



## Appendix 15.1

### **DESK STUDY REVIEW AND GROUND INVESTIGATION**

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# Begbroke Innovation District

## Desk Study Review and Ground Investigation

*For Oxford University Development Limited*

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# Executive Summary

<i>SITE INFORMATION AND SETTING</i>	
Objectives	The works have been commissioned to support to support the planning application, assist with clearing anticipated planning conditions and to assist the design of the development.
Client	Oxford University Development Limited.
Site name and location	Begbroke Innovation District. Located between Kidlington and the A44 Woodstock Road, approximately 8km to the west-north-west of Oxford. A nearby postcode is OX5 1GZ with the centre of the site at an approximate grid reference of 447925, 213503.
Proposed development	The site development proposals are understood to comprise a mixed housing and non-residential development.  The proposed layout of the site has not been confirmed at the time of issue of this report. However, it is understood that the built environment will occupy the centre, west and south of the site, with the northern and eastern boundaries and the area of the landfill in the central-south of the site remaining as open space.  A proposed footbridge and cycleway is proposed in the centre of the site crossing the Didcot and Chester Railway Line and a further proposed bridge over the canal in the southeast.
Site description	The site currently mostly comprises agricultural fields, used for arable farming, with several fields in the south-west of the site in use for raising poultry and deer. A field in the west of the site is used as allotment gardens. There are several farm storage barns shown as Parkers Farm in the central-east of the site.  The total site area is approximately 170ha with the widest dimensions of approximately 1.5km north to south, and 1.3km west to east.  An historical landfill (filled with inert/industrial waste) is present in the central-south of the site with an area of approximately 5.20ha.  Sandy Lane bisects the site in a west to east orientation, through the approximate centre of the site. A railway line trends north to south, bisecting (but outside of) the site, and separates seven fields in the east (an area of approximately 43 hectares) from the rest of the site area.  The approximately 7.9ha Begbroke Science Park is in the central-northern area (although not included in the investigation area) and is accessed by a roadway (Begbroke Hill road) off the A44 to the west.  A pedestrian access road joins Begbroke Science Park to Sandy Lane to the east.  A number of public footpaths are present leading to Begbroke Science Park and in the surrounding fields.  An underground sewer crosses the site in a north to south direction and is present to the west of Begbroke Science Park (joining a pumping station in the north), before splitting into two in the south with one spur crossing site to the south of the landfill area (trending east to west), and the other continuing south beyond the site.  The site is bounded by the A44 to the west, to the east by the Oxford Canal, to the north by fields and the Rowel Brook and to the south by open land.  A fuel station is present adjacent to the south-west corner of the site.  There are residential areas to the east of the Oxford Canal (Kidlington), Yarnton to the south-west, and Begbroke to the north-west.  The southern section of Rushy Meadows Site of Special Scientific Interest (SSSI) borders 450m of the northern site boundary.

DESK STUDY SUMMARY	
Topography	<p>The topography of the site is characterised by a plateau forming a topographic high in the west and centre of the site at approximately 67m Ordnance Datum (OD), sloping away from it as follows:</p> <ul style="list-style-type: none"> <li>to the north towards Rowel Brook at approximately 63m OD and rising again to the north of Rowel Brook, to approximately 67mOD. and</li> <li>To the east and south to a low-lying area at approximately 61m OD.</li> </ul> <p>The landfill area in the central-south, is between approximately 68.5m OD in the north-west, and slopes gently down to the south-east to approximately 64.5m OD and is between 0.5m and 1.0m higher than the surrounding land.</p>
Hydrology	<p>Rowel Brook enters the site in the north-west and flows west to east through the north of the site towards the Oxford Canal.</p> <p>A small watercourse (understood to be Thrupp Ditch), runs through Rushy Meadows (located to the north of the site), flowing in a north-south direction and converging with Rowel Brook on the central-northern edge of the site.</p> <p>There is also a small stream/ditch in the south of the site.</p> <p>All the streams and ditches on and in the immediate vicinity of the site were dry at the time of the investigation works, after an extended period of dry weather.</p> <p>The Oxford Canal forms most of the eastern boundary of the site.</p>
Site History	<p>The site is predominantly fields from the earliest available mapping to the present day with Parkers Farm shown in the central-east of the site.</p> <p>The railway line and Sandy Lane have been present from the earliest available mapping. Allotment gardens are shown in the west of the site from 1970.</p> <p>Begbroke Hill Farm (excluded from the site area) is shown in the central-north of the site until 1971 when it is shown as a Weed Research Associated (now Begbroke Science Park).</p> <p>Begbroke Hill Road is shown constructed off Woodstock Road to enter Begbroke Science Park located in the central-north of the site (excluded from the site area) from 1999.</p> <p>A number of gravel pits are shown in the surrounding area beyond the north-western boundary (Fern Hill Pits) and within the central-southern part of the site to the south of Sandy Lane, known as Sandy Lane Pits. Following completion of the gravel extraction operations, these pits were used as landfill and were backfilled by the early 1980's. Subsequent residential development has taken place over Fern Hill Pits and the western (off site) of the two Sandy Lane Pits. The eastern most Sandy Lane Pit was shown as a refuse pit until 1978 and remains undeveloped and backfilled slightly above the surrounding ground level.</p>
Published Geology	<p>Superficial Geology:</p> <ul style="list-style-type: none"> <li>River Terrace Deposits (Summertown-Radley Sand and Gravel Member) in the central / northern plateau area of the site at topographically high areas of the site.</li> <li>Alluvium in the east of the site.</li> <li>1<sup>st</sup> River Terrace Deposits anticipated to underlie the Alluvium in the east of the site.</li> </ul> <p>Solid Geology:</p> <ul style="list-style-type: none"> <li>Oxford Clay Formation; comprising a dark grey mudstone; over</li> <li>Kellaways Sand Member comprising interbedded silty sand and mudstone; over</li> <li>Kellaways Clay Member comprising grey mudstone; over</li> <li>Cornbrash Formation comprising bluish grey limestone weathering to olive or yellowish brown.</li> </ul> <p>The solid strata dip gently towards the south (2° or less).</p>

Hydrogeology	<p>The superficial deposits of the River Terrace Deposits and Alluvium are classified as Secondary A Aquifers.</p> <p>The solid deposits of the Cornbrash Limestone Formation and Kellaways Sand Member are classified as Secondary A Aquifers with the overlying Kellaways Clay Member and the Oxford Clay Formation classified as unproductive strata.</p> <p>The site is not in a Source Protection Zone.</p> <p>One abstraction consent is located 960m to the north-east of the site (operated by Unigate Dairies at Langford Lane, Kidlington, for general use).</p> <p>In areas adjacent to Rowel Brook in the north, and land east of the railway, there are areas identified as either primarily Flood Zone 2 and Flood Zone 3. The remainder of the site is shown as Flood Zone 1.</p>
UXO Risk	A non-specialist unexploded ordnance (UXO) assessment indicates a low UXO risk.
<i>INITIAL CONCEPTUAL SITE MODEL BASED ON DESK STUDY</i>	
Potential on-site contaminant sources	<ul style="list-style-type: none"> <li>• Made Ground associated with general historical activity.</li> <li>• Made Ground in the central-south of the site associated with the historical landfill.</li> <li>• Possible diesel fuel / heating oil around Parkers Farm and around unspecified tanks.</li> <li>• Ground gases from organic materials in the Made Ground and Alluvium.</li> <li>• Ground gases from materials in the landfill on the site.</li> <li>• Radon from underlying geology;</li> <li>• Leachate in the landfill waste.</li> <li>• Asbestos from existing buildings.</li> <li>• Pesticides and herbicides in the agricultural soils.</li> <li>• Naturally occurring arsenic in the geological soils.</li> </ul>
Potential off- site contaminant sources	<ul style="list-style-type: none"> <li>• Ground gases from materials in the landfills off-site.</li> <li>• Hydrocarbon fuels from adjacent petrol station in the south-west; and</li> <li>• Made Ground associated with the railway line bisecting (but outside of) the site.</li> </ul>
Potential contaminant receptors	<ul style="list-style-type: none"> <li>• Humans - residential with home grown produce / non-residential users (POS, commercial, research and development etc.).</li> <li>• Controlled waters – surface water and groundwater.</li> <li>• Plants.</li> <li>• Ecology (including Rushy Meadows SSSI, off site to the north).</li> <li>• Buildings / property.</li> </ul>
<i>GROUND MODEL PROVEN BY INVESTIGATION</i>	
Ground and groundwater conditions encountered by investigation	<p>The ground conditions encountered in the ground investigation comprise:</p> <ul style="list-style-type: none"> <li>• A surface covering comprising: <ul style="list-style-type: none"> <li>» Topsoil Made Ground – between 0.05m and 0.80m below ground level (bgl), comprising clay. Gravel of brick and concrete (and occasional glass, metal and fabric) were encountered in the topsoil above the former Sandy Lane landfill.</li> <li>» Landfill Made Ground – in the former Sandy Lane landfill, to between 0.05m and 3.90m bgl, comprising brown gravelly sand (predominantly ash) with abundant man-made putrescible waste and gravel sized fragments of concrete, slag, brick, glass bottles, plastic bottles, plastic wrapping, scrap metal, wires, batteries, bike frames, animal bones and newspaper (dated 1960's).</li> <li>» Localised Made Ground – to between 0.10m and 1.20m bgl, generally comprising sandy gravelly clay or clayey sand with gravel constituents of limestone, sandstone flint and brick.</li> </ul> </li> </ul>



- » Agriculturally Disturbed Topsoil across most of the site to between 0.10m bgl to 0.80m (average thickness of 0.31m bgl), comprising a brown slightly gravelly clayey sand or dark brown slightly gravelly sandy clay.
- Superficial deposits, comprising:
  - » Alluvium; encountered close to the streams in the north and south of the site and across the east of the site between the railway line and Oxford Canal, to depths of between 0.45m bgl and 3.15m bgl, comprising soft orangish and yellowish-brown sandy clay to slightly sandy slightly gravelly clay, and a sandy gravel with gravel constituents of flint and limestone. Locally, an organic odour and remnant rootlets were noted.
  - » Head Deposits; identified locally over the River Terrace Deposits, to depths of between 0.50m bgl to 1.70m bgl comprising orangish brown sandy clay, locally slightly gravelly, of flint.
  - » River Terrace Deposits encountered in the higher areas of the site (west, centre and north) to depths of between 0.80m bgl (where extending down slopes) and 5.90m bgl, comprising generally medium dense to dense (locally loose) slightly gravelly slightly clayey sand / sandy gravel with gravel constituents of flint, limestone and ironstone and underlying the Alluvium in the east and south of the site. Locally, clay was thinly interbedded between the granular layers with a cohesive band at between 62mOD to 59mOD to the east and south of the landfill. The River Terrace Deposits were mostly extracted in the Sandy Lane pits, but a thin band remains beneath the Landfill in the central-south of the site.
- Solid geology, comprising:
  - » Oxford Clay Formation in the centre and south of the site (at topographic highs) and in the southeast of the site to depths of between >1.90m to >10.45m bgl comprising grey to bluish grey clay, occasionally thinly laminated with shell fragments, selenite crystals and sand pockets. In a number of locations, bluish grey slightly clayey sand and siltstone bands were encountered.
  - » Kellaways Sand Member sub-cropping at the surface in the north of the site, south of the site and underlying the Oxford Clay Formation, comprising a soft grey or orangish brown sandy clayey silt, sand or sandy clay.
  - » Kellaways Clay Member sub-cropping at the surface in the north of the site, consisting of stiff fissured grey, yellowish brown or greenish grey clay.
  - » Cornbrash Limestone Formation comprising a light grey to yellowish brown limestone gravel or stiff yellowish brown sandy gravelly clay. Encountered sub cropping in the north of the site and below the Kellaway's Clay Formation (where penetrated), and considered to extend at depth under the entire site.
  - » Forest Marble Formation outcropping in the northeast of the site and underlying the Cornbrash Limestone Formation (where penetrated) comprising an upper grey mudstone with interbeds of a strong grey limestone. Limestone band thickness increased with depth.
  - » White Limestone Formation encountered underlying the Forest Marble Formation (at depth where fully penetrated) comprising a light grey strong limestone.
  - » The solid geological strata dip gently (0.7° to the south).

Evidence of petroleum hydrocarbon contamination were noted in some soils, mainly those associated with the landfill. No evidence of hydrocarbon contamination was noted elsewhere including the area of Parkers Farm.

Groundwater was encountered at depths between 0.10m bgl and 4.00m bgl during the investigation. Groundwater levels recorded post-fieldwork ranged between 0.03m bgl and 5.05m bgl (57.92m OD to 68.08m OD). Monitoring is ongoing.

The shallow groundwater flow within the superficial deposits is from the west of the site, from the topographic high, to the east and south-east, although in the north of the site

	<p>groundwater flow is locally towards Rowel Brook (from the north and the south). In the far east of the site (in the floodplain), groundwater flows are to the south and at a shallower hydraulic gradient, but potentially influenced by the Oxford Canal which borders the east of the site.</p> <p>Within the bedrock geology in the north of the site, groundwater flow is shown from west to east although this is likely due to a complicated bedrock outcropping and superficial deposits and temporal limits of the investigation. Groundwater flow is likely to be towards the south following the dip of the strata.</p>
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*WATER AND RUSHY MEADOWS SSSI*

Water and Rushy Meadows SSSI	<p>Based on the data to date, groundwater flow in the far north of the site (adjacent to Rushy Meadows) is to the south towards Rowel Brook. Consequently, it is unlikely that any impact from the proposed development will extend to the north, past Rowel Brook and be transmitted upgradient to the SSSI.</p> <p>It is also unlikely that any changes in water level associated with the proposed development will significantly change the water levels to the north of Rowel Brook (which is more susceptible to any changes to the north and east of Rushey Meadows, than to changes to the south of Rowel Brook).</p> <p>Potential adverse impacts on the Rushy Meadows SSSI based on the proposed development are considered negligible.</p>
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*SUMMARY OF GEOTECHNICAL CONCLUSIONS – ASSUMING THE HISTORICAL LANDFILL AREA IS POS*

Groundworks	<p>Local obstructions associated with former development, including foundations, floor slabs and services, should be anticipated in Parkers Farm, along with known underground services (e.g. rising sewer main).</p> <p>The presence of shallow rock in the north of the site may cause localised difficult excavation. Whilst the Cornbrash Formation can usually be excavated by large plant and toothed buckets, localised breaking out may be required for excavation of rock.</p> <p>Collapse / spalling of trial pit faces was noted during trial pit excavation in several locations within Alluvium and River Terrace Deposits. This was noted particularly in the coarse soils and was exacerbated where groundwater ingress occurred. In addition, the Oxford Clay can be fissured and whilst instability due to fissuring was not noted in the trial pit excavations, fissuring can cause instability of excavations open for longer periods or long lengths.</p> <p>Temporary trench support, or battering of excavation sides, is recommended for all excavations that are close to, or below the water table, or are to be left open for any length of time, and must be provided for entry by personnel.</p> <p>Where shallow groundwater has been observed, the rate of water ingress to the proposed excavations is likely to be significant through the River Terrace Deposits and Alluvium. In these circumstances, groundwater control by sump pumping may not be sufficient to deal with anticipated flows and significant high volume pumps (running for extended time) are likely to be required. If high volume pumps are not sufficient, alternative methods of dewatering, or use of impermeable cut-offs would be required.</p>
Earthworks, slopes and retaining	<p>Soils are generally suitable Class 1, Class 2 and Class 4.</p> <p>The earthworks will need to be undertaken under a Materials Management Plan and in accordance with a suitable design and Specification.</p> <p>The use of hydraulic binders is not recommended for Oxford Clay soils.</p> <p>Given the relatively gentle slopes across the site, it is assumed, that significant retaining walls will not be required. As a preliminary assessment, 1V:3H slopes using natural subsoils are likely to be stable (subject to detailed design).</p>
Foundations	<p>Preliminary foundation recommendations are as follows:</p> <ul style="list-style-type: none"> <li>• For houses up to 2½ storeys: strip/trench fill foundations across the centre, north and west of the site (deepening due to trees as required) to depths of between 1m and a</li> </ul>

	<p>maximum depth of 2.5m bgl, depending on site specific ground conditions and the locations of existing and proposed trees and hedges.</p> <ul style="list-style-type: none"> <li>• Pad foundations for commercial buildings with relatively light loads.</li> <li>• Ground improvement by vibro stone columns (VSC) with reinforced strip foundations or pads in areas underlain by loose sands and soft clays, located to the east and south of the landfill.</li> <li>• Piled foundations will be required in areas underlain by deep Made Ground, and soft compressible deposits such as Alluvium, or to the south and east of the landfill, due to risks of excessive settlement from anticipated structural loads.</li> <li>• Piled foundations for houses where foundation depths are greater than 2.50m, such as due to trees on shrinkable clays, or deep low strength / loose / compressible strata.</li> <li>• Pile foundations are likely to be required for bridge abutments.</li> </ul> <p>Subject to further parcel specific assessment. Allowable net bearing pressure of 100 - 125 kN/m<sup>2</sup> should be available for strip/trench fill foundations and 130 - 150 kN/m<sup>2</sup> for pad foundations depending on the underlying geology.</p> <p>Deepening of foundations/heave protection is likely to be required to allow for the effects of trees where foundations are in cohesive deposits with shrinkage potential.</p> <p>Suspended slabs recommended to the presence of medium/high shrinkage potential clay soils depending on underlying geology. However, subject to further investigation, detailed design and time of construction, ground bearing slabs may be possible for some parts of the site.</p> <p>For commercial/industrial units and bridges these are likely to fall within Category 2 structures and specific geotechnical design will be required.</p>
Roads and pavements	<p>For road / pavement design, a design CBR of 3% will generally be achievable over the majority of the site, and 5% where the sub-grade is granular.</p>
Sustainable drainage	<p>Assessment of the infiltration rate data the ground model concludes:</p> <ul style="list-style-type: none"> <li>• The Alluvium, proven along the northern and southern edges of the site (and expected to be present along the eastern edge), is considered unsuitable for infiltration drainage due to a combination of high clay content (low permeability) and the presence of groundwater.</li> <li>• The thicker River Terrace Deposits in the centre of the site (at a topographic high) are considered suitable (subject to further testing) for infiltration drainage where there is sufficient depth of gravel present above the water table. However, there will need to be sufficient thickness of permeable soil above the water table to allow soakaway design.</li> <li>• The thinner River Terrace Deposits in the north, south and east of the site, at the topographic lower points, are considered unsuitable for infiltration due to shallow groundwater levels resulting in limited storage capacity, generally due to a limited thickness of River Terrace Deposits, merging with the Alluvium and overlying the Oxford Clay.</li> <li>• The Kellaways Clay Member and Oxford Clay Member (sub-cropping around the periphery of the northern part of the site, and present at depth below the site), are considered unsuitable for infiltration drainage due to their low permeability (high clay content).</li> <li>• Infiltration drainage should not be installed in the historical landfill site, located in the central-south of the site.</li> </ul> <p>The civils designer and flood risk designer will need to take groundwater water levels into account when designing the attenuation ponds. The design options available are to either:</p> <ul style="list-style-type: none"> <li>• increase the base level of the pond, so it is above the groundwater table; or</li> </ul>

	<ul style="list-style-type: none"> <li>line the pond. It should be noted that if it is proposed to line the ponds, the potential hydrostatic uplift needs to be considered with the design and the liner will need to be placed at an over excavated depth and covered with soil to prevent the liner lifting.</li> <li>Due to the potential effects of a variable groundwater table on the sides of the attenuation ponds, subject to detailed assessment and design, Hydrock believe the ponds may require reinforcement to prevent wash out and collapse of the pond sides.</li> </ul>
Buried concrete	<p>Design Sulphate Class - DS-1 and ACEC Class AC-1 applies to the entire site for buried concrete in most of the natural underlying superficial deposits. This is equivalent to Design Chemical Class DC-1 for a 50 year design life with regards to: Head Deposits; Alluvium; River Terrace Deposits</p> <p>Design Sulphate Class - DS-4 and ACEC Class AC-4. Equivalent to Design Chemical Class DC-4 for a 50 year design life with regards to the Oxford Clay Formation, Kellaways Sand Member, Kellaways Clay Member, Forest Marble Formation and White Limestone Formation.</p> <p>Design Sulphate Class - DS-3 and ACEC Class AC-3. Equivalent to Design Chemical Class DC-3 for a 50 year design life with regards to the Cornbrash Limestone Formation.</p>
<b>SUMMARY OF GEO-ENVIRONMENTAL ASSESSMENT</b>	
Human Health	<p>The following are considered as potential contamination risks which will need to be given consideration to discharge likely planning conditions depending on the details of the development layout used for the application:</p> <p><b>Landfill Area – assuming public open space (POS) end use</b></p> <ul style="list-style-type: none"> <li>Beryllium and dibenz(a,h)anthracene in the Topsoil Made Ground.</li> <li>Arsenic, beryllium, lead, benzo(b)fluoranthene and dibenz(a,h)anthracene in the Landfill Made Ground.</li> <li>Asbestos fibres and ACM in the landfill Made Ground.</li> </ul> <p><b>Wider Site (depending on final proposed residential or non-residential end use)</b></p> <ul style="list-style-type: none"> <li>ACM within buildings around Parkers Farm to be demolished;</li> <li>Asbestos fibres within soils around Parkers Farm (none encountered during the investigation, but needs confirmation after completion of demolition works).</li> </ul>
Phytotoxicity	<p>The following are considered as potential residual contamination risks to plant life:</p> <ul style="list-style-type: none"> <li>Copper, nickel and zinc in the Topsoil – Made Ground over the historical Landfill</li> <li>Boron, copper, nickel and zinc in the Landfill – Made Ground.</li> </ul>
Controlled waters	<p>Tests on groundwater samples exceed the EQS for cadmium, cobalt, chromium (III), copper, manganese, nickel, ammonium, ammoniacal nitrogen, nitrite and sulphate. However, based on risk evaluation and subject to regulatory approval it is considered these do not present a significant risk to controlled waters.</p>
Radon	<p>Basic to full protection measures are required in any buildings constructed north of Rowel Brook.</p>
Potable water supply pipes	<p>Standard potable water supply pipework is envisaged for most of the site outside of the former landfill area. However, confirmation should be sought from the water supply company.</p> <p>Within the landfill area barrier pipe is recommended. However, confirmation should be sought from the water supply company at the earliest opportunity.</p>
Ground gases or vapours:	<p>The risk from ground gases is low to moderate for most of the site (subject to additional and on-going monitoring) and CS1 conditions apply across the wider site. CS2 conditions apply within the landfill area.</p>

<i>ENABLING WORKS</i>	
Proposed mitigation measures	<p>With regards to the areas of the site outside of the former landfill area, the mitigation measures proposed to remove unacceptable contamination risks are:</p> <ul style="list-style-type: none"> <li>• Removal of asbestos from buildings to be demolished by specialist Contractors in accordance with the asbestos survey and relevant legislation).</li> <li>• Supplementary testing of Made Ground to confirm absence of asbestos fibres in soils and its removal where necessary.</li> </ul> <p>Assuming the landfill is proposed for POS use, the mitigation measures proposed to remove unacceptable risks from the identified contamination in the landfill for Open Space end use include:</p> <ul style="list-style-type: none"> <li>• The installation of a 450mm engineered cover, comprising a bonded geogrid break layer (to deter burrowing animals), subsoil beneath a topsoil thickness of between 150mm and 300mm.</li> <li>• Importation and placement of subsoil/topsoil in line with a Materials Management Plan.</li> </ul> <p>To assist with land forming, it is recommended the landfill is compacted using a High Energy Impact Compactor, to densify the existing landfill soils, reduce site levels and allow the cover system to be placed, whilst minimising disposal.</p> <p>As part of the mitigation, Hydrock would recommend that a cover system is placed across the landfill, and extending outside the landfill boundary by a minimum of 3.0m (to allow embedment).</p> <p>Given the human health risks of burrowing wildlife such as badgers bringing potentially contaminated materials to surface, Hydrock recommend the relocation of the badger setts which are present on the edges of the site to selected locations under the control of suitably licensed ecologists. If these cannot be closed and artificial setts need to be provided on the landfill, design to prevent burrowing into the landfill will be required (steel mesh).</p> <p>In addition, to prevent disturbance of the landfill material such as by roots and tree collapse, Hydrock recommends removal of existing trees and hedges (and introducing controlled re-planting, as necessary). This will also allow the cover system to be firmly embedded beyond the edge of the landfill and to mitigate any potential human health risks from contact with the landfill soils.</p>
Earthworks	<p>If earthworks are proposed for the wider site, a geotechnical design and an Earthwork Specification will be required to allow reuse of materials where suitable, along with the production of a Materials Management Plan (MMP) and its approval by a Suitably Qualified Person (SQP).</p> <p>Verification reports by competent independent geotechnical specialists will be required following completion of any earthworks to ensure compliance with the Specification and MMP.</p>
Waste management	<p>Excavated soils to be disposed of as waste, are likely to be classed as non-hazardous waste with natural uncontaminated subsoils likely able to be disposed of at an ‘inert’ landfill.</p> <p>Within the former landfill area, the soils are likely to comprise a mix classifying as hazardous and non-hazardous waste.</p> <p>All works will need to be undertaken in accordance with a Materials Management Plan (MMP) and its approval by a Suitably Qualified Person (SQP).</p> <p>It should be noted that the landfill soils are currently a waste and will remain a waste until they are recovered. Recovery of soils is difficult in the current regulatory regime, and Hydrock recommend that any soils excavated from the landfill area cannot be re-used on the site and will need to be disposed of off-site as waste.</p>

*FUTURE CONSIDERATIONS*

Further work	<p>Following the ground investigation works undertaken to date, the following further works will be required:</p> <ul style="list-style-type: none"> <li>• Additional investigation to the east and south of the landfill to further define the softer, looser soils.</li> <li>• Demolition / refurbishment asbestos survey of farm structures.</li> <li>• Completion and reporting of the ongoing gas monitoring, hence the conclusions in this report are provisional, subject to the completion of monitoring.</li> </ul> <p>The following works should be undertaken once more details of the development layout have been finalised;</p> <ul style="list-style-type: none"> <li>• supplementary detailed ground investigation to allow geotechnical design and parcel specific investigations;</li> <li>• discussion and agreement with utility providers regarding the materials suitable for pipework;</li> <li>• discussions with regulatory bodies and the warranty provider regarding the conclusions of this report;</li> <li>• assessment of tree influence on foundations and design of foundations;</li> <li>• discussions with Vibro-stone Column Contractors regarding the viability of, and potential improvement by, VSCs;</li> <li>• discussions with piling contractors regarding conclusions of this report and design of the piles where these are required;</li> <li>• provision of geotechnical design for any Geotechnical Category 2 structures (earthworks, retaining, floor slabs, large scale foundations etc.);</li> <li>• production of Remediation Strategies and Verification Plans as necessary (and agreement with the regulatory bodies and the warranty provider);</li> <li>• production of Materials Management Plans relating to reuse of soils at the site and importation of soils to the site;</li> <li>• management of remediation and mitigation works; and</li> <li>• verification of the earthworks, remediation and mitigation works.</li> </ul> <p>If the landfill area is proposed for residential or non-residential end use, other than POS, the recommendations in this report should be reviewed and it is likely that extensive further investigation for mitigation and geotechnical design would be necessary.</p>
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This Executive Summary forms part of Hydrock Consultants Limited report number 19114-HYD-XX-XX-RP-GE-01002-S2-P08 and should not be used as a separate document.

## 1. INTRODUCTION

### 1.1 Terms of reference

In July 2022, Hydrock Consultants Limited (Hydrock) was commissioned by Oxford University Development Limited (OUD, also known as the Client) to undertake a site investigation, comprising a review of a Phase 1 desk study previously produced by others, and Phase 2 ground investigation at Begbroke, Oxfordshire. Supplementary ground investigation works were commissioned by OUD in January 2023.

The site is 170 hectares in area, located between Kidlington and the A44 Woodstock Road, approximately 8km to the west-north-west of Oxford. The nearest postcode is OX5 1GZ. Currently, the site is mostly open fields surrounding the existing Begbroke Science Park, which does not form part of the investigation area.

Hydrock understands that preliminary plans for the proposed development comprise a mixed housing and non-residential development. The proposed layout of the site has not been confirmed at the time of issue of this report. However, it is understood that the built environment will occupy the centre, west and south of the site, with the northern and eastern boundaries and the area of the landfill in central south of the site remaining as open space. In addition, it is understood a road bridge is required to cross the railway line in the eastern part of the site, and a noise / screening bund is required adjacent to the railway line.

The investigation works have been undertaken in accordance with Hydrock's proposals referenced 19114-GMNO/FP003 Rev A, with the subsequent Client's instructions to proceed (email from King Technical Consultancy (on behalf of OUD), dated 22<sup>nd</sup> July 2022) and 19114/GMNO/FP004/Rev002 and 19114/GMNO/FP/005 both dated 15<sup>th</sup> December 2022 with the subsequent Client's instruction to proceed (email from King Technical Consultancy (on behalf of OUD), dated 03<sup>rd</sup> January 2023).

Investigation works with regards to Begbroke Hill Road (Access to Begbroke Science Park) are reported in a separate report reference 19114-HYD-XX-XX-RP-GE-01003.

### 1.2 Objectives

The works have been commissioned to support the planning application, assist with clearing anticipated planning conditions and to assist the design of the development.

The objectives of the Phase 1 Desk Study review are to formulate a preliminary Ground Model and an initial Conceptual Site Model of the site to identify and make a preliminary assessment of any potential geo-environmental and geotechnical risks to the proposed development.

The objectives of the Phase 2 Ground Investigation are to:

- determine ground and groundwater conditions, and allow collection of samples for geotechnical testing and chemical analysis and installation of gas and groundwater monitoring wells;
- update the initial Conceptual Site Model in accordance with the principles of the Defra Land Contamination Risk Management procedure (LCRM);
- To identify potential geo-environmental mitigation requirements to enable development; and
- to provide outline geotechnical recommendations for design.

### 1.3 Scope

The site investigation includes the review of a Phase 1 Desk Study produced by others, and to undertake a Phase 2 Ground Investigation.

The Desk Study review comprises:

- Summary of the desk study including the preliminary Ground Model and Preliminary Risk Assessment.
- A field reconnaissance (walkover) to determine the nature of the site and its surroundings including current land uses, topography and hydrology.
- Commission and review of BGS Radon Risk Reports.
- Development of a preliminary Ground Model representing ground conditions at the site.
- Development of an initial Conceptual Site Model (iCSM), including identification of potential complete contaminant linkages.
- A qualitative assessment of any geo-environmental risks identified.
- Identification of any plausible geotechnical hazards.

The scope of the Phase 2 Ground Investigation comprises:

- A preliminary ground investigation including trial pitting, hand pits, soakaways, windowless sampling, rotary cored boreholes and cable percussive boring, to:
  - » obtain data on the ground and groundwater conditions of the site;
  - » allow collection of samples for geotechnical and chemical laboratory analysis;
  - » allow geotechnical field tests to be undertaken; and
  - » install gas and groundwater wells.
- Gas concentration and flow monitoring and groundwater level gauging.
- Groundwater sampling.
- Geotechnical and chemical laboratory analysis.
- Updating the preliminary Ground Model.
- Preparation of a geotechnical risk register.
- Presentation of initial geotechnical design recommendations.
- Formulation of an updated Conceptual Site Model (CSM), including identification of any plausible complete contaminant linkages.
- Completion of a generic quantitative risk assessment (GQRA) of any identified chemical contaminants to establish 'suitability for use' under the current planning regime.
- Discussion of any potential environmental liabilities associated with land contamination (soil, water and gas).
- Identification of outline mitigation requirements to ensure the site is 'suitable for use'.



## 1.4 Available information

The following relevant information has been provided to Hydrock by OUD for use in the preparation of this report:

- A topographic survey plan (unreferenced);
- Jubb Consulting Engineers Limited. May 2018. 'Land at Begbroke, Begbroke. Phase 1 Desk Study Report', Ref: 18182-DTS-011, undertaken for Begbroke Tripartite, Oxfordshire;
- Jubb Consulting Engineers Limited. December 2019. 'Land at Begbroke, Begbroke. Ground Conditions Assessment Report', Ref: 18182-GCA-1 undertaken for Begbroke Tripartite, Oxfordshire; and
- Buro Happold. November 2022. 'Proposed Road Alignment and Surface, Option 3', Ref: 0052188 (Sketch Plan).

The Jubb Report (December 2019) included reference to a Factual Report as follows, although this has not been provided to Hydrock:

- Terra Firma (South) Limited. November 2019. 'Factual Ground Investigation Report – Begbroke, Oxfordshire', Ref: 6307.

### Railway Bridge and Canal Bridge Design Details / Options:

- Buro Happold. March 2023. 'Begbroke Park, PR7B Site Connection Option 2 – Shared Path Plan & Longitudinal Section'. Ref BEG-BUR-XX-XX-SK-CE-0005 Rev P02.
- Buro Happold. March 2023. 'Begbroke Park, PR7B Site Connection Option 1 – Road and Shared Path Plan & Longitudinal Section'. Ref BEG-BUR-XX-XX-SK-CE-0004 Rev P02.
- Robert Bird Group. January 2023. 'Oxford Corridor Phase 2A Level Crossings. Sandy Lane Footbridge Location Plan'. Ref 5060-RBG-177052-SL-DR-CV-00001 Rev P01 (approval in principle).
- Robert Bird Group. January 2023. 'Oxford Phase 2A. Sandy Lane General Arrangements. Ref 5060-RBG-177052-SL-DR-CV-83101 Rev P01.
- Robert Bird Group. January 2023. 'Oxford Corridor Phase 2A Level Crossings. Sandy Lane Footbridge General Arrangements. Ref 5060-RBG-177052-SL-DR-ST-13001 Rev P01 (approval in principle).

Hydrock has previously undertaken and reported on the following works, which are incorporated into this report (and superseded by this report):

- Hydrock. October 2021. 'Begbroke, Oxfordshire. Soil Infiltration Rate Assessment', Ref: 19114-HYD-XX-XX-TN-GE-01002, undertaken for Oxford University Development Limited; and
- Hydrock. October 2021. 'Begbroke, Oxfordshire. Landfill Geo-Environmental Assessment', Ref: HYD-19114-XX-XX-RP-GE-01001, undertaken for Oxford University Development Limited.

It is understood that the Client either commissioned or has obtained assignment of the above documents and Hydrock has assumed full reliance can be placed upon their contents. Should this not be the case, Hydrock should be informed at the earliest opportunity.

In addition, Hydrock has downloaded the following report (used for information only) from the Cherwell District Council (CDC) website, in relation to Rushy Meadows SSSI, which is located to the north of the site:

- White Young Green Limited. February 2018. 'Rushy Meadows SSSI: Hydrogeological and Hydrogeological Desk Top Study (DTS)', Ref: A106710 undertaken for CDC.

## 1.5 Regulatory context and guidance

The investigation work has been carried out and reported in general compliance with recognised best practice, including (but not limited to) BS 5930:2015+A1:2020, and BS 10175:2011+A2:2017.

The geotechnical section of this report is prepared in general accordance with BS EN 1997-1+A1:2013, BS EN 1997-2:2007 and BS 8004:2015. This report constitutes a Ground Investigation Report (GIR) as described in Part 2 of Eurocode 7 (BS EN 1997-2) (EC7). However, it is not intended to fulfil the requirements of a Geotechnical Design Report (GDR) as specified in EC7.

Where relevant the relevant requirements of the 2023 NHBC Standards have also been applied.

The methods used follow a risk-based approach, the first stage of which is a Phase 1 desk study (or desk study review) and field reconnaissance, with any potential geo-environmental risks assessed qualitatively in the iCSM. This is done using the 'source-pathway-receptor contaminant linkage' concept to assess risk as introduced in the Environmental Protection Act 1990 (EPA, 1990). Any potential geotechnical risks are also assessed at the Phase 1 desk study and site reconnaissance stage.

Phase 2 comprises intrusive ground investigation work and testing. The factual information from the desk study and the ground investigation are used to develop the iCSM into the Conceptual Site Model (CSM). This CSM is based on the Ground Model of the site physical conditions and an exposure model of the possible complete contaminant linkages. The CSM forms the basis for GQRA in accordance with current guidelines (LCRM, 2022). This GQRA might lead to the requirement for more Detailed Quantitative Risk Assessment (DQRA). Professional judgement is then used to evaluate the findings of the risk assessments and to provide recommendations for the development.

The geo-environmental and geotechnical aspects are discussed in separate sections. Throughout the report the term 'geotechnical' is used to describe aspects relating to the physical nature of the site (such as foundation requirements). The term 'geo-environmental' is used to describe aspects relating to ground-related environmental issues (such as potential contamination). However, it should be appreciated that this is an integrated investigation, and these two main aspects are inter-related. Designers should take all aspects of the investigation into account.

Remaining uncertainties and recommendations for further work are listed in Section 10 and Section 11 respectively.

## 2. DESK STUDY REVIEW (AND FIELD RECONNAISSANCE)

### 2.1 Introduction

Hydrock has been provided with a Desk Study for the site prepared by others (as detailed in Section 1.4), which is provided in Appendix B. The following sections summarise the pertinent information presented in the Desk Study, supplemented by additional information as required.

It should be noted that a north-south railway bisects the site, but is not included within the site. In addition, the area east of the railway line was not included as part of the historical Desk Study Report but, where relevant the desk study summary presented below provides updated information for the eastern section of the site.

### 2.2 Site location

The site is located between Kidlington and the A44 Woodstock Road, approximately 8km to the west-north-west of Oxford. A nearby postcode is OX5 1GZ with the centre of the site at approximate National Grid Reference 447925, 213503.

The location of the site is shown in Figure 2.1.

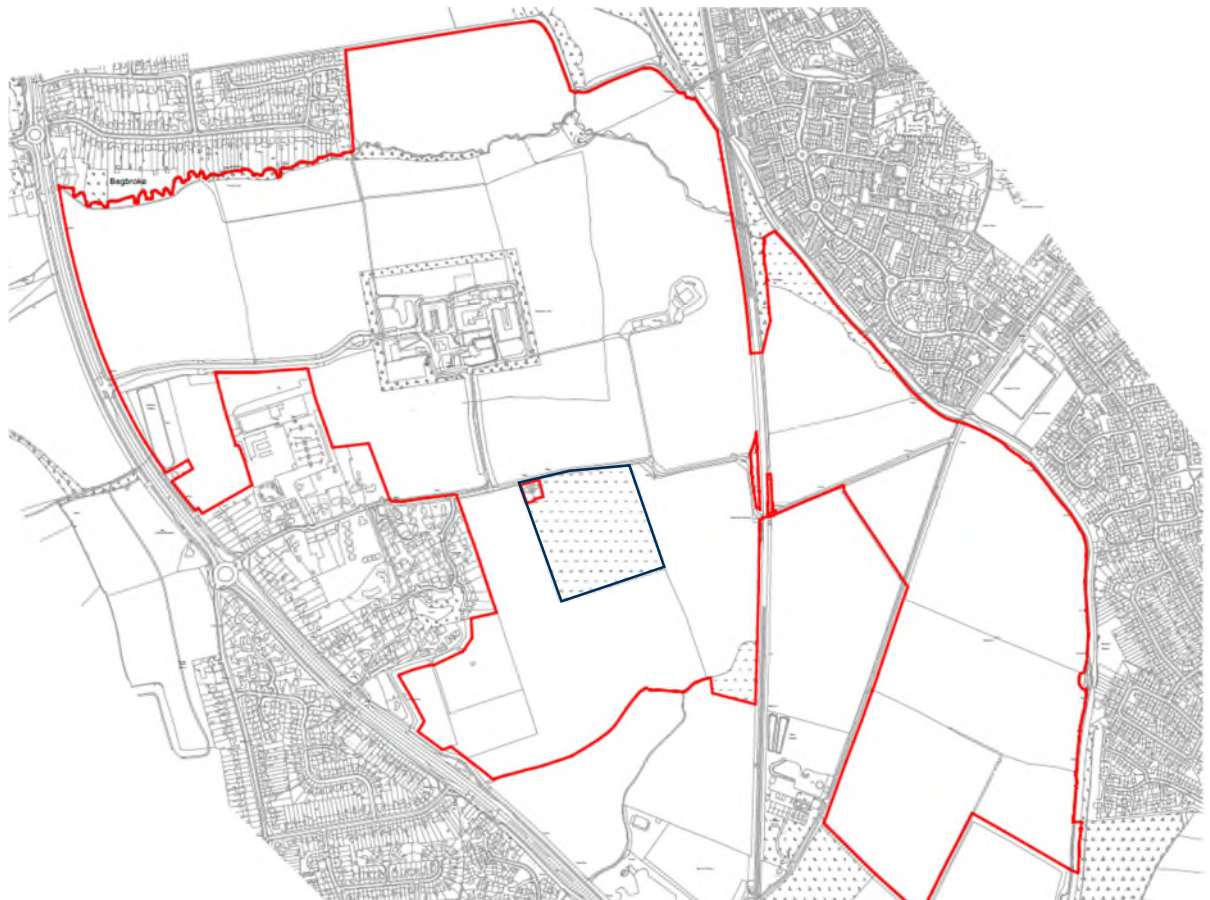


Figure 2.1: Site Boundary Plan

## 2.3 Site description

The site mainly comprises agricultural fields, used for arable farming. Several fields in the south-west of the site are in use for raising poultry and deer. A field in the west of the site is used as allotment gardens. A few farm buildings (storage barns) with asbestos cement roof sheeting are present in the central east of the site (Parkers Farm).

Begbroke Science Park in the central north of the site totals an approximate area of 7.9ha and is accessed along Begbroke Hill Road, off the A44 to the west. Although within the site boundary, this was not included within the investigation area.

A pedestrian access road joins Begbroke Science Park to Sandy Lane to the east.

A number of public footpaths are present leading to Begbroke Science Park and in the surrounding fields.

The blue outlined area in Figure 2.1 represents a former landfill of approximately 5.20ha in area. This comprises an undeveloped hummocky field of long grass, nettles and brambles with large trees and dense bushes along the field boundaries.

Sandy Lane bisects the site in a west-east orientation through the approximate centre of the site. The Great Western Railway line trends north-south, bisecting (but outside of) the site and splitting seven fields in the east (an area of approximately 43 hectares) from the remainder of the site area.

The total site area, including the land to the east of the railway line, is approximately 170ha. The longest north-south dimension measures approximately 1.5km and the west-east dimension is approximately 1.3km.

Rowel Brook runs along the northern boundary of the site in the north-west and part of the site and flows into the Oxford Canal to the north-east.

The site is bounded by the A44 to the west with residential areas (Yarnton) located in the centre of the western boundary either side of Sandy Lane; to the east by the Oxford Canal and residential properties beyond (Kidlington); to the north by open/fields in the centre including Rowel Brook and Rushy Meadows SSSI beyond; Rowel Brook and residential properties (Begbroke) beyond the north-east boundary; and to the south by open land.

The topography of the site is characterised by a plateau in the topographic highs of the site in the west and centre of the site at approximately 67m OD before sloping:

- to the north towards a stream at approximately 63m OD and rising again (on the northern side of Rowel Brook) to approximately 67m OD beyond.
- To the east and south to approximately 61m OD.

The landfill part of the site is at between approximately 68.5m OD in the north-west, sloping gently down to the south-east to approximately 64.5m OD and is between 0.50m and 1.00m higher than the surrounding land.

## 2.4 Detailed Site description

Jubb Consulting (2018) subdivided the site into 19 individual areas west of the railway line (east of the railway line was beyond the scope of their report) (see Appendix B) which are summarised below, along with Hydrock’s observations during later walkover surveys and investigation works. Field numbering is as indicated in Figure 2.2, which corresponds with Jubb (2018) and, in order to retain consistency, Hydrock have continued the numbering sequence to cover the remaining fields (Fields 20 to 26). Individual field descriptions are presented in Table 2.1 and Table 2.2.



Figure 2.2: Field Numbering Plan

Table 2.1: Field Description Table 1 of 2 (2018 Jubb Walkover)

Field Reference	Approximate Area (ha)	Field Description
Field 1	10.6	<p>Agricultural land with a topographic fall to the north, towards Rowel Brook in the north, with Rowel Brook, present along the northern boundary, flowing west to east.</p> <p>A footpath is present along a trackway leading to a Thames Water sewage pumping station in north-east corner of the field.</p> <p>Hedgerows surround field boundaries with trees located in the north adjacent to Rowel Brook.</p>



Field Reference	Approximate Area (ha)	Field Description
Field 2	2.0	<p>Agricultural field with a topographic fall to the north and rising slightly to the east. High Voltage (HV) overhead electricity cables trend north-west to south-east in the central-south of the field. A second overhead HV cable along eastern field boundary trends north to south.</p> <p>Raised manhole covers are present along the northern field boundary associated with a sewer.</p> <p>A public footpath follows southern field boundary.</p> <p>Rowel Brook forms the northern boundary.</p> <p>Hedgerows form the remainder of field boundaries.</p>
Field 3	7.0	<p>Agricultural field with a slight topographic fall to the north.</p> <p>HV cables follow the eastern boundary of the field, trending north to south with a second HV cable trending north-west to south-east, from the south-east corner of the site towards the centre of Field 2.</p> <p>Northern, western, and southern boundaries are formed by hedgerows with the eastern boundary open to a concrete trackway with Field 4 beyond.</p> <p>Manholes are present along the western boundary, associated with a sewer line.</p>
Fields 4 & 5	5.2	<p>Agricultural land with a topographic fall to the north.</p> <p>A public footpath crosses the field east to west, which is noted as the subdivision between Field 4 &amp; 5.</p> <p>Rowel Brook forms the northern field boundary.</p> <p>Hedgerows are present along the eastern and southern boundaries, with Begbroke Science Park beyond to the south and trees are present adjacent to Rowel Brook.</p> <p>A concrete surfaced track forms the western boundary.</p>
Field 6	9.1	<p>Agricultural land with a topographic fall from the crest of the slope in the north to the south and east into the south-eastern corner.</p> <p>An overhead HV cable is present along the western boundary of the site, along with a sewer and public footpath, which trends north to south.</p> <p>Residential properties form the western boundary, with hedgerows to the north, Rowel Brook and mature trees to the south, and hedgerows and mature trees to the east with Rushy Meadows SSSI beyond.</p>
Field 7	4.6	<p>Open land, which is relatively flat and at the lowest point of the site.</p> <p>Identified as waterlogged during the walkover, Field 7 is adjacent to Rowel Brook which forms the southern boundary of the site.</p> <p>A public footpath crosses the field trending east-west with overhead HV cables present in the east of the field, trending north-south.</p> <p>Hedgerows and mature trees form the eastern boundary, with Oxford Canal beyond to the north-east and the railway line to the east.</p> <p>Hedgerows and mature trees form the northern boundary, with Rowel Brook and Rushy Meadows SSSI beyond.</p>
Field 8	15.3	<p>Agricultural land which slopes down to the north and east from the west where it borders Begbroke Science Park.</p> <p>Overhead HV cables cross the east of Field 8, trending north-south.</p> <p>A number of stockpiles are present in south of Field 8 comprising topsoil and wood chippings with barn structures and areas of hardstanding located in the south-west.</p>

Field Reference	Approximate Area (ha)	Field Description
		<p>Probable asbestos cement fragments are visible on the surface in the north and farm buildings with probable asbestos cement sheet roofing present on the barns in the south-west.</p> <p>The southern boundary is formed by a concrete access track to the farm buildings, with the northern boundary former by Rowel Brook and mature trees. The eastern boundary is formed by a railway line, which is located on an approximate 2m high embankment compared to the surrounding land.</p>
<b>Field 9 &amp; 10</b>	13.8	<p>Agricultural land sloping towards the east, with a concrete track (trending north-south), subdividing Fields 9 &amp; 10.</p> <p>An overhead HV cable continues through the east of Field 10, trending north-south from Field 8.</p> <p>Begbroke Science Park forms part of the northern boundary, with a concrete surfaced track to Field 8, and the barns in the north-east.</p> <p>The eastern boundary is formed by the railway line on an embankment with the western boundary formed by a concrete surfaced track for pedestrian access to Begbroke Science Park.</p> <p>Hedgerows form the southern boundary with Sandy Lane beyond.</p>
<b>Field 11</b>	7.0	<p>Agricultural land sloping towards the east and south from the north-western corner.</p> <p>An overhead HV cable is present in the centre, trending north-south.</p> <p>The field is bounded to the south by a former landfill area with mature trees and hedgerows and agricultural land. Hedgerows with Sandy Lane beyond define the northern boundary, while a ditch and marshy land define the southern boundary and the railway line on an embankment defines the eastern boundary trending north-south.</p>
<b>Field 12</b>	9.7	<p>Agricultural land sloping from the north to the south, towards an open ditch.</p> <p>Two overhead cables are present with one following the western boundary trending north-south and a second in the south (central) trending north-south to the south-western corner of the landfill located to the north.</p> <p>A manhole cover is located in the north-east, associated with an underground sewer.</p> <p>The northern boundary is half agricultural land (Field 13) and half former landfill, which is surrounded by hedgerows and mature trees.</p> <p>A mound of wood chipping is present in the south-west corner.</p> <p>The western boundary is formed by chain-link fencing to livestock areas, and mature trees and hedgerow to a Shell Fuel Station to the south-west. Field 12 is bound to the south by the open ditch, hedgerows and mature trees and to the east by hedgerows.</p>
<b>Field 13</b>	3.1	<p>Agricultural land gently sloping slope with a continuation into Field 12.</p> <p>An overhead HV cable is present in the west, trending north-south.</p> <p>Field 13 is bounded by the former landfill and mature trees in the east, a residential property in the north-east, hedgerow and Sandy Lane to the north and hedgerow and residential properties beyond to the west.</p>
<b>Field 14, 15 &amp; 16</b>	4.9	<p>Livestock fields containing deer, poultry and goats separated by mesh fencing. A gravel track is present along the western boundary leading to farm cottages north of the livestock fields.</p> <p>Bordered by agricultural fields to the east and south (Field 12), farm buildings to the north and trackway, residential properties and the A44 to the west.</p>

Field Reference	Approximate Area (ha)	Field Description
Field 17	6.2	<p>Agricultural fields, relatively flat at the crest of sloping ground to the north and south.</p> <p>An overhead HV cable crosses the field trending north-west to south-east in the south-west corner of the field.</p> <p>A grass strip with sporadic trees is in the east of the field, adjacent to Begbroke pedestrian access roadway.</p> <p>Bounded by hedgerows to the south, west and north with sporadic mature trees along the north, west and eastern boundary.</p> <p>Begbroke Science Park and access road are located to the north, Sandy Lane to the south, residential properties and Yarnton Garden Centre to the west as well as Begbroke Pedestrian access to the west.</p>
Field 18	2.6	<p>Agricultural fields, relatively level with a gravel area in the north.</p> <p>An overhead HV cable crosses site trending south-west to north-east in the approximate centre of the field.</p> <p>Bounded by hedgerows with the allotments beyond to the west, access road to Begbroke Science Park to the north, residential properties to the south and hedgerows with sporadic mature trees to the east with Yarnton Garden Centre beyond.</p>
Field 19	1.4	<p>Allotments bounded by hedgerows and the A44 to the west, hedgerows with access road to Begbroke Science Park beyond to the north, hedgerows and sporadic mature trees with agricultural land to the west (Field 18) and a hedgerow with a residential property beyond to the south.</p>

Additional fields to the east of the railway line and the landfill in the central-south, as indicated on the wider plan, total a further seven fields (Fields 20 to 26). Field descriptions at the time of the Hydrock Ground Investigation for the land east of the railway line, and the former landfill area are provided in Table 2.2.

Table 2.2: Field Description Table 2 of 2 (2022 Hydrock Investigation)

Field Reference	Approximate Area (ha)	Field Description
Field 20	5.3	<p>Overgrown and relatively level.</p> <p>Overhead HV cables are present in the west of the field, trending north-south.</p> <p>Bounded by a railway line on an embankment to the west, hedgerows and sporadic trees to the north, west and south, with Oxford Canal located beyond the east, a grassed field (Field 21) to the south and open land to the north.</p>
Field 21	4.2	<p>Grassed field relatively level.</p> <p>Two overhead HV cables are located in the west, trending north-south.</p> <p>Hedgerows and sporadic trees are located along the field boundaries with overgrown land (Field 20) to the north, Oxford Canal to the east, Sandy Lane to the south and a residential property with the railway line on a raised embankment to the west.</p>
Field 22	2.4	<p>Grassed triangular shaped field and relatively level.</p> <p>Located to the south of Sandy Lane and west of Kidlington Lane.</p> <p>Agricultural land is located to the south.</p> <p>Field boundaries are formed by hedgerows with sporadic mature trees.</p>



Field Reference	Approximate Area (ha)	Field Description
Field 23	11.4	<p>Agricultural field and relatively level.</p> <p>An overhead HV cable crosses the field entering in the central south of the field trending north-east to south-west.</p> <p>A raised manhole cover is present in the north-west of the field associated with sewer infrastructure.</p> <p>A public footpath follows the western border of the site.</p> <p>Field boundaries are predominantly formed by hedgerows and mature trees as well as by the Oxford Canal to the north and east with residential properties beyond, agricultural fields to the south (Field 24) and Kidlington Lane to the west.</p>
Field 24	8.4	<p>Agricultural field and relatively level.</p> <p>An overhead HV cable crosses the field entering in the central south of the field trending north-east to south-west.</p> <p>A public footpath follows the western border of the field.</p> <p>Field boundaries are predominantly formed by hedgerows and mature trees as well as by the Oxford Canal to the east with residential properties beyond, agricultural fields to the south (Fields 25 &amp; 26) and north (Field 23) and Kidlington Lane to the west.</p>
Field 25	8.6	<p>Agricultural field and relatively level.</p> <p>An overhead HV cable enters the field in the south-west trending north-east to south-west.</p> <p>A public footpath follows the western border.</p> <p>An area in the central north of the field is overgrown.</p> <p>Field boundaries are predominantly formed by hedgerows and mature trees as well as by agricultural land (Field 26) and a solar panel farm to the east, agricultural fields / open land to the south, agricultural land to the north (Field 25) and Kidlington Lane to the west with a disused sewage works beyond.</p>
Field 26	2.9	<p>Agricultural field and relatively level.</p> <p>Field boundaries are predominantly formed by hedgerows and mature trees and the field is bounded by Oxford Canal to the east, a solar panel farm to the south and agricultural fields to the north (Field 24) and west (Field 25).</p>
Former Landfill	5.2	<p>Hummocky land generally between 0.50m and 1.00m above the surrounding ground levels, with a gentle slope towards the south-west from 68.50m OD to 64.50m OD.</p> <p>The vegetation on the area predominantly consists of long grass, nettles and brambles, with large trees and dense bushes along the field boundaries.</p> <p>Field boundaries are formed by mature trees and hedgerows.</p>

## 2.5 Site History

The site comprises fields from the earliest mapping (1876) until the present day with a field in the west (Field 19) shown as allotment gardens from the 1970's.

Parkers Farm is shown in the central-east of the site (currently two farm sheds) from the earliest available mapping with tanks (unknown above or below ground) shown around Parkers Farm from 1981 to 1983.

Begbroke Hill Farm (excluded from the site area) is shown in the central-north of the site until 1971, when it is shown as Weed Research Associates (now Begbroke Science Park). Begbroke Hill Road is

shown as constructed off Woodstock Road and entering Begbroke Science Park located in the central-north of the site from 1999.

A railway line (Great Western Railway) is present, bisecting (but outside of) the site, from the earliest available mapping to the present day. The railway line separates the site into two areas and Sandy Lane trending east-west is shown through the centre of the site.

A number of 'small' buildings are shown in the central-north of Field 25 until 1981, when they are no longer shown.

A number of gravel pits are shown in the surrounding area located beyond the north-western boundary (Fern Hill Pits) and to the east and west of the central part of the site (south of Sandy Lane and known as Sandy Lane Pits). All pits were backfilled by the early 1980's with subsequent development over Fern Hill and the western of the two Sandy Lane Pits (located off-site). The Sandy Lane Pit in the east was shown as a refuse pit until 1978 and remains undeveloped and backfilled to ground level.

A petrol filling station is shown adjacent to the southern field (Field 12) from the 1920s to the present day.

Surrounding development has been continuous, with the villages of Yarnton, Begbroke and Kidlington expanding throughout the available mapping period to the current layout. Begbroke Science Park is shown from 1971 and shown as Weed Research Associates with various phases of development and expansion to the current day layout.

## 2.6 Geology

The published geology of the site is shown in Figure 2.3.

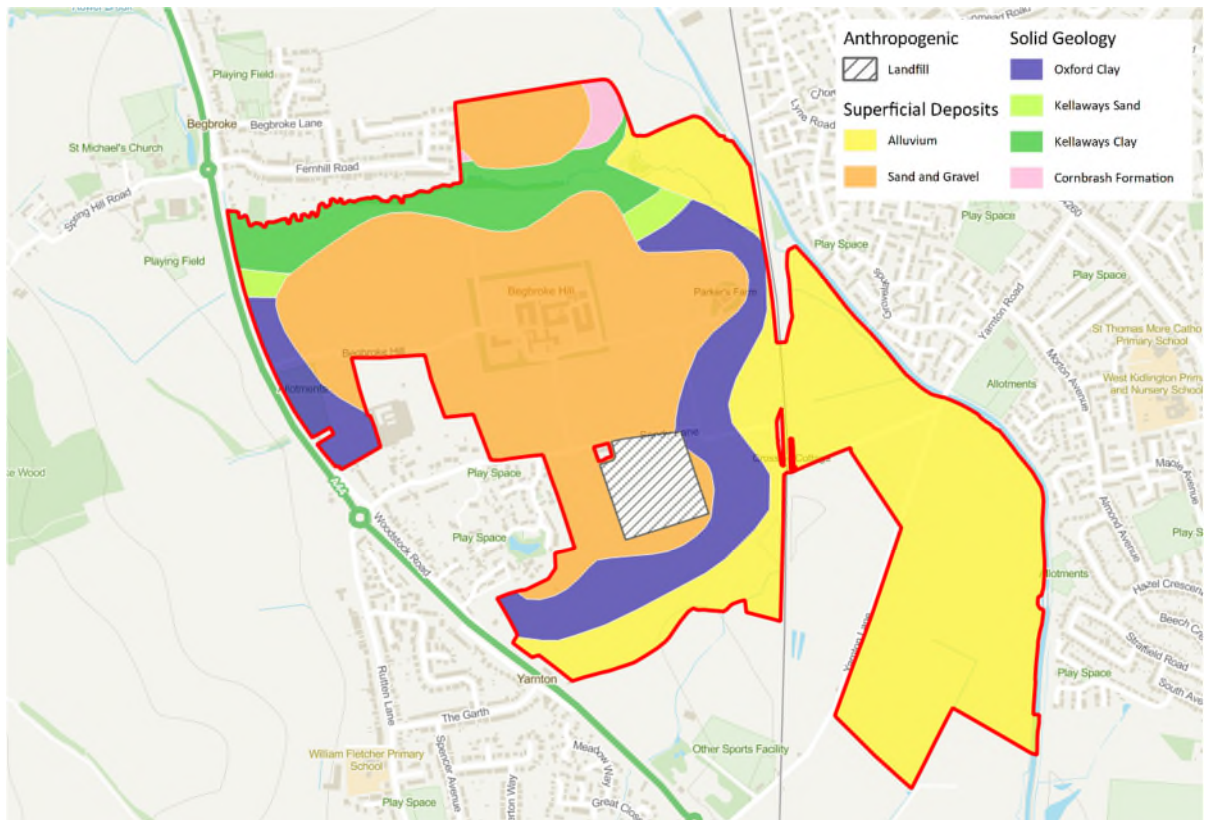


Figure 2.3: Geological map summary

The superficial geology comprises:

- Summertown-Radley Sand and Gravel Member (orange on Figure 2.3), located on the topographical highs of the site (2<sup>nd</sup> River Terrace Deposit).
- Alluvium (yellow on Figure 2.3), shown towards the topographical lows of the site in the east and south, and extending east beyond the railway line.
- 1<sup>st</sup> River Terrace Deposits, not shown on Figure 2.3. However, anticipated to underlie the Alluvium.

The solid geology comprises:

- Oxford Clay Formation, comprising a dark grey mudstone; over
- Kellaways Sand Member, comprising an interbedded silty sand and mudstone; over
- Kellaways Clay Member, comprising a grey mudstone; over
- Cornbrash Limestone Formation, comprising a bluish grey limestone weathering to olive or yellowish brown.

The solid geology dips gently towards the south at a gradient of approximately 1(v):40(h) (less than 2°).

A historical BGS borehole (SP41 SE6), located close to the western boundary of the Science Park, encountered 1.40m of brown silty clay over 3.10m of sand and gravel, over dark grey Oxford Clay at 4.50m below ground level (bgl). Groundwater was encountered approximately 3.00m bgl, within the sand and gravel deposits.

A second historical BGS borehole (SP41 SE10) near the southern boundary of the site, encountered 0.70m of alluvial clay, over 4.10m of sandy gravel, over Oxford Clay. Groundwater was recorded at less than 1.00m bgl.

## 2.7 Hydrogeology

The superficial deposits of the Summertown-Radley Sand and Gravel Member and Alluvium are classified as a Secondary A Aquifer.

The solid deposits of the Cornbrash Limestone Formation and Kellaways Sand Member are also classified as Secondary A Aquifers, with the Kellaways Clay Member and the Oxford Clay Formation as a unproductive strata.

The site is not in a groundwater Source Protection Zone. There is one groundwater abstraction consent located 960m north-east of the site (operated by Unigate Dairies at Langford Lane, Kidlington, for general use), which is considered unlikely to be affected or have an effect on the site.

The environmental data report indicates a potential for groundwater flooding to occur at surface across most of the site. However, this is more likely to be a risk in the lower lying areas around the perimeter of the site.

## 2.8 Hydrology

### 2.8.1 General

The nearest surface water feature is Rowel Brook which enters site in the north-west and flows west to east through the north of the site towards the Oxford Canal.

A small watercourse (understood to be Thrupp Ditch), runs through Rushy Meadows (located to the north of the site), flowing in a north to south direction and converging with Rowel Brook on the central-northern edge of the site.

There is also a small stream/ditch in the south of the site and a number of small, open ditches throughout the site. The Oxford Canal forms most of the eastern boundary of the site.

Reference to the Environment Agency website shows the site is located within the catchment of the Thames River Basin District, with the specific river water body being the Thames (Evenlode to Thame) Water Body. The current (2019 cycle 2) overall status under the Water Framework Directive is 'moderate'.

### 2.8.2 Rushy Meadows Site of Special Scientific Interest (SSSI)

Rushy Meadows SSSI is located to the north of the site, is approximately rectangular in shape and comprises an area of 8.74ha.

Natural England (<https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1001685>), describes Rushy Meadows as comprising “*unimproved alluvial grassland alongside the Oxford Canal, in which low intensity, traditional management has produced rich meadows with fen communities containing several uncommon species. Meadow habitats of this type are now both rare and under threat in Britain. Rushy Meadows represents one of the few surviving sites in a district where such grasslands have declined in an area following agricultural improvement and urban development.*”

*The meadows are situated on terrace alluvium and gravels which have weathered to produce loamy soils...”*

A small watercourse (thought to be Thrupp Ditch) runs through Rushy Meadows, flowing in a north-south direction and converges with Rowel Brook to the south of the SSSI boundary (north of the site).

White Young Green (2018) on behalf of CDC have historically undertaken a hydrological and hydrogeological desk study with regard to the impact the landfill part of the site (noted as PR8 in the Cherwell Local Plan) may have on the Rushy Meadows SSSI.

The WYG (2018) report notes

*“Flow gradient of shallow groundwater within superficial deposits is expected to be towards local surface watercourses. Groundwater flow in Rushy Meadows is likely to be to the south towards Rowel Brook. Consequently, any impact from the proposed development site is unlikely to extend to the north past Rowel Brook and be transmitted upgradient to the SSSI.”*

*“Rushy Meadows SSSI would be more susceptible to impact from changes in water level and quality which occurred to the north of the SSSI. Significant changes in surface water or groundwater level within the proposed PR8 development site to the south could potentially impact Rushy Meadows SSSI, but such an event is considered to have a low probability of occurrence. Quality changes, to either surface water or groundwater are unlikely to impact upon Rushy Meadows SSSI.”*

*“Groundwater flow up-gradient beyond Rowel Brook into Rushy Meadows SSSI is not feasible, and consequently the superficial alluvium do not provide a viable hydrogeological connection between the proposed development site and Rushy Meadows.”*

Potential adverse impacts on the Rushy Meadows SSSI based on the proposed development are considered negligible and the risk assessment summary (Table 12) of the WYG (2018) report is reproduced as Figure 2.4.

**Table 12: Risk Assessment Summary**

Development Stage	Receptors	Potential Impact	Preliminary Risk Level
<b>Hydrogeology: Construction Phase</b>	<ul style="list-style-type: none"> <li>• Superficial Deposits (Alluvium, Sands and Gravels)</li> <li>• Secondary A Bedrock Aquifer (Cornbrash Formation)</li> </ul>	<ul style="list-style-type: none"> <li>• Accidental spillages</li> <li>• Historical ground contamination</li> <li>• General site works &amp; excavations</li> </ul>	<b>Negligible</b>
<b>Hydrogeology: Operational Phase</b>		<ul style="list-style-type: none"> <li>• Decreased groundwater recharge</li> <li>• Diffuse pollution</li> </ul>	<b>Negligible</b>
<b>Hydrology: Construction Phase</b>	<ul style="list-style-type: none"> <li>• Surface Watercourses (Thrupp Ditch and Rowel Brook)</li> </ul>	<ul style="list-style-type: none"> <li>• Accidental spillages</li> <li>• Historical ground contamination</li> <li>• General site works &amp; excavations</li> <li>• Increased surface runoff</li> </ul>	<b>Negligible</b>
<b>Hydrology: Operational Phase</b>		<ul style="list-style-type: none"> <li>• Increased surface runoff</li> <li>• Discharges to surface watercourses</li> </ul>	<b>Negligible</b>

Figure 2.4: White Young Green, Rushy Meadows Hydrological and Hydrogeological Risk Assessment Summary

However, it is noted that due to a lack of site-specific data a quantitative assessment of potential risk could not be undertaken, and a number of uncertainties and data gaps were identified as part of the desk study. These included:

- site specific qualitative groundwater data (level and water quality);
- lateral extent, thickness, and hydrogeological characteristics of underlying superficial deposits;
- site specific water quality and generalised flow data at targeted locations; and
- specific construction details for individual elements of the development.

Whilst assessed as a negligible risk, the historical and recent investigations should to provide the majority of the data to more accurately assess risks to Rushy Meadows SSSI.

## 2.9 Flood risk

The desk study information indicates the proposed development is primarily within Flood Zone 1 (less than 0.1% chance of flooding in any year). However, in areas adjacent to Rowel Brook and land east of the railway, areas are identified as either Flood Zone 2 (0.1% - 1% chance of flooding) or Flood Zone 3 (>1% chance of flooding).

No further consideration of flood risk is undertaken in this report. Specialist flood risk advice should be sought with regard to drainage and flooding.

## 2.10 Mining or mineral extraction

A former sand and gravel extraction pit is present in the central-south of the site and several historical sand and gravel pits are shown in the surrounding area, all of which are shown to have ceased and subsequently been backfilled or used as landfills.

Two historical gravel pits have been identified in the immediate vicinity of the site, identified as Fern Hill Gravel Pit / Willow Way landfill, located 168m north; and Sandy Lane West gravel pit and landfill, located to the immediate west of the site. The former gravel pit and landfill area in the central part of the site was Sandy Lane East gravel pit. All locations appear to have been situated within the geological outcrop of the Summertown-Radley Sand and Gravel Member. The locations of the former gravel pits are shown in Figure 2.5.

Residential properties are now shown to have been constructed over the Fern Hill Gravel Pit and Western Sandy Lane Gravel Pit.



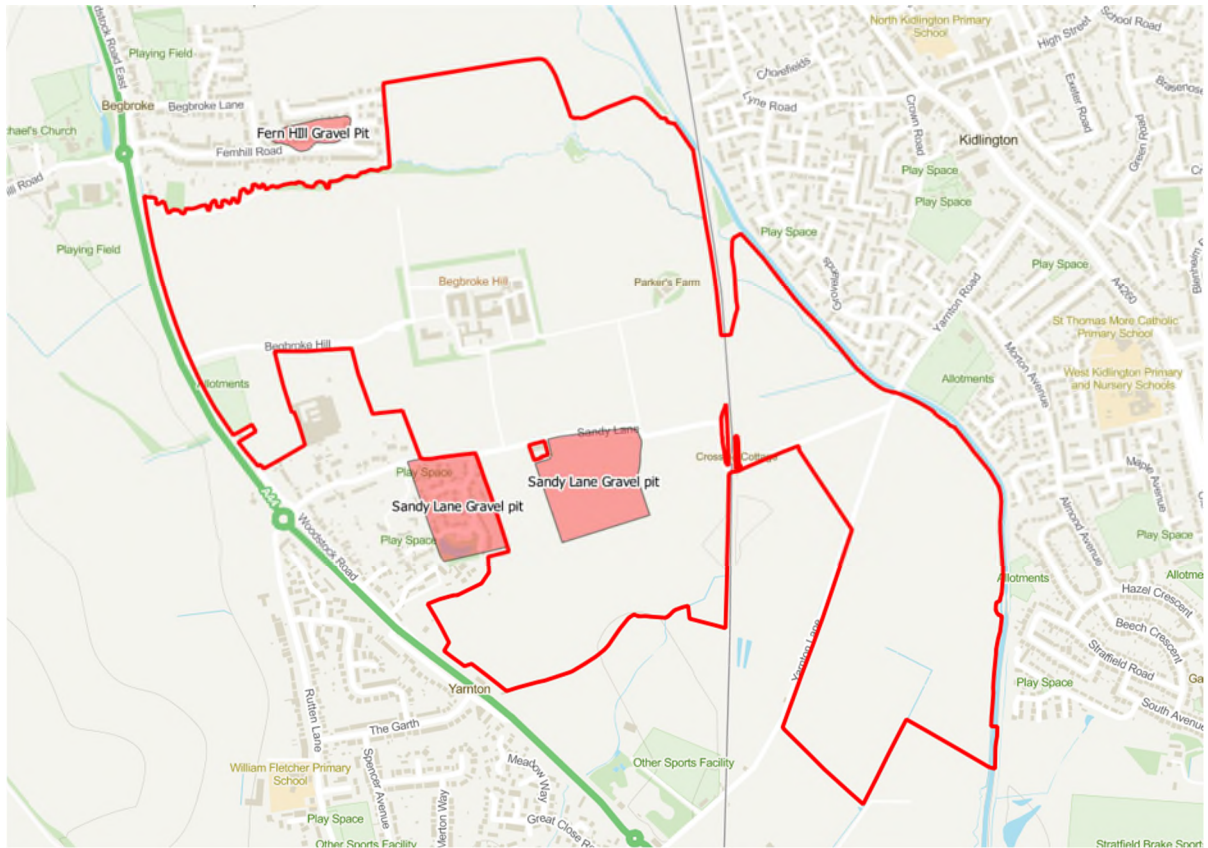


Figure 2.5: Former gravel pit / landfill location plan

## 2.11 Waste management

Three historical landfill sites are shown within 250m of the site relating to the backfilling of the historical sand and gravel pits:

- Willow Way located 168m north (formerly the Fern Hill Gravel Pits) accepted inert, industrial, commercial and household waste. Residential development now covers this area.
- Sandy Lane West accepted inert waste. Residential development now covers this area.
- Sandy Lane East accepted inert and industrial waste from unrecorded sources over an unspecified timeframe, but generally in the late 1960s and 1970s. Remains as undeveloped open land, approximately 0.50m to 1.00m above the surrounding ground levels.

## 2.12 Natural soil chemistry

The previous desk study did not identify any significantly elevated naturally occurring elements that may present a risk to future site users.

## 2.13 Radon and ground gas

Jubb (2018) indicates that the site is in a Radon Affected Area where recorded radon levels in 1-3% of homes are above the action level. However, since issue the UK Radon Maps have been updated (December 2022).

A full Radon report was obtained by Hydrock in March 2023 (see Appendix B), which indicates that the far northern part of the site (Radon Report ID BGS\_331991/43780), north of Rowel Brook, is in a Radon

affected area of between 3-5% and 10-30% where either basic or full protection measures are required in any buildings constructed in this area of the site.

The remainder of the site (Radon Report ID: BGS\_331991/43779) is not considered to be in a Radon affected area (<3%) and no radon protection measures are required.

## 2.14 Unexploded ordnance (UXO)

The previous desk study did not address UXO risk. As such, in general accordance with CIRIA Report C681 (Stone et al 2009), Hydrock has undertaken a non-specialist UXO screening exercise for the purposes of ground investigation and this is presented in Table 2.3.

Table 2.3: Non-specialist UXO screening (for the purposes of ground investigation)

Data	Comment	Further Assessment Required
Site History	There is no indication of former military use from the desk study.	No
Post War Development	No evidence of potential damage or development on historical maps.	No
Geology Type	The ground conditions are highly variable but comprise Alluvium over River Terrace Deposits in the east. There is the potential that UXO, if present, would remain undetected in these areas. However, the softer superficial soils are underlain by hard soils (stiff clay or rock) from relatively shallow depth.	Yes, discounted on further assessment
Surface Cover during WWI	The surface cover during WWII comprised open fields. There is the potential that UXO, if present, would remain undetected. However, when assessed against the risk of UXO being present, the overall risk is considered low.	Yes, discounted on further assessment
Indicator of Aerial Delivered UXO	Screening against the regional bomb risk map (Northamptonshire) Appendix B indicates the site to be in an area where the bomb risk is low	No

The non-specialist UXO screening exercise has indicated that whilst there is the potential for UXO to remain undetected due to the presence of open fields at the site during WWII and Alluvium in the east, no further assessment is required with regard to UXO in relation to ground investigation.



## 2.15 Historical Ground Investigations

### 2.15.1 Jubb Consulting Engineers Limited. December 2019. Ref: 18182-GCA-1

A ground investigation was undertaken by Terra Firma (South) Limited after being scoped by Jubb with the factual report reference of 6307 dated November 2019. The factual report has not been made available to Hydrock. However, a summary of the ground conditions encountered is included within the Jubb (2019) report and are summarised below.

The works comprised a total of eight cable percussion boreholes located to the north, east, south and west of the Sandy Lane Landfill, which at the time was not included as part of the site. Whilst the logs are not available to review the individual locations, the geology encountered is understood to have comprised:

- Topsoil to between 0.20m bgl and 0.90m bgl, comprising dark brown slightly gravelly slightly silty clay; over
- Summertown/Radley Gravel Member (River Terrace Deposits) comprising a brown slightly clayey to clayey sandy flint gravel and locally, stiff orange brown slightly gravelly slightly sandy clay; over
- Oxford Clay Formation to depths exceeding 10.0m bgl, comprising stiff grey slightly sandy to sandy clay.

In situ tests undertaken in the River Terrace Deposits recorded SPT 'N' values between <10 and 50 with a median of 32. SPT 'N' values of between 4 and 16 were achieved in the cohesive strata. SPT 'N' values in the Oxford Clay were recorded between 8 and 50, generally increasing with depth.

Particle size distributions within the River Terrace Deposits indicated slightly silty/clayey sandy gravel.

Atterberg tests within the Oxford Clay indicated the soils to be of high plasticity with a moderate volume change potential as defined by NHBC Standards.

Groundwater was encountered in some of the boreholes between 5.20m bgl and 7.20m bgl during the investigation works with subsequent groundwater monitoring recording ground levels between 2.70m bgl and 6.40m bgl.

Elevated levels of arsenic were recorded within 13 out of 22 samples tested, with a maximum concentration of 79mg/kg in the natural soils. PBET testing was not undertaken as part of the works.

Naphthalene was encountered above the GAC in one location at 2.2mg/kg compared to a GAC of 1.5mg/kg. However, this was discounted as an outlier.

In summary, with regards to land contamination the Jubb report stated that *'it is likely that any potential landfill material has not had an adverse effect on the surrounding area'*.

Maximum concentrations of 7.0% carbon dioxide (CO<sub>2</sub>) and 0% methane (CH<sub>4</sub>) were recorded with a maximum gas screening value (GSV) of 0.014l/hr calculated, according with Characteristic Situation 1 (CS1). However, CS2 was recommended due to a value of 7% carbon dioxide which is above the 5% value for consideration to increase the CS.

Groundwater samples had exceedances for copper and zinc above the water quality targets (WQT). However, it was considered that these were not representative of landfill leachate and therefore were not considered to present a significant risk to the site.

### 2.15.2 Hydrock Consultants Limited October 2021. Ref: HYD-19114-XX-XX-RP-GE-01001

Comprising a Phase 1 Desk Study Review and Phase 2 Ground Investigation within the former Sandy Lane Landfill.

The site investigation works comprised:

- 3 Cable Percussion Boreholes to a maximum depth of 10.00m bgl with gas and groundwater wells installed below the base of the landfill;
- 10 Dynamic Sampling Boreholes to a maximum depth of 5.00m bgl with gas and groundwater monitoring wells installed within the landfill; and
- 7 Trial Pits to a maximum depth of 3.50m bgl.

Six gas and groundwater monitoring rounds were undertaken as part of the works.

The ground conditions underlying the site at the time of the investigation comprised and were interpreted as:

- Made Ground - Topsoil to between 0.05m bgl to 0.80m bgl comprising a dark brown to orangish brown silty gravelly sand with high root content with gravel constituents of brick and concrete with occasional glass, metal, and fabric fragments.
- Made Ground - Landfill to between 2.10m bgl to 3.90m bgl (approximately 64m OD) comprising highly variable material but generally consisted of greyish, orangish brown gravelly sand (predominantly ash) with abundant man-made putrescible waste and gravel sized fragments of concrete, slag, brick and fragments of glass, plastic, metal, batteries, paper, and animal bones. Local cobbles and boulders of concrete were encountered. Towards the base of the landfill the colour changes to dark grey and black. A putrid odour was noted in all locations and a strong hydrocarbon odour in TP02. No lining was encountered at the base of the landfill and no capping was identified.
- Made Ground – General, encountered in two locations (WS07 to BH01) to depths of up to 0.60m bgl comprising a firm yellowish greyish brown slightly sandy occasionally slightly gravelly clay. It was interpreted that these materials are separate to the landfill materials due to absence of man-made constituents.
- Residual sand and gravel (approximately 1m thickness) of the Summertown Radley Sand and Gravel Member (River Terrace Deposits) left during the quarrying operations (between the 1930's and 1970's) was encountered underlying the Landfill – Made Ground and underlying the topsoil in one location in the north-west corner. It comprised yellowish to greyish brown slightly sandy gravel or sand and gravel, with gravel of flint and sandstone. In the north-west corner these were noted to be sandy clay to 5.00m bgl.
- The Oxford Clay Formation was encountered underlying the Summertown Radley Sand and Gravel Formation to depths >10.00m bgl comprising a stiff (locally soft) thinly laminated grey sandy clay with rare lithorelicts of mudstone.

Groundwater was encountered at between 2.40m bgl and 3.40m bgl during the investigation and in subsequent monitoring at between 1.88m bgl and 3.98m bgl (62.15m OD to 65.09m OD).

A copy of the geological model across the former landfill (Reference Hydrock Drawing 19114-HYD-XX-ZZ-SK-GE-01006) is presented in Figure 2.6.

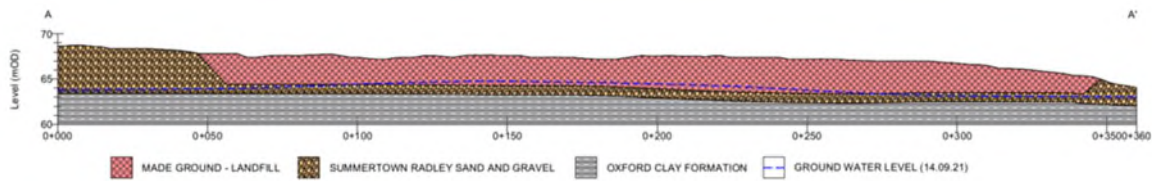


Figure 2.6: Hydrock Consulting Limited Landfill Geological Model) \* Since updated March 2023

Since the landfill investigation works were undertaken and based on further works the above geological model has been updated (including nomenclature) and included within the dataset as well as the geo-environmental assessment.

The investigation identified a number of contamination risks associated with the former landfill for site end users:

- Human Health (POS);
  - » Asbestos Containing Materials (ACM), Asbestos fibres and benzo(a)pyrene in the Landfill – Made Ground
  - » PAH in the Topsoil Made Ground; and
  - » Arsenic in the natural soils.
- Human Health (Residential);
  - » Asbestos, arsenic, lead and benzo(a)pyrene in the Landfill Made Ground
  - » Arsenic, lead, and benzo(a)pyrene in the Topsoil Made Ground; and
  - » Arsenic in the natural soils
- Plant Growth;
  - » Pervasive boron, copper, nickel and zinc.
- Controlled Waters;
  - » Exceedances with regards to ammoniacal nitrogen, chromium (III), cobalt, chromium, copper, nickel, sulphate, and manganese as an indicator of groundwater risk.
- Moderate risk from ground gases and CS<sub>2</sub> conditions apply for the area of the landfill.

Proposed mitigation measures with regards to a public open space (POS) use comprised:

- » Installation of a 450mm engineered cover, comprising a bonded geogrid break layer and subsoil with a topsoil thickness of between 150mm and 300mm.
- » Import of subsoil and topsoil in line with a MMP.

It was recommended that a cover system is placed over the landfill to break the pathway to the identified receptors, and that the landfill material is first compacted prior to placement of the cover system, which should extend a minimum of 3.0m beyond the edge of the landfill boundary to ensure adequate cover is provided.

The data from the investigation above has been included within the geological model and geo-environmental assessment as part of these works.

### 3. INITIAL CONCEPTUAL SITE MODEL

#### 3.1 Introduction

The iCSM incorporates evidence from the site walkover, the Desk Study and previous investigations carried out at the site. The formulation of an iCSM is a key component of the LCRM methodology. The iCSM incorporates a Ground Model of the site physical conditions and an exposure model of the possible contaminant linkages; it forms the basis for GQRA in accordance with current guidelines.

The following section provides a discussion of the iCSM for the entire site currently under consideration, including the former landfill area and areas proposed for retention as open space.

#### 3.2 Ground model

The geology presented in Section 2.6 provides an understanding of the ground conditions and is the basis for preparing the preliminary geotechnical hazard assessment (Section 3.3) and the preliminary geo-environmental exposure model (Section 3.4).

#### 3.3 Geotechnical hazard identification

##### 3.3.1 Context

A preliminary geotechnical hazard identification has been undertaken in general accordance with the ICE/DETR Document 'Managing Geotechnical Risk' and the Highways England documents HE-DMRB-G CS 641 and HE-DMRB-G CD 622 Revision 1.

The following section sets out the identified geotechnical hazards and the development elements potentially affected (see Table H.1 in Appendix H for further information).

##### 3.3.2 Plausible geotechnical hazards

Plausible geotechnical hazards identified at the site are:

- Uncontrolled general Made Ground (variable strength and compressibility).
- Soft / loose compressible ground (low strength and high settlement potential) – e.g. landfill materials, Head Deposits, and Alluvium.
- Shrinkage / swelling of the clay fraction of soils under changes in moisture content from seasonal effects and the influence of trees, hedges and vegetation.
- Variable lateral and vertical changes in ground conditions.
- Attack of buried concrete by aggressive ground conditions.
- Obstructions – man made construction and natural buried resistant materials.
- Existing below ground structures which are to remain (e.g. mains sewers).
- Shallow groundwater.
- Changing groundwater conditions.
- Risk from flooding and erosion.
- Running sands and / or loose Made Ground, leading to difficulty with excavation and collapse of side walls.

- Slope stability issues – general slopes and retaining walls.
- Earthworks – risk of settlement of new fill.
- Earthworks – poor bearing capacity of new fill.
- Earthworks – suitability of site won material to be reused as fill.
- Effects of sand / gravel extraction.
- Solifluction.
- Problematic soils.

### 3.3.3 *Potential development elements affected*

Development elements potentially affected by geotechnical hazards are:

- Buildings – foundations and floor slabs.
- Roads and pavements.
- Infrastructure structures (bridges).
- Buried services.
- General slopes.
- Retaining walls.
- Gardens.
- Construction staff, vehicles and plant operators.
- Concrete below ground.
- Earthworks control, inability to place and compact fill.
- Insufficient volumes of suitable site-won fill to complete earthworks.

Health and safety risks to site contractors and maintenance workers have not been assessed during these works and will need to be considered separately during design.

The above plausible geotechnical hazards and development elements affected have been carried forward for investigation and assessment. The investigation is presented in Sections 4 and 5 and the assessment is presented in Section 6.

## 3.4 Geo-environmental exposure model

### 3.4.1 *Context*

The preliminary exposure model is used to identify geo-environmental hazards and to establish potential contaminant linkages, based on the source-pathway-receptor (SPR) approach. A viable contaminant linkage requires all the components of an SPR to be present. If only one or two are present, there is no linkage and no further assessment is required.

### 3.4.2 *Potential contaminants*

For the purpose of this assessment the potential contaminants have been separated according to whether they are likely to have originated from an on-site or off-site source.

### 3.4.2.1 *Potential on-site sources of contamination*

- Made Ground, associated with historical construction activities, possibly including elevated concentrations of metals, metalloids, asbestos fibres, Asbestos Containing Materials (ACM), polycyclic aromatic hydrocarbons (PAHs) and petroleum hydrocarbons (S1).
- Landfilled waste, possibly including: elevated concentrations of metals, metalloids, asbestos fibres, ACM, PAHs and petroleum hydrocarbons (S2).
- Hydrocarbon fuels, lubricants, and solvents from the operation around Parkers Farm, together with uncontrolled disposal and spillage from waste receptacles (S3) (no tanks have been observed during the walkover).
- Ground gases (carbon dioxide and methane) from organic materials in the Made Ground, Landfill and Alluvium (S4).
- Naturally occurring elevated concentrations of arsenic within soils (S5).
- Asbestos within existing buildings, with the potential to be incorporated into the ground from demolition activities (S6).
- Pesticides and herbicides from agricultural land use (S7).
- Leachate from landfilled waste including commercial and industrial, located on the northern boundary (Fern Hill (now residential housing)) and Sandy Lane Pits in the centre and west of the site (S8).

### 3.4.2.2 *Potential off-site sources of contamination*

- Hydrocarbon fuels from adjacent petrol station to the south-west of the site (S9).
- Made Ground, associated with historical construction activities, possibly including elevated concentrations of metals, metalloids, asbestos fibres, ACM, PAHs and petroleum hydrocarbons from Railway line (bisecting but outside of the site) (S10).
- Ground gases (carbon dioxide and methane) from organic materials in the landfills located off-site (S11).

Leakage from chemical stores from Begbroke Science Park are mentioned in the historical desk study (Jubb, 2018). However, Hydrock do not believe this is a plausible contaminant source, due to the controlled conditions of storage.

### 3.4.3 *Potential receptors*

The following potential receptors in relation to the proposed land use have been identified.

- People (site end users, and neighbours) (R1).
- Development end use (buildings, utilities and landscaping) (R2).
- Groundwater: Secondary A aquifer status of the Superficial Summertown Radley Sand and Gravel and Alluvium and Bedrock Cornbrash Limestone Formation and Kellaways Sand Formation (R3).
- Surface water: on-site stream (Rowel Brook) in the north of the site, Oxford Canal along the eastern boundary (R4) and stream in the south the site, along with any existing ditches, and ponds.
- Ecology: Rushy Meadows SSSI located adjacent to the north-east of the site (R5).

#### 3.4.4 Potential pathways

The following potential pathways have been identified.

- Ingestion, skin (dermal) contact, inhalation of dust (P1).
- Migration and accumulation of ground gases via permeable soils and/or construction gaps into enclosed spaces (P2).
- VOC and petroleum hydrocarbon vapour ingress to buildings and outdoor air via permeable soils and/or construction gaps (P3).
- Root uptake by plants (P4).
- Migration of contaminants from landfill deposits (leachate) through the unsaturated zone in the River Terrace Deposits and laterally along the boundary with the Oxford Clay Formation (P5).
- Surface water via overland flow (P6).
- Surface water, via drainage discharge (P7).
- Surface water, via base flow from groundwater (P8).

Migration of leachate from the landfill, down to the underlying permeable geology (Kellaways Sand Formation and Cornbrash Formation) is not considered a viable pathway as the impermeable Oxford Clay Formation is present below the landfill, which will act as an aquitard.

Health and safety risks to site development contractors and maintenance workers have not been assessed as part of this study and will need to be considered separately.

The above sources, pathways and receptors have been included in the Preliminary Risk Assessment in accordance with LCRM (2022), and are considered to be plausible in the context of this site and therefore have been carried forward for investigation and assessment.

The investigation is described in Section 5 and the assessment is presented in Section 7.

An assessment of the SPR linkages is undertaken following the assessment (Section 7) and is presented in Appendix I (Table I.2).



## 4. GROUND INVESTIGATIONS

### 4.1 Site works

#### 4.1.1 Rationale

The ground investigation works, including the rationale which was based on the findings of the preliminary risk assessment is summarised in Table 4.1. Works have been undertaken in several stages and comprise: landfill investigation; preliminary soil infiltration investigation; site wide preliminary investigation; Sandy Lane railway bridge and canal bridge investigation; and groundwater levels investigation.

Table 4.1: Investigation rationale

Location	Purpose – Preliminary Investigation.
<i>Landfill investigation</i>	
BH01 - BH03	Cable percussion boreholes to investigate the thickness of the landfill. To allow collection of samples for contamination testing. Installation of gas and groundwater monitoring and sampling wells in the Oxford Clay Formation.
WS01, WS02, WS09 & WS10	Dynamic sampled boreholes to investigate the extent of the landfill. To allow collection of samples for contamination testing. Installation of gas and leachate/groundwater monitoring and sampling wells in the landfill.
WS03-WS08	Dynamic sampled boreholes to assess shallow ground conditions within the known location of the landfill. To allow collection of samples for contamination testing. Installation of gas and leachate/groundwater monitoring and sampling wells in the landfill.
TP01-TP07	Machine dug trial pits to assess the shallow ground conditions To allow collection of samples for contamination testing.
<i>Preliminary soil infiltration investigation</i>	
SA01 – SA09	Machine dug trial pits to investigate the shallow geology on a very wide spacing across the site. To allow for soil infiltration rate testing. (The locations of tests were designed to provide an indication of infiltration potential at areas identified as potential attenuation pond locations in the north (SA03, SA04 and SA05) and south (SA08 and SA09) and also across the central part of the site (SA01, SA02, SA06 and SA07), where gravels were expected to be thicker.
<i>Site wide preliminary investigation</i>	
BH201 – BH205	Cable percussion boreholes to investigate the thickness of the underlying deeper geology. To allow collection of samples for contamination testing. To allow collection of samples for geotechnical testing and in-situ geotechnical testing. Installation of gas and groundwater monitoring and sampling wells external to the landfill within the River Terrace Deposits.
WS201 – WS252	Dynamic sampled boreholes to investigate the thickness of the superficial deposits across the site. To allow collection of samples for contamination testing. To allow collection of samples for geotechnical testing and in-situ geotechnical testing.

Location	Purpose – Preliminary Investigation.
	Installation of gas and groundwater monitoring and sampling wells within the River Terrace Deposits.
TP201 – TP234	Machine dug trial pits to investigate the thickness of the shallow geology across the site. To allow collection of samples for contamination testing. To allow collection of samples for geotechnical testing and in situ geotechnical testing. Installation of gas and groundwater monitoring and sampling wells within the River Terrace Deposits.
HP201 – HP206	Hand dug pits to assess shallow conditions in the allotments in the west of the site. To allow collection of samples for contamination testing.
HP207 – HP210	Hand dug pits to assess shallow conditions around Parkers Farm in the central-east of the site. To allow collection of samples for contamination testing.
<i>Sandy Lane railway bridge and canal bridge investigation</i>	
RO301 – RO305	Rotary cored boreholes to assess the deeper underlying geology for the construction of a Railway and Canal bridge. To allow collection of samples for contamination testing. To allow collection of samples for geotechnical testing and in situ geotechnical testing. Installation of gas and groundwater monitoring and sampling wells in either the River Terrace Deposits or Cornbrash Limestone Formation
TP301 – TP313, TP315 – TP317	Machine dug trial pits to investigate shallow ground conditions. To allow collection of samples for contamination testing. To allow collection of samples for geotechnical testing and in situ geotechnical testing.
<i>Groundwater levels investigation</i>	
RO306 – RO321	Rotary open hole and rotary cored boreholes to confirm the underlying geology. To allow for installations of groundwater monitoring and sampling wells in the River Terrace Deposits and Cornbrash Limestone Formation.
CP301 – CP305	Cable percussion boreholes to investigate thickness of the deeper underlying geology. To allow for installation of groundwater monitoring and sampling wells into the River Terrace Deposits.
SA301 – SA302	Machine dug trial pits to investigate the shallow geology in the west of the site. To allow for soil infiltration rate testing.
HDP301 – HDP350	Hand dug pits to allow the collection of samples for organic analysis at 100mm intervals up to 300mm.

The fieldworks took place betweenThe fieldworks took place between:

- 17<sup>th</sup> and 20<sup>th</sup> August 2021 for the landfill investigation.
- 27<sup>th</sup> September and 1<sup>st</sup> October 2021 for the preliminary soil infiltration testing.
- 22<sup>nd</sup> August 2022 and 14<sup>th</sup> September 2022 for the site wide preliminary investigation.
- 23<sup>rd</sup> January 2023 and 14<sup>th</sup> February 2023 for the Sandy Lane Railway bridge and canal bridge investigation and groundwater levels investigation.

The ground investigation locations were surveyed in using a Total Station GPS survey instrument and are shown on the Exploratory Hole Location Plan (Hydrock Drawing 19114-HYD-XX-ZZ-DR-GE-01001) in Appendix A.

The logs, including details of ground conditions, soil sampling, in situ testing and any installations, are presented in Appendix C. A summary of the site works is presented in **Error! Reference source not found.**

The weather conditions during the:

- Landfill site fieldwork and for the previous week were dry and sunny.
- Preliminary soil infiltration testing and for the previous week were scattered showers.
- Site wide fieldwork and for the previous week were dry and sunny generally with occasional periods of light rain, following an extended period of dry weather. The network of open ditches around site, along with Rowel Brook in the north and a small stream/ditch in the south were dry at the time of the investigation works.
- Railway and canal bridge crossing and supplementary groundwater investigations and the previous week were scattered showers and overcast.

Table 4.2: Summary of site works

Activity	Method	No.	Name	Maximum Depth Range (m bgl)	In situ tests	Rationale
<i>Landfill investigation</i>						
Boreholes	Cable percussive	3	BH01 – BH03	10.00	SPT	50mm HDPE wells with gas taps in 3 holes
	Windowless sampler	10	WS01 – WS10	5.00	SPT	50mm HDPE wells with gas taps in 10 holes
Trial pits	Machine (JCB 3CX)	7	TP01 – TP07	3.50	Hand shear vane (HSV)	
<i>Preliminary soil infiltration investigation</i>						
Infiltration tests	Machine (JCB 3CX)	10	SA01 – SA09	1.00 – 2.10m	BRE365 Soakaway Testing	Infiltration tests (not undertaken in SA06 due to damage to installation).
<i>Site wide preliminary investigation</i>						
Boreholes	Cable percussive	5	BH201 – BH205	5.20 – 10.45	SPT U100	63mm HDPE wells with gas taps in all holes
	Windowless sampler	52	WS201 – WS252	1.00 – 5.45	SPT	63mm HDPE wells with gas taps in all holes
Trial pits	Machine (JCB 3CX)	35	TP201 – TP234	0.70 – 3.60	HSV	
	Hand-excavated	10	HP201 – HP210	0.55 – 1.20	-	
<i>Sandy Lane railway bridge and canal bridge investigation</i>						

Activity	Method	No.	Name	Maximum Depth Range (m bgl)	In situ tests	Rationale
Boreholes	Rotary Cored	5	RO301 – RO305	20.00 – 21.00	SPT U100	63mm HDPE wells with gas taps in all holes
Trial pits	Machine (JCB 3CX)	16	TP301 – TP317	1.40 – 2.70	HSV	
<i>Supplementary groundwater investigation</i>						
Boreholes	Rotary Cored	16	RO306 – RO321	4.50 – 12.70	-	63mm HDPE wells with gas taps in all holes
	Rotary Open Hole	7	RO307A, RO309A, RO312A, RO313A, RO316A, RO318A & RO321A	0.90 – 4.50	-	63mm HDPE wells with gas taps in all holes
	Cable Percussive	5	CP301 – CP305	4.80 – 5.60	-	63mm HDPE wells with gas taps in all holes
Trial pits	Machine (JCB 3CX)	3	SA301 – SA302	2.00 – 2.50	HSV BRE365 Soakaway Testing	Infiltration tests
	Hand-excavated	50	HDP300 – HDP350	0.30	-	

#### 4.1.2 Constraints

During investigation of the landfill site:

- Exploratory locations were constrained by the presence of badger setts along parts of the southern and western boundaries (locate by BSG Ecology who were present on the first day of site works) with a minimum of 15m excavation exclusion zone employed as indicated by BSG Ecology, where encountered.
- Works were also constrained by the presence of overhead HV cables along the eastern boundary with a 9m standoff zone employed. As such exploratory holes were not able to be undertaken to prove the lateral extents of the landfill in these locations.

During soil infiltration rate investigation:

- Infiltration tests were not able to be undertaken within SA06 as a result of damage to the infiltration test location as a result of ploughing shortly after construction.
- Excavation for soakaway tests in SA03a, SA04 and SA09 were stopped short of the target depth of 2.00m due to pit collapse and water ingress.
- Excavation for tests SA05 and SA08 were stopped short of the target depth due to water ingress.

During site wide preliminary investigation:

- Investigation works were limited in the area around the chicken and deer farm with exploratory holes undertaken external to the fenced livestock areas.
- A 15m exclusion zone around the badger setts was in use during the works, in consultation with the appointed ecologist.
- Several services were present on site including overhead HV cables, an underground sewage main and adjacent to the railway line. Appropriate exclusion zones were employed during the duration of the works.

During supplementary Investigation:

- Several services were present on site including overhead HV cables and an underground sewage main. Appropriate exclusion zones were employed during the duration of the works.
- Where appropriate, exclusion zones were employed around infrastructure elements of the railway line and canal after discussions with asset owners.

#### 4.1.3 Monitoring installations

Wells for monitoring groundwater levels and ground gas concentrations, and to facilitate the sampling of groundwater were installed as part of several of the investigations. A summary of the monitoring well installations is presented in Table 4.3.

*Table 4.3: Summary of monitoring installations*

Location	Ground level (m OD)	Standpipe diameter (mm)	Screen top and base depth (m bgl)	Screen top and base elevation (m OD)	Strata targeted
<i>Landfill investigation</i>					
BH01	67.66	50	4.00 – 10.00	63.66 – 57.66	OCF / KSM /KCM
BH02	66.47	50	4.00 – 10.00	62.47 – 56.47	OCF / KSM /KCM
BH03	67.09	50	5.00 – 10.00	62.09 – 57.09	OCF / KSM /KCM
WS01	67.54	50	1.00 – 3.00	66.54 – 64.54	Landfill
WS02	65.62	50	1.00 – 4.00	64.62 – 61.62	RTD
WS03	67.71	50	0.70 – 2.70	67.01 – 65.01	Landfill
WS04	66.74	50	1.00 – 3.00	65.74 – 63.74	Landfill
WS05	67.39	50	1.00 – 3.00	66.39 – 64.39	Landfill
WS06	66.97	50	1.00 – 2.00	65.97 – 64.97	Landfill
WS07	67.14	50	0.50 – 2.50	66.64 – 64.64	Landfill
WS08	67.02	50	0.80 – 3.80	66.22 – 63.22	Landfill
WS09	66.71	50	1.00 – 3.00	65.71 – 63.71	Landfill
WS10	66.71	50	1.00 – 3.00	65.71 – 63.71	Landfill
<i>Site wide preliminary investigation</i>					
BH201	68.06	50	1.00 – 5.00	67.06 – 63.06	RTD
BH202	63.67	50	1.00 – 5.00	62.67 – 58.67	RTD
BH203	63.35	50	1.00 – 5.00	62.35 – 58.35	RTD
BH204	62.31	50	1.00 – 5.00	61.31 – 57.31	RTD
BH205	60.78	50	1.00 – 4.00	59.78 – 56.78	RTD / KSM
WS201	67.36	50	1.00 – 2.00	66.36 – 65.36	KCM
WS202	65.92	50	1.00 – 2.00	64.92 – 63.92	MG / RTD
WS203	68.32	50	1.00 – 2.00	67.32 – 66.32	RTD
WS204	64.19	50	0.70 – 1.00	63.49 – 63.19	RTD / CLF
WS205	64.23	50	1.00 – 3.00	63.23 – 61.23	RTD
WS206	64.72	50	1.00 – 4.20	63.72 – 60.52	RTD / KCM / CLF
WS207	62.87	50	1.00 – 2.00	61.87 – 60.87	RTD
WS208	62.33	50	0.80 – 2.00	61.53 – 60.33	RTD
WS209	64.34	50	1.00 – 3.00	63.34 – 61.34	RTD
WS210	62.37	50	1.00 – 2.50	60.87 – 59.87	ALV
WS211	68.29	50	2.80 – 3.50	65.49 – 64.79	RTD
WS213	68.30	50	1.00 – 3.70	67.30 – 64.60	RTD
WS214	68.15	50	0.70 – 1.20	67.45 – 66.95	RTD
WS215	62.11	50	1.00 – 2.70	61.11 – 59.41	RTD
WS216	67.87	50	1.00 – 4.00	66.87 – 63.87	RTD
WS217	68.52	50	1.00 – 2.00	67.52 – 66.52	RTD
WS218	68.42	50	1.00 – 1.80	67.42 – 66.62	RTD

Location	Ground level (m OD)	Standpipe diameter (mm)	Screen top and base depth (m bgl)	Screen top and base elevation (m OD)	Strata targeted
WS219	65.68	50	1.00 – 5.00	64.68 – 60.68	KSM / KCM
WS220	62.56	50	1.00 – 3.00	61.56 – 59.56	ALV / RTD
WS221	67.84	50	1.00 – 2.00	66.84 – 65.84	RTD
WS222	68.14	50	0.80 – 2.60	67.34 – 65.54	RTD
WS223	67.12	50	1.00 – 2.00	66.12 – 65.12	RTD
WS224	61.94	50	1.00 – 1.30	60.94 – 60.64	ALV
WS225	67.49	50	1.00 – 2.00	66.49 – 65.49	RTD
WS226	67.70	50	0.70 – 1.00	67.00 – 66.70	RTD
WS227	68.21	50	1.00 – 2.70	67.21 – 65.51	RTD
WS228	67.66	50	0.80 – 1.00	66.86 – 66.66	RTD
WS229	68.16	50	1.00 – 2.00	67.16 – 66.16	RTD
WS230	66.91	50	1.00 – 1.20	65.91 – 65.71	RTD
WS231	64.77	50	1.00 – 5.00	63.77 – 59.77	H / RTD
WS232	61.66	50	1.00 – 3.00	60.66 – 58.66	RTD
WS233	61.48	50	1.30 – 2.50	60.18 – 58.98	ALV / RTD
WS234	61.32	50	1.00 – 1.70	60.32 – 59.62	RTD
WS235	64.31	50	1.00 – 5.00	63.31 – 59.31	RTD / OCF / KSM
WS236	66.24	50	1.00 – 2.00	65.24 – 64.24	RTD
WS237	67.40	50	0.50 – 1.00	66.90 – 66.40	RTD
WS238	65.12	50	2.00 – 5.00	63.12 – 60.12	OCF
WS239	61.33	50	1.30 – 2.50	60.03 – 58.83	ALV / RTD
WS240	61.26	50	0.90 – 1.20	60.36 – 60.06	ALV / RTD
WS241	61.59	50	1.00 – 2.00	60.59 – 59.59	ALV / RTD
WS242	61.92	50	0.60 – 3.60	61.32 – 58.32	RTD
WS243	66.85	50	0.50 – 1.00	66.35 – 65.85	RTD
WS244	61.21	50	0.50 – 1.00	60.71 – 60.21	RTD
WS245	60.66	50	1.00 – 2.70	59.66 – 57.96	ALV / RTD
WS246	61.02	50	1.00 – 4.40	60.02 – 56.62	ALV / RTD
WS247	60.57	50	0.50 – 1.00	60.07 – 59.57	RTD
WS248	61.01	50	1.00 – 1.70	60.01 – 59.31	RTD
WS249	60.82	50	0.80 – 1.00	60.02 – 59.82	RTD
WS250	60.81	50	0.80 – 1.00	60.01 – 59.81	RTD
WS251	60.53	50	1.00 – 2.00	59.53 – 58.53	RTD
WS252	60.40	50	1.00 – 5.00	59.40 – 55.40	ALV / OCF
<i>Sandy Lane railway bridge and canal bridge investigation</i>					
RO301	61.81	50	5.50 – 7.60	56.31 – 54.21	CLF
RO302	61.57	50	1.00 – 3.15	60.57 – 58.42	RTD



Location	Ground level (m OD)	Standpipe diameter (mm)	Screen top and base depth (m bgl)	Screen top and base elevation (m OD)	Strata targeted
RO303	61.47	50	2.00 – 4.00	59.47 – 57.47	RTD
RO304	61.47	50	6.00 – 8.35	55.47 – 53.12	CLF
RO305	60.12	50	1.00 – 2.50	59.12 – 57.62	RTD
<i>Supplementary groundwater investigation</i>					
RO306	65.63	50	3.50 – 4.50	62.13 – 61.13	CLF
RO307	66.09	50	3.50 – 5.00	62.59 – 61.09	CLF
RO307A	66.09	50	1.00 – 2.00	65.09 – 64.09	RTD
RO309	68.22	50	4.50 – 5.50	63.72 – 62.72	CLF
RO309A	68.22	50	2.00 – 3.50	66.22 – 64.72	RTD
RO310	67.04	50	3.50 – 6.00	63.54 – 61.04	CLF
RO311	64.41	50	3.00 – 5.00	61.41 – 59.41	CLF
RO312	67.28	50	6.00 – 9.00	61.28 – 58.28	CLF
RO312A	67.28	50	1.00 – 2.00	66.28 – 65.28	RTD
RO313	65.84	50	2.00 – 4.50	63.84 – 61.34	CLF
RO313A	65.84	50	0.50 – 0.80	65.34 – 65.04	RTD
RO314	63.98	50	4.00 – 4.50	59.98 – 59.48	CLF / FMF
RO315	63.32	50	4.50 – 5.50	58.82 – 57.82	FMF
RO316	65.50	50	3.50 – 5.50	62.00 – 60.00	CLF
RO316A	65.50	50	2.00 – 3.50	63.50 – 62.00	RTD
RO317	62.75	50	6.70 – 7.30	56.05 – 55.45	FMF
RO318	62.13	50	5.50 – 6.00	56.63 – 56.13	FMF
RO318A	62.13	50	1.00 – 4.50	61.13 – 57.63	RTD
RO319	62.21	50	3.50 – 5.50	58.71 – 56.71	RTD / CLF
RO320	62.18	50	3.50 – 5.00	58.68 – 57.18	CLF
RO321	62.55	50	3.00 – 4.00	59.55 – 58.55	CLF
RO321A	62.55	50	1.00 – 2.00	61.55 – 60.55	RTD
CP301	67.69	50	1.60 – 4.60	66.09 – 63.09	RTD
CP302	66.74	50	1.50 – 4.00	65.24 – 62.74	RTD
CP303	68.15	50	1.00 – 4.00	67.15 – 64.15	RTD
CP304	68.02	50	1.00 – 4.00	67.02 – 64.02	RTD
CP305	67.78	50	1.60 – 4.60	66.18 – 63.18	RTD
ALV – Alluvium   CLF – Cornbrash Limestone Formation   FMF – Forest Marble Formation   H – Head Deposits KCM – Kellaways Clay Member   KSM – Kellaways Sand Member   MG – Made Ground   OCF – Oxford Clay Formation RTD – River Terrace Deposits					

## 4.2 Geo-environmental testing

### 4.2.1 Sampling strategy and protocols

Exploratory hole positions were determined by reference to the site conditions and uncertainties identified in the iCSM.

No specific sampling statistics or grid were utilised in this instance.

Samples were taken, stored and transported in general accordance with BS 10175:2011+A2:2017.

### 4.2.2 Geo-environmental monitoring

Six ground gas monitoring rounds were completed at the landfill site between August and October 2021.

The site wide preliminary investigation gas monitoring boreholes have been monitored on 14 occasions, and a further three monthly visits are scheduled to be undertaken (completion anticipated September 2023).

The ground gas and groundwater monitoring results are presented in Appendix E.

### 4.2.3 Geo-environmental laboratory analyses

The chemical test certificates for testing undertaken as part of Hydrock's investigations are provided in Appendix F and are summarised in Table 4.4 (soils) and Table 4.5 (waters). Wherever possible, UKAS and MCERTS accredited procedures have been used.

Table 4.4: Geo-environmental analyses of soils

Determinand Suite	Made Ground	Landfill Made Ground	Agriculturally Disturbed Topsoil	Natural Soils
<i>Landfill investigation</i>				
Hydrock minimum suite of determinands for solids*	4	17	-	4
Speciated aliphatic and aromatic banding Total Petroleum Hydrocarbons (TPH) (Hydrock Tier 2 TPH Suite)	-	14	-	1
Volatile organic compounds (VOCs)	-	9	-	1
Semi-volatile organic compounds (SVOCs)	-	9	-	1
<i>Site wide preliminary investigation</i>				
Hydrock minimum suite of determinands for solids*	5	-	74	21
Hydrock Tier 2 TPH Suite	4	-	10	2
Benzene, toluene, ethylbenzene and xylene (BTEX)	4	-	10	2
MTBE (Methyl Tertiary Butyl Ether)	4	-	10	2
VOCs	2	-	4	-
SVOCs	2	-	4	-

Determinand Suite	Made Ground	Landfill Made Ground	Agriculturally Disturbed Topsoil	Natural Soils
BS 3882 Topsoil Suite + Interpretation	-	-	5	-
Pesticide / Herbicide screen	-	-	15	-
WAC Full Solid Suite	2	-	2	1
<i>Sandy Lane railway bridge and canal bridge investigation</i>				
Hydrock minimum suite of determinands for solids*	-	-	4	4
Hydrock Tier 2 TPH Suite	-	-	4	-
*Hydrock minimum soil suite comprises: As, B (water soluble), Be, Cd, Cr (total), Cr (VI), Cu, Hg, Ni, Pb, S (elemental), Se, V, Zn, cyanide (total), sulphide, pH, asbestos fibres, speciated PAHs (USEPA Priority 16), total phenols and fraction of organic carbon (FOC)				

The soils chemical test data are interpreted and assessed in Sections 7.3 and 7.4.

Table 4.5: Geo-environmental analyses of waters

Determinand Suite	Groundwater
<i>Landfill investigation</i>	
Hydrock minimum suite of determinands for waters*	6
Hydrock Tier 2 TPH Suite	6
VOCs	6
SVOCs	6
<i>Site wide preliminary investigation</i>	
Hydrock minimum suite of determinands for waters*	31
Hydrock Tier 2 TPH Suite	9
BTEX	9
VOCs	6
SVOCs	6
* Hydrock minimum waters suite comprises: Ag, Al, As, B, Ba, Cd, Co, Cr (III), Cr(VI), Cu, Fe, Hg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Zn, V, cyanide (total), phenols (total), ammonium, bromate, chloride, fluoride, nitrate, nitrite, sulphate, PAH (speciated), pH, EC and hardness;	

The groundwater chemical test data are interpreted and assessed in Section 7.5.

## 4.3 Geotechnical testing

### 4.3.1 Geotechnical laboratory testing

The geotechnical tests undertaken are summarised in Table 4.6 and the test certificates are provided in Appendix D. Wherever possible, UKAS accredited procedures have been used.

No geotechnical testing was undertaken as part of the landfill investigation.

The geotechnical test data are summarised in Section 5.6 and interpreted in Section 6.

Table 4.6: Summary of sample numbers for geotechnical tests

Test	Agriculturally Disturbed Topsoil	Alluvium	Head Deposits	River Terrace Deposits	Glacial Washout Till?	Oxford Clay Formation	Kellaways Sand Member	Kellaways Clay Member	Cornbrash Limestone Formation	Forest Marble Formation	White Limestone Formation
Natural moisture content	-	29	4	26	1	5	6	12	1	3	-
Atterberg limits	-	21	3	14	1	2	7	5	-	2	-
Particle size distribution (sieve/sedimentation)	-	8	1	10	-	-	1	-	-	-	-
Sulphate and aggressive chemical environment classification for buried concrete classification (full BRE SD1 suite)	-	8	2	15	1	2	5	5	2	4	1
Optimum Moisture Content / Maximum Dry Density Relationship (4.5kg rammer), with hand shear vane at each compaction point	-	-	1	3	-	-	-	1	-	-	-
Remoulded California Bearing Ratio at natural moisture content (soaked)	-	5	-	5	-	-	-	-	-	-	-
Remoulded California Bearing Ratio Remoulded at OMC (soaked)	-	-	1	3	-	-	-	1	-	-	-
Remoulded undrained triaxial shear strength at Optimum Moisture Content	-	-	1	3	-	-	-	1	-	-	-
Undrained Triaxial	-	-	-	-	-	-	-	1	-	-	-
Odometer	-	-	-	1	-	-	-	1	-	-	-
Particle density	-	-	1	3	-	-	-	1	-	-	-
Organic Matter	150	4	1	3	-	-	1	1	-	-	-
Rock Tests	Point Load	-	-	-	-	-	-	-	4	4	3
	Uniaxial Compressive Strength	-	-	-	-	-	-	-	2	1	1

## 5. GROUND INVESTIGATION RECORDS AND DATA

### 5.1 Physical ground conditions

#### 5.1.1 Summary of strata encountered

The following presents a summary of the properties of the ground and groundwater conditions encountered, based on field observations, interpretation of the field data and laboratory test results, taking into account drilling, excavation and sampling methods, transport, handling and specimen preparation.

Details of the results of the Hydrock ground investigation works are provided in the logs in Appendix C, a summary of the strata encountered forming the Ground Model is presented in Table 5.1 and the individual strata are described in the sections below. Relevant geological cross-sections are presented in Appendix A.

Table 5.1 supersedes the previous geological conditions (Issue P01) due to deeper boreholes penetrating the Cornbrash Limestone Formation allowing a more accurate site-specific dip of strata to be determined and correlated across the site as well as an understanding of deeper geological units.

Table 5.1: Strata encountered

Stratum	Depth to top (m bgl)	Depth to base (m bgl)	Thickness (m) (range)	Thickness (m) (average)
Topsoil Made Ground - Landfill	0.00	0.05 – 0.80	0.05 – 0.80	0.24
Landfill - General Made Ground	0.25 – 0.30	0.50 – 0.60	0.25 – 0.30	0.28
Landfill – Made Ground (restricted to the landfill only)	0.05 – 0.80	2.10 – 3.90	1.80 – 3.75	2.86
‘General’ Made Ground	0.00 – 0.30	0.10 – 1.20	0.10 – 1.10	0.54
Agriculturally Disturbed Topsoil	0.00	0.15 – 0.80	0.15 – 0.80	0.31
Alluvium	0.18 – 0.80	0.45 – 3.15	0.20 – 2.85	0.93
Head Deposits	0.20 – 0.40	0.40 – 1.70	0.10 – 1.40	0.62
River Terrace Deposits	0.10 – 3.90	0.80 – 5.90	0.22 – 5.55	2.37
Glacial Washout Till	1.20	1.80	0.60	0.60
Oxford Clay Formation	1.50 – 4.90	3.30 – 11.30*	0.70 – 8.60*	-
Kellaways Sand Member	1.00 – 11.30	1.90 – 14.40*	0.40 – 3.14*	-
Kellaways Clay Member	1.00 – 14.44	1.80 – 17.30*	0.20 – 3.50*	-
Cornbrash Limestone Formation	0.30 – 17.30	4.00 – 9.10*	0.29 – 3.70*	-
Forest Marble Formation	3.00 – 9.10	16.84 – 18.00*	8.75 – 10.40*	-
White Limestone Formation	16.84 – 18.0	>21.00	Not Proven	-
* Where proven				

### 5.1.2 *Topsoil Made Ground – Landfill*

Topsoil Made Ground – Landfill, was encountered in all locations within the landfill, to a maximum depth of 0.80m (with an average of 0.24m). However, it should be noted that in some areas, namely TP03, TP04, TP05, WS07, WS08 and WS09, the topsoil cover was minimal, with the surface cover comprising grass surfacing straight onto landfill.

The Topsoil Made Ground generally consisted of dark brown to orangish brown silty gravelly sand with high root content. Gravels consist of angular to sub-rounded, fine to coarse, of flint and sandstone with gravel sized fragments of angular fine to coarse brick and concrete and occasional glass, metal and fabric.

### 5.1.3 *General Made Ground (Landfill)*

No obvious capping of the landfill was identified, although locally in two locations (WS03 and BH01) to depths of up to 0.60m bgl, a firm yellowish greyish brown slightly sandy occasionally slightly gravelly clay was encountered, which appeared different to the underlying landfill Made Ground.

No plastic, metal, etc. objects were identified in this material, but were present in the underlying Landfill Made Ground. Whilst the locations where General Made Ground was encountered were within the apparent landfill boundary, the absence of obvious and significant man-made material suggests potential differences in material deposited and therefore, it has been interpreted that the materials in the areas of these observations are separate from the main landfill deposits.

### 5.1.4 *Landfill – Made Ground*

Landfill Made Ground was encountered across the area of the former landfill site to depths of up to 3.90m bgl. The depth and level to the base of the landfill are shown on Hydrock Drawings 19114-HYD-XX-ZZ-SK-GE-01003 and 19114-HYD-XX-ZZ-SK-GE-01004, provided in Appendix A.

The Landfill Made Ground was highly variable. However, it generally consisted of a mixture of greyish, orangish brown, gravelly sand (predominantly ash) with abundant man-made putrescible waste (as below) and gravel sized fragments of fine to coarse, angular to sub-rounded concrete, slag and brick, glass bottles (containing unknown liquid), plastic bottles, plastic wrapping, scrap metal, wires, batteries, bike frames, animal bones and newspaper (dated 1960's). Locally cobbles and boulders of concrete were encountered. Towards the base of the landfill the colour notably changed to dark grey and black.

During the investigation it was noted that the Landfill Made Ground had a putrid odour in all locations that increased with depth and in one location (TP02) a strong hydrocarbon odour was noted between 1.40m and 3.20m bgl. No low permeability lining was encountered at the base of the landfill and no capping was identified.

The lateral extents of the landfill were unable to be determined due to the presence of badger setts. However, investigation in the fields beyond have identified natural strata in all locations and as such the lateral extents of the landfill are interpreted as the hedgerows around the site.

### 5.1.5 *Made Ground*

Made Ground was encountered around the farm buildings in the central-east of the site (Parkers Farm) in HP207 – HP210, WS202 adjacent to a track in the north of the site to the pumping station, around

the farm track, WS224 located in the north-east of the site and WS235 & WS236 associated with a track and farmyard area associate with the poultry and deer farm in the south-west of the site.

Around Parkers Farm, the Made Ground comprised mixed materials with a 0.10 – 0.15m concrete surfacing in 2 locations, with Made Ground up to 1.10m bgl comprising a gravelly slightly clayey sand and limestone gravel/cobbles. A slight PAH odour was noted in HP208 and black staining.

WS202 undertaken adjacent to the track in the north recorded Made Ground to 1.20m bgl with a firm orangish brown slightly gravelly sandy clay with sandstone and flint gravel with a soft band with occasional fragments of brick between 1.00m bgl to 1.20m bgl.

WS235 & WS236 encountered in the south-west recorded a brown slightly sandy gravelly clay with gravel constituents of flint, quartz, chalk and brick.

### 5.1.6 *Agriculturally Disturbed Topsoil*

Agriculturally Disturbed Topsoil was encountered across the majority of the site (excluding around the farm buildings, tracks and the area of the landfill). The topsoil present in the allotments is also included in the Agriculturally Disturbed Topsoil designation for completeness.

Topsoil was between 0.15m and 0.80m thick, with an average thickness of 0.31m. The topsoil comprised a brown slightly gravelly clayey sand and stiff (site work followed a prolonged period of dry hot weather) dark brown slightly gravelly sandy clay. Gravel constituents comprised flint and limestone.

For the purposes of this report, topsoil is defined as the upper layer of an in-situ soil profile, usually darker in colour and more fertile than the layer below (subsoil) which is a product of natural chemical, physical, biological and environmental processes.

Five composite samples of the topsoil were tested for compliance with BS 3882:2015. These were found to be complaint when compared to multi-purpose topsoil on the basis of the grading (clay content). However, they were found to be non-compliant when compared to multi-purpose topsoil on the basis of the pH, available plant nutrients, extractable phosphate, potassium and magnesium and Mass Loss on Ignition in one sample. This does not preclude the use of the topsoil as a growing medium as long as it is recognised the topsoil will require regular application of general-purpose fertiliser. Subject to noting the above comments, and subject to approval by the Client, the landscape architect or landscape contractors, the Agriculturally Disturbed Topsoil is considered likely to be suitable for reuse as general topsoil in the proposed development.

### 5.1.7 *Alluvium*

Alluvium was encountered underlying the Agriculturally Disturbed Topsoil in the vicinity of the stream in the north of the site, the southern boundary of the site and in the east of the site between the railway line and Oxford Canal, to depths of between 0.45m bgl and 3.15m bgl.

The Alluvium generally consisted of soft to firm orangish and yellowish-brown, locally grey, sandy clay to slightly sandy slightly gravelly clay interbedded with bands of yellow brown clayey sand to gravelly sand with gravel constituents of flint and limestone. Locally an organic odour, or remnant rootlets were present.

The depth to the base of the Alluvium is presented on Hydrock Drawings 19114-HYD-XX-ZZ-DR-GE-01018 (m OD) and 19114-HYD-XX-ZZ-DR-GE-01019 (m bgl) in Appendix A.



Instability of excavation faces was noted in a number of locations within the Alluvium and was exacerbated by groundwater ingress.

#### 5.1.8 *Head Deposits*

Head Deposits were encountered underlying the Agriculturally Disturbed Topsoil sporadically across the site and are interpreted as a cohesive band overlying the River Terrace Deposits, formed under periglacial conditions after their deposition. These were recorded to depths of between 0.40m bgl and 1.70m bgl with an average thickness of 0.62m.

The Head Deposits generally consist of stiff orangish brown sandy clay to slightly gravelly sandy clay with gravel constituents of predominantly flint.

#### 5.1.9 *River Terrace Deposits*

River Terrace Deposits were encountered in the centre of the site, in the topographically higher areas, to depths between 0.80m bgl (where extending down slopes) to 5.90m bgl in the centre of the site. The depths to the base of the River Terrace Deposits are shown on Hydrock Drawings 19114-HYD-XX-ZZ-DR-GE-01020 (m OD) 19114-HYD-XX-ZZ-DR-GE-01021 (m bgl) in Appendix A.

These deposits generally consisted of medium dense to dense (but locally loose) slightly gravelly slightly clayey sand to a sandy gravel, with the gravel constituents of flint, limestone and ironstone. Local cohesive deposits were identified between granular layers.

Review of the data distribution indicates that the River Terrace Deposits are more cohesive, generally to the east and south of the landfill, with a soft cohesive band and occasionally a loose granular band of soils present at between approximately 62m OD and 59m OD.

Collapse within the River Terrace Deposits was recorded in the centre and south of the site, generally associated with groundwater ingress from depths of between 1.10m bgl and 1.40m bgl in the south (SA09, TP225, TP228 & TP229). Collapse of excavations within the trial pits was also noted in a number of locations between 1.20m bgl and 2.0m bgl in the east of the site and also generally associated with groundwater ingress.

Beneath the landfill, remnant River Terrace Deposits were present and consisted of yellowish to greyish brown slightly sandy gravel or sand and gravel.

The gravel consists of angular to rounded, fine to coarse flint and sandstone and limestone from 0.50m bgl to 3.90m bgl but >5.00m where the thickness was not proven. Within WS02 in the north-west corner these were noted to be a sandy clay to 5.0m bgl.

#### 5.1.10 *Glacial Washout Till*

Strata interpreted as Glacial Washout Till was encountered in TP308 at a depth of between 1.20m bgl and 1.80m bgl and was described as a firm to stiff light brown and mottled grey slightly sandy slightly gravelly clay with gravel constituents of mudstone, sandstone and quartz.

#### 5.1.11 *Oxford Clay Formation*

The Oxford Clay Formation was encountered underlying the superficial deposits in the centre of the site at topographic highs and underneath River Terrace Deposits beneath the landfill with the thickness of the unit generally unproven to depths of between 3.30m bgl and >11.30m bgl.

These deposits generally comprised a stiff grey to bluish grey clay occasionally thinly laminated and presence of shell fragments, selenite crystals and sand pockets.

Previous interpretation in the south of the site (Issue P01) has been updated to be reflective of the Kellaways Formation based on the local dip of the strata identified during additional works.

#### *5.1.12 Kellaways Sand Member*

The Kellaways Sand Member was encountered underlying the superficial deposits in the north of the site where it outcrops at surface and in RO305 in the southeast of the site. It was generally encountered as banded soft grey and orangish brown sandy clayey silt, grey sand or sandy clay and locally weathered near surface.

In the north of the site where encountered, the full thickness was not observed likely due to the deposition and erosion during deposition of the River Terrace Deposits where at outcrop.

#### *5.1.13 Kellaways Clay Member*

The Kellaways Clay Member was encountered directly underlying the superficial deposits in the north of the site and beneath the Kellaways Sand Member and overlying the Cornbrash Formation where proven in the deeper rotary boreholes in the north, centre and south of the site. In the north of the site where encountered, the full thickness was not observed likely due to the deposition and erosion during deposition of the River Terrace Deposits where at outcrop.

These deposits generally consisted of a stiff fissured grey, yellowish brown or greenish grey clay and were encountered near surface in the north overlying the Cornbrash Limestone Formation. Oyster shells were encountered in a number of locations which is consistent with the basal unit of this member and within TP215 for correlation.

#### *5.1.14 Cornbrash Limestone Formation*

The Cornbrash Limestone Formation was encountered underlying the superficial deposits, Kellaways Clay Member or immediately beneath the Topsoil in the north of the site where it outcrops at surface. These deposits generally consisted of light grey to yellowish brown very weak limestone or stiff yellowish brown sandy gravelly clay where weathered. The limestone was fractured and encountered as a gravel in the near surface highly weathered zones. Where deepening in the centre and south of the site the Cornbrash Limestone was generally un-weathered and comprised a strong grey limestone.

The Cornbrash Limestone Formation is anticipated to underlie the entire site beneath the Kellaways Clay Member, becoming deeper towards the south due to the dip of the strata and encountered at 17.30m bgl in the far southeast of the site.

In the vicinity of the landfill in the central-south of the site the Oxford Clay Formation, Kellaways Sand Member and Kellaways Clay Member are present above the older solid geology including the Cornbrash Limestone Formation.

The depth to the top of the Cornbrash Formation is shown on Hydrock drawing 19114-HYD-XX-ZZ-DR-GE-01022 (m OD) 19114-HYD-XX-ZZ-DR-GE-01023 (m bgl) in Appendix A.

### 5.1.15 Forest Marble Formation

The Forest Marble Formation was encountered underlying the Cornbrash Limestone Formation across the site (where fully penetrated) and underlying superficial deposits in the far northeast of the site. These deposits generally consisted of a grey very weak mudstone in the upper elements of the unit and a grey limestone in the base of the unit with a maximum thickness (where proven) of 10.40m.

The Forest Marble Formation is anticipated to underlie the entire site beneath the Cornbrash Limestone Formation, becoming deeper towards the south due to the dip of the strata.

### 5.1.16 White Limestone Formation

The White Limestone was encountered underlying the Forest Marble Formation in RO301 to RO304 at depths between 16.84m bgl to 18.00m bgl and comprised a strong light grey limestone. The base of the unit was unproven during the investigation.

### 5.1.17 Geological Cross Sections

Geological cross sections of the site based on the Hydrock Ground Investigations are presented on Hydrock Drawing 19114-HYD-XX-ZZ-DR-GE-01007 in Appendix A.

A dip of 0.7° (a gradient of approximately 1(v) in 82(h)) has been assumed in the ground model based on the wider geology and assessment of strata horizons in boreholes RO301 to RO305 and RO308.

Individual cross sections relating to the proposed railway bridge and the proposed footbridge are presented in Cross Section lines E-E' and F-F'.

## 5.2 Obstructions

To date, obstructions encountered during the investigation have been limited to the landfill as summarised in Table 5.2.

Table 5.2: Obstructions encountered

Stratum	Location	Depth (m bgl)	Description
Landfill – Made Ground	TP06	0.90	Blocks of concrete and cemented bricks

Obstructions associated with existing buildings and with excavation in rock (in the north of the site) will also be present.

## 5.3 Visual and olfactory evidence of contamination (soil)

In addition to the more common man-made constituents (ash, slag, plastic, etc), described above in Section 5.1, visual and olfactory evidence of contamination was noted in a number of locations within the landfill, which are summarised in Table 5.3.

Table 5.3: Visual and olfactory evidence of contamination - soils

Stratum	Location	Depth (m bgl)	Description
Landfill – Made Ground	BH02	0.40 – 3.00	Putrid odour
Landfill – Made Ground	BH02	3.00 – 3.10	Strong putrid odour
Landfill – Made Ground	BH03	0.50 – 3.90	Putrid odour
Landfill – Made Ground	TP02	140 – 3.20	Hydrocarbon odour

Stratum	Location	Depth (m bgl)	Description
Landfill – Made Ground	TP03	1.50 – 2.50	Putrid odour
Landfill – Made Ground	TP05	1.40 – 2.80	Strong putrid odour
Landfill – Made Ground	WS05	2.80 – 3.60	Strong putrid odour
Landfill – Made Ground	WS06	1.40 – 2.10	Strong putrid odour
Landfill – Made Ground	WS09	2.90 – 3.10	Strong putrid odour

## 5.4 Groundwater

### 5.4.1 Groundwater observations and levels

Groundwater encountered during the investigation is provided on the logs in Appendix C.

Where groundwater was encountered, little rise in groundwater level was noted after 20 minutes. However, where observation was undertaken over a longer period, and shallow groundwater had been encountered during investigation, groundwater levels rose between 500mm and 750mm.

Groundwater levels recorded during post-fieldwork monitoring are provided in Appendix E.

Anecdotal evidence suggests the potential for springs to be present at the site. Following review of the geology encountered at the site during investigation works, the only location for potential springs is in the north-east of the site, to the north of Rowel Brook where a spring has been noted during a site visit/walkover by others.

### 5.4.2 Groundwater summary

In general, groundwater was encountered within the River Terrace Deposits towards the base of the stratum with the groundwater encountered shallower in the topographic lows of the site.

Groundwater levels are shown as hydraulic gradients in Figure 5.1 and Figure 5.2, reproduced from Hydrock Drawings 19114-HYD-XX-ZZ-DR-GE-01008 (m OD) and 19114-HYD-XX-ZZ-DR-GE-01009 (m bgl) in Appendix A.

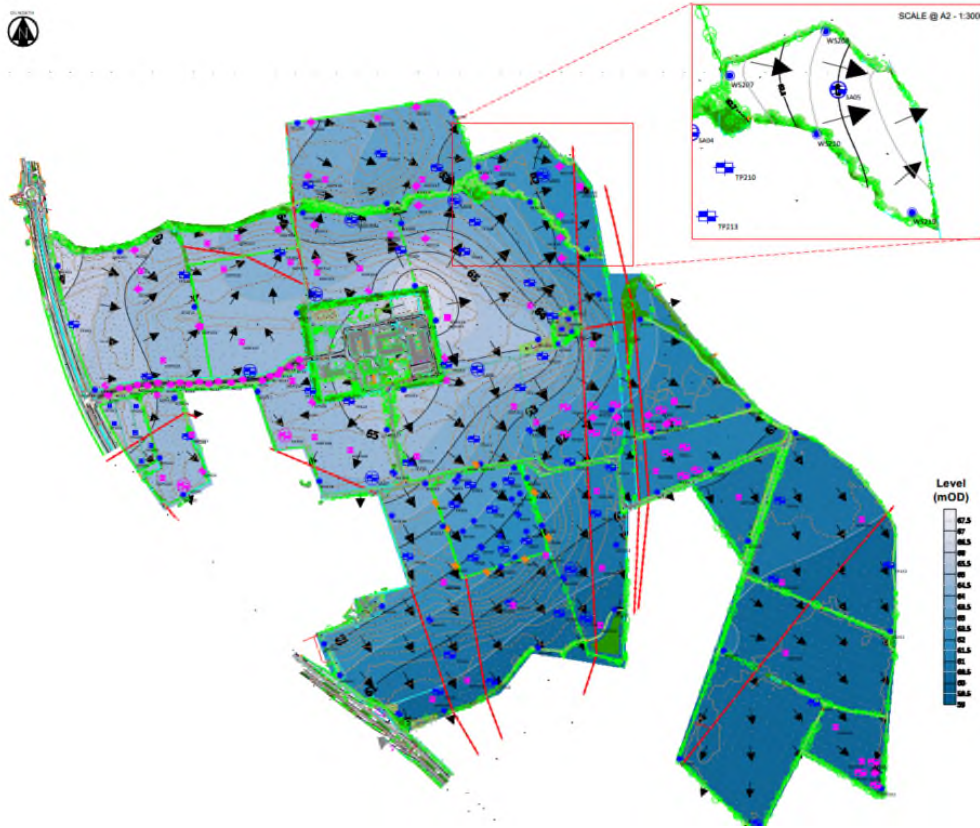


Figure 5.1: Groundwater levels (m OD)

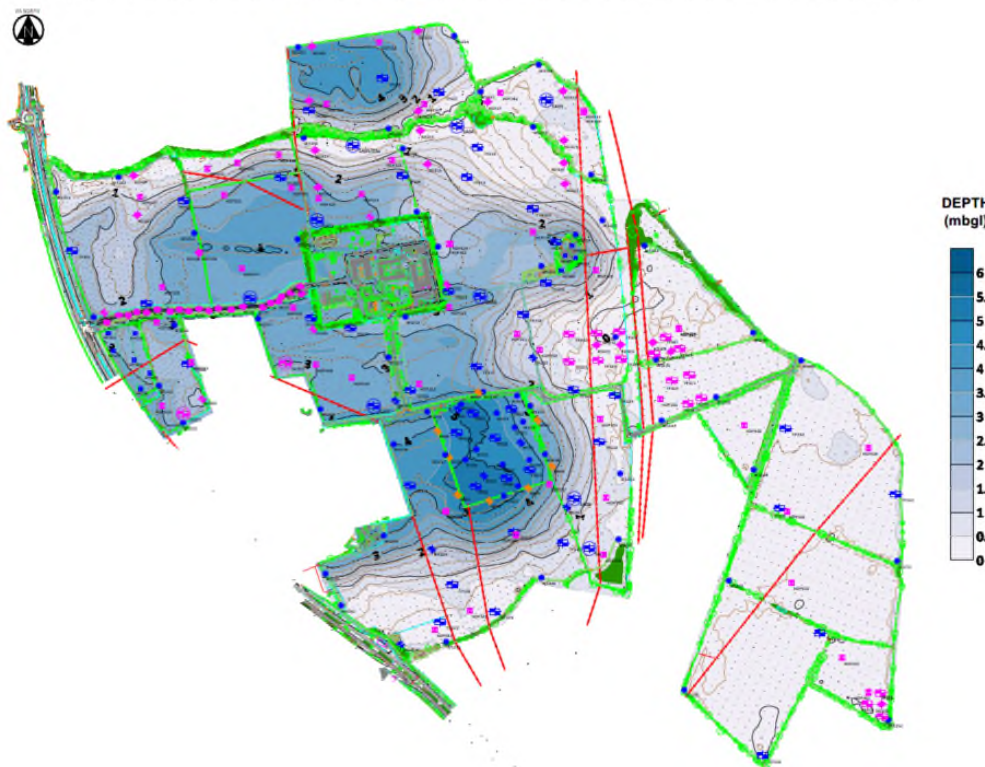


Figure 5.2: Groundwater depths (m bgl)

Based on the hydraulic gradient, within superficial deposits, the shallow groundwater flow is from the west of the site, from the topographic high, to the east and south-east, although in the north of the site groundwater flow is locally towards Rowel Brook (from the north and the south). In the far east of the site (in the floodplain), groundwater flows are to the south and at a shallower hydraulic gradient, but potentially influenced by the Oxford Canal which borders the east of the site.

Groundwater flow within the Cornbrash Limestone Formation and Forest Marble Formation is shown in the north of the site to flow towards the east as shown on Hydrock Drawing 19114-HYD-XX-ZZ-DR-GE-01024 (Appendix A). However, whilst based on the contour profiles from monitoring, the variable geology outcropping and overlying superficial deposits leads to a complicated groundwater regime and is likely to mask groundwater flow direction in this area. Groundwater flow is likely to be towards the south-west following the geological dip of the strata. It is unlikely that any impact from the proposed development will extend to the north, past Rowel Brook and be transmitted upgradient to the SSSI.

It is also unlikely that any changes in water level associated with the proposed development will significantly change the water levels to the north of Rowel Brook (which is more susceptible to any changes to the north and east of Rushy Meadows, than to changes to the south of Rowel Brook).

Potential adverse impacts on the Rushy Meadows SSSI based on the proposed development and the risk assessment summary (Table 12) of the WYG (2018) report are considered negligible.

Groundwater was encountered within the Landfill Made Ground in a few locations, likely to be at a similar level and in continuity with the groundwater in the surrounding remaining sand and gravel deposits, although monitoring indicates groundwater within the Summertown Radley Sand and Gravel is limited.

### 5.4.3 Infiltration tests

The results of the infiltration testing undertaken are summarised in Table 5.4. The results sheets are presented in Appendix C. Testing was carried out in general accordance with BRE Digest 365 (BRE DG365) (2016).

Table 5.4: Infiltration test results

Stratum	Location	Depth to base of pit (m bgl)	Infiltration rate (m/s)		
			Run 1	Run 2	Run 3
River Terrace Deposits	SA01	1.20 – 2.00	$1.67 \times 10^{-4}$	$1.91 \times 10^{-4}$	$1.40 \times 10^{-4}$
	SA02	1.00 – 2.00	$6.05 \times 10^{-5}$	$3.47 \times 10^{-5}$	$4.05 \times 10^{-5}$
	SA06	-	Destroyed by ploughing between installation and test.		
	SA07	1.30 – 2.10	$1.92 \times 10^{-4}$	$1.81 \times 10^{-4}$	$1.35 \times 10^{-4}$
	SA301	1.00 – 1.60	$7.13 \times 10^{-5}$	$8.13 \times 10^{-5}$	$8.09 \times 10^{-5}$
	SA302	1.40 – 2.50	$2.25 \times 10^{-4}$	$1.44 \times 10^{-4}$	$1.40 \times 10^{-4}$
Alluvium	SA04	0.70 – 1.40	No water added due to standing groundwater level of 0.70m bgl decreasing to 0.75m bgl over 3 days.		
	SA03a	0.46 – 1.00	Infiltration rate too slow to calculate.		
	SA09	0.50 – 1.10	Infiltration rate too slow to calculate.		
Kellaways Clay Member	SA05	0.50 – 1.40	No water added due to standing groundwater level of 0.50m bgl decreasing to 0.61m bgl over 3 days.		



Stratum	Location	Depth to base of pit (m bgl)	Infiltration rate (m/s)		
			Run 1	Run 2	Run 3
	SA08	1.00 – 2.00	Infiltration rate too slow to calculate.		

## 5.5 Ground gases (carbon dioxide and methane)

Records from the gas monitoring boreholes are presented in Appendix E.

Six monitoring visits were undertaken as part of the previous landfill investigation works.

Fourteen monitoring visits have been undertaken to date as part of the site wide preliminary and additional investigations, with monitoring continuing on a monthly interval for a further three visits. The data are assessed in Section 7.6.

## 5.6 Geotechnical data

### 5.6.1 Introduction

Geotechnical laboratory test results are contained in Appendix D with *in situ* test results shown on the relevant exploratory hole log or datasheet in Appendix C. The following sections summarise the main findings and provide interpretation where appropriate.

### 5.6.2 Plasticity

The volume change potentials in terms of NHBC Standard (Chapter 4.2) with respect to building near trees have been determined from the results of plasticity index tests on samples of soil. These are summarised in Table 5.5.

Table 5.5: Volume change potential

Stratum	No. of tests	Plasticity Index (%)			Modified Plasticity Index (%)			Plasticity designation	Modified Volume Change Potential
		Min.	Max.	Av.	Min.	Max.	Av.		
Head Deposits	3	13	21	7	3	9	6	Low	Low
Alluvium	21	NP	44	20	NP	56	19	Medium to very high	Medium to high
River Terrace Deposits	14	NP	26	17	NP	17	7	Low	Non-Plastic to low
Glacial Washout Till	1	17	17	17	14	14	14	Medium	Low
Oxford Clay Formation	2	17	35	26	17	35	26	Medium to high	Medium to high
Kellaways Sand Member	6	8	17	14	8	17	13	Low	Low
Kellaway's Clay Member	6	34	45	39	34	45	39	High to very high	High
Forest Marble Formation	2	13	14	14	13	14	14	Low to Medium	Low

### 5.6.3 Particle size distribution

Particle Size Distribution test (PSDs) results are summarised in Table 5.6 and summary descriptions and PSD plots of the material analysed are presented in Appendix D.

Table 5.6: PSD results summary

Stratum	No. of tests	Fines %		Sand %	Gravel %	General description
		Clay	Silt			
Head Deposits	1	12	9	41	38	Slightly clayey gravelly SAND.
Alluvium	5	10 - 27	6 - 34	29 - 69	3 - 44	Slightly gravelly slightly sandy, slightly clayey SILT to gravelly sand.
River Terrace Deposits	9	13	17	17 - 66	27 - 53	Slightly clayey slightly silty sandy GRAVEL to gravelly SAND.

Stratum	No. of tests	Fines %		Sand %	Gravel %	General description
		Clay	Silt			
Kellaway's Sand Member	1	0 - 13	0 - 17	17 - 66	32 - 53	Slightly silty, slightly clayey SAND to sandy GRAVEL.

#### 5.6.4 Soil strength

Table 5.7 summarises information pertaining to the shear strength of the soils according to geological stratum.

Factual results are summarised for laboratory tests, field tests (e.g. hand shear vane) and uncorrected Standard Penetration Tests (SPT). Where the SPT is used to infer shear strength by published correlation, this is also tabulated.

A shear strength versus depth profile is summarised in Figure 5.3 and presented in Appendix D.

Table 5.7: Soil strength results and derived values (Cohesive Soils)

Stratum	No. of tests	SPT (N 60-value) (range)	c <sub>u</sub> (kPa) N60	Method
Head Deposits	2	24 – 28	205 – 240**	SPT – windowless sampler boreholes
	1	-	320	Laboratory Remoulded at OMC triaxial test
Alluvium	8	6 – 22	30 – 115**	SPT – windowless sampler boreholes
	1	8	40	SPT – rotary percussive
	22	-	11 – 73	Hand shear vane
Glacial Washout Till	1	-	90	Hand shear vane
River Terrace Deposits (Cohesive)	9	3 – 12	32 – 107**	SPT – cable percussion
	6*	3 – 18	32 – 169**	SPT – windowless sampler boreholes
	3	-	23 – 47	Hand shear vane
	3	-	250 – 540	Laboratory Remoulded at OMC triaxial test
Oxford Clay Formation	11	8 – 32	40 – >150**	SPT – windowless sampler boreholes
	6	25 – 50	120 – >250**	SPT – rotary percussive
	15	-	59 – 140	Hand shear vane
Kellaways Sand Member (Cohesive)	2***	18 – 19	120 – 125**	SPT – windowless sampler boreholes
	2	-	45 – 57	Hand shear vane
Kellaways Clay Member	12	9 – 50	40 – >250**	SPT – windowless sampler boreholes
	3	17	70	SPT – rotary percussive
	14	-	45 – 140	Hand shear vane
	1	-	610	Laboratory Remoulded at OMC triaxial test
	1	-	60	Undrained Triaxial
Forest Marble Formation	6	50	250**	SPT – rotary percussive

\* three SPT values of N Value 50 removed due to refusal of borehole on likely granular material.

\*\*Correlation with Stroud (1975) based on 'average' plasticity

\*\*\* Cohesive unit within this strata

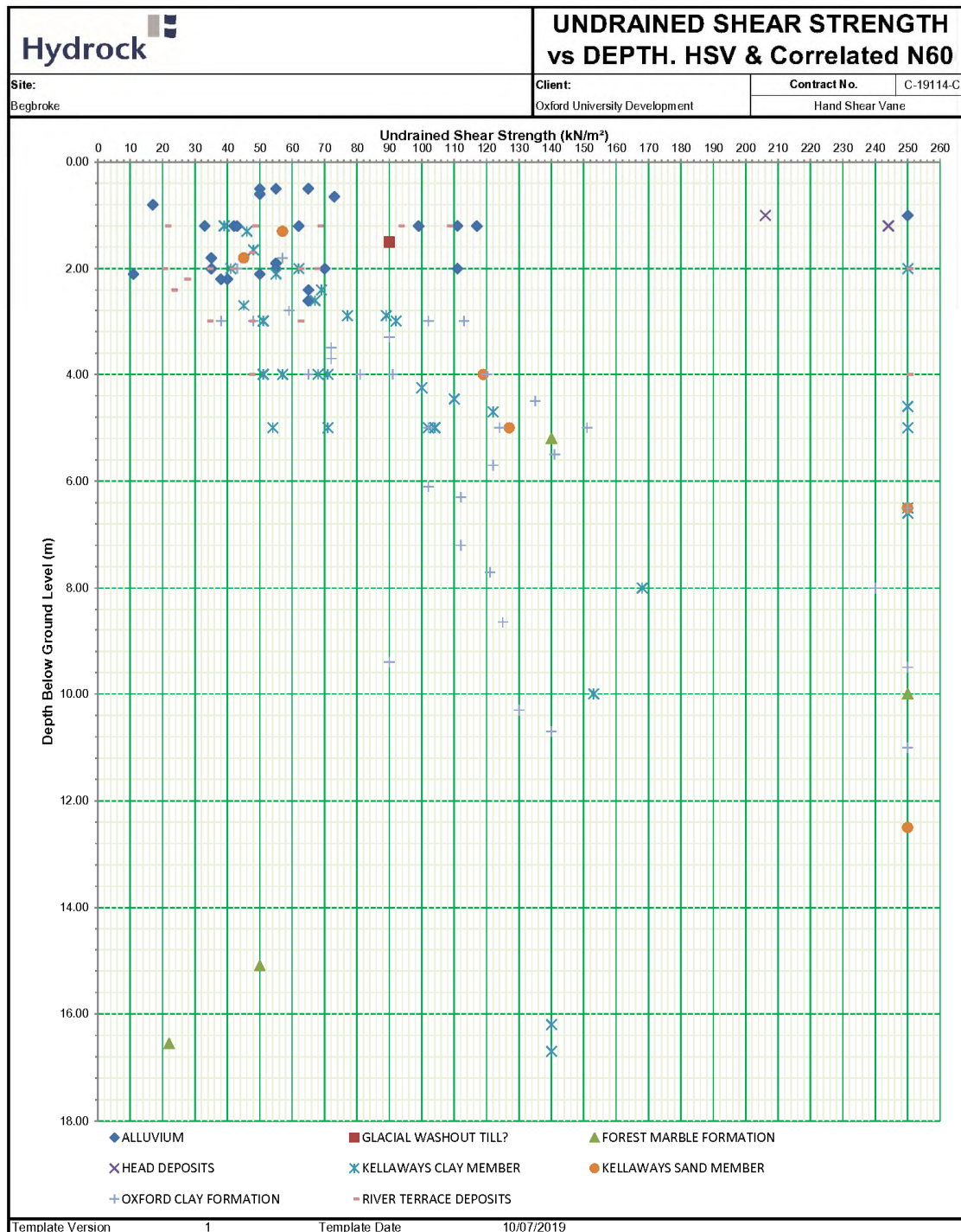


Figure 5.3: Undrained shear strength versus depth summary

As shown by Figure 5.3:

- The strength profile of the Alluvium indicates consistent, relatively low strength (<50kN/m<sup>2</sup>). Although is highly variable.
- Head deposits are shown to be of high strength; however, it is noted that the soils were dry at the time of the investigation due to a prolonged period of hot and dry weather, and it is likely affected by some degree of desiccation near surface, which may be seasonal.

- Cohesive units within the River Terrace Deposits are shown to be generally of low to medium strength (25kN/m<sup>2</sup> to 80kN/m<sup>2</sup>). However, based on a review of the data distribution, the cohesive soils of the River Terrace Deposits are generally located to the east and south of the landfill at a level of between 62m OD to 59m OD.
- The underlying solid geology of the Kellaways Clay Member and Kellaways Sand Member (Cohesive units) shows predominantly medium strength to 3.00m depth and then an increasing strength with depth profile.
- The Oxford Clay Formation shows medium strength to approximately 5.00m bgl and then has an increasing strength profile with depth.

### 5.6.5 Relative density

Table 5.8 summarises information pertaining to the relative density of the granular soils according to geological stratum.

Factual results are summarised for laboratory tests, field tests (e.g. SPT, CPT, dynamic probe correlation). A SPT 'N<sub>60</sub>' value versus depth profile is summarised in Figure 5.4. Plots are presented in Appendix D.

Table 5.8: Relative density results and derived values

Stratum	No. of tests	Method	SPT (N-value) (Range) N <sub>60</sub>	phi' (°)
Alluvium	2	SPT – windowless sampler boreholes (Peck et. al. (1967)).	4 – 9	30 – 35
	1	SPT – rotary percussive (Peck et. al. (1967)).	8	
River Terrace Deposits	12	SPT – cable percussion (Peck et. al. (1967)).	4 – 50	30 – 52
	89	SPT – windowless sampler boreholes (Peck et. al. (1967)).	3 – 50	28 – 52
	11	SPT – rotary percussive (Peck et. al. (1967)).	4 – 40	-
Kellaways Sand Member	2	SPT – windowless sampler boreholes (Peck et. al. (1967)).	22 – 24	42 – 56
	2	SPT – rotary percussive (Peck et. al. (1967)).	23 – 50	

As shown on Figure 5.4:

- Gravel units as part of the Alluvium are recorded as loose.
- Within the River Terrace Deposits on the topographic high, SPT N<sub>60</sub> values are generally indicative of medium dense soils or better (N<sub>60</sub> >10) although locally loose to very loose soils are recorded with a general area of 62m OD to 59m OD recorded loose around the east and south of the landfill based on the data distribution.
- The Kellaways Sand Member is generally medium dense.

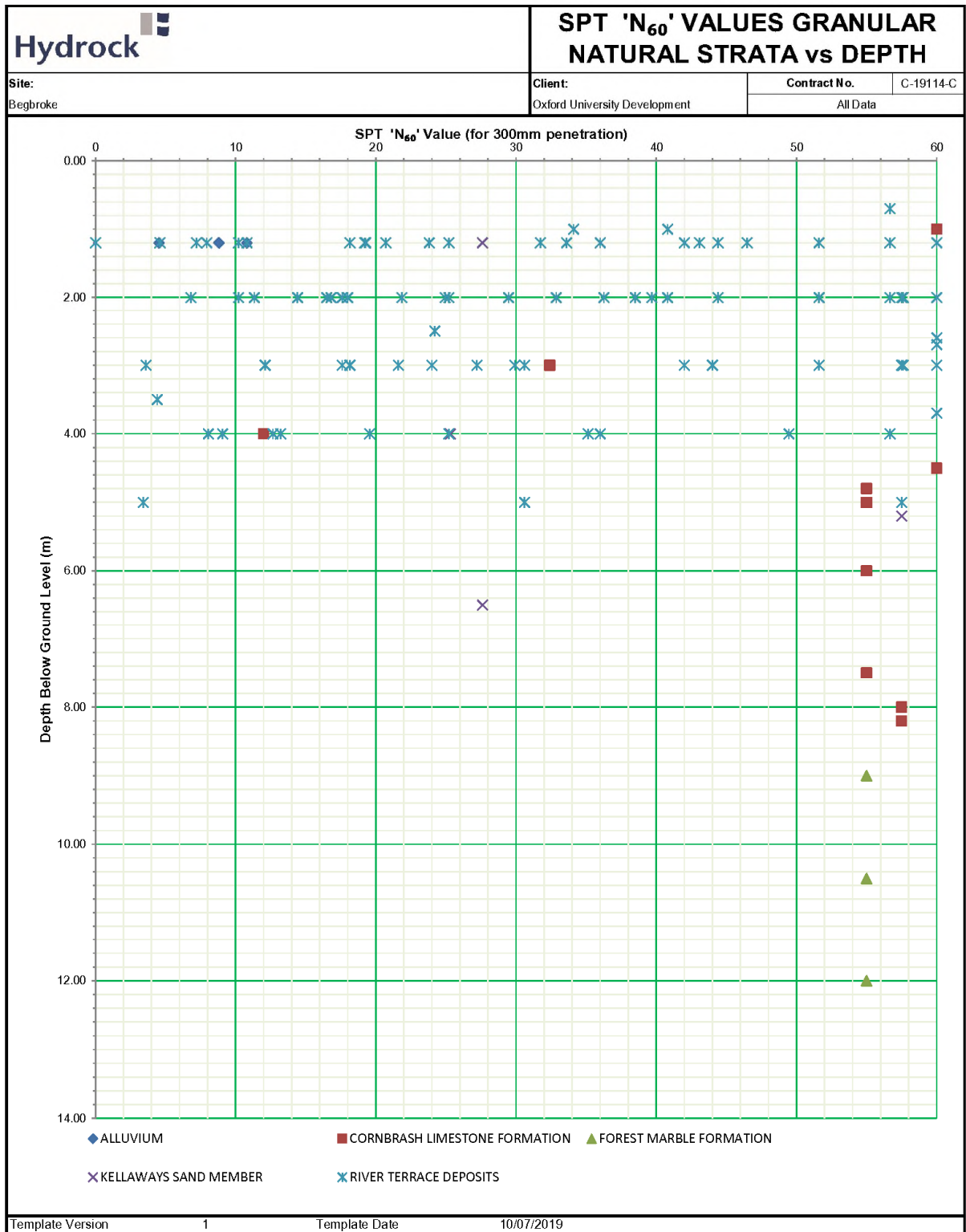


Figure 5.4: SPT 'N' Value versus depth summary

### 5.6.6 Compressibility

Table 5.9 presents a summary of the derived parameters for coefficient of consolidation and compressibility. The data indicates that the material is generally of medium to high compressibility over the pressure ranges tested.

Table 5.9: Summary of compressibility

Stratum	No. of tests / results	Method	Pressure Range (kN/m <sup>2</sup> )	Derived coefficient of volume compressibility (m <sub>v</sub> ) (m <sup>2</sup> /MN)
Head Deposits	2	Correlation with SPT <sup>1</sup>	-	0.04 – 0.05
Alluvium	9	Correlation with SPT <sup>2</sup>	-	0.02 – 0.29
River Terrace Deposits (Cohesive)	15	Correlation with SPT <sup>3</sup>	-	0.01 – 0.48
River Terrace Deposits (Granular on description)	1	One Dimensional Oedometer	40	0.097 (re-load 0.00042)
Oxford Clay Formation	17	Correlation with SPT <sup>4</sup>	-	0.02 – 0.26
Kellaways Sand Member	2	Correlation with SPT <sup>5</sup>	-	0.01 – 0.08
Kellaways Clay Member	15	Correlation with SPT <sup>6</sup>	-	0.18 – 0.25
	1	One Dimensional Oedometer	80	0.089 (re-load 0.041)

<sup>1</sup> An  $f_2$  value of 0.88 has been used based on a plasticity index of 6. (Tomlinson (2001), after Stroud)).  
<sup>2</sup> An  $f_2$  value of 0.57 has been used based on a plasticity index of 6. (Tomlinson (2001), after Stroud)).  
<sup>3</sup> An  $f_2$  value of 0.62 has been used based on a plasticity index of 6. (Tomlinson (2001), after Stroud)).  
<sup>4</sup> An  $f_2$  value of 0.49 has been used based on a plasticity index of 6. (Tomlinson (2001), after Stroud)).  
<sup>5</sup> An  $f_2$  value of 0.68 has been used based on a plasticity index of 6. (Tomlinson (2001), after Stroud)).  
<sup>6</sup> An  $f_2$  value of 0.45 has been used based on a plasticity index of 6. (Tomlinson (2001), after Stroud)).

### 5.6.7 Compaction and moisture content

Table 5.10 presents a summary of the moisture content tests and compaction studies undertaken at the site. It should be noted that the samples tested were collected during an exceptionally long and significant dry period.

Table 5.10: Compaction study results

Stratum	No. tests	Method	Natural moisture content (%) (range)	Optimum moisture content (%) (range)	Particle density (Mg/m <sup>3</sup> ) (range)	Maximum dry density (Mg/m <sup>3</sup> ) (range)
River Terrace Deposits	3	4.5kg Rammer	8.9 – 13	9.2 – 11	2.74 – 2.92	2.03 – 2.22
Head Deposits	1		6.7	12	2.92	2.06
Kellaways Clay Member	1		27	19	2.72	1.74



### 5.6.8 Subgrade stiffness

The subgrade stiffness (CBR and Modulus of Subgrade Reaction) results are summarised in Table 5.11.

Table 5.11: CBR results and derived values

Stratum	No. tests	Method	Modulus of Subgrade Reaction k (MN/m <sup>2</sup> /m) (Range)	CBR (%) (Range)
Alluvium	5	Laboratory remoulded sample at Natural Moisture Content (NMC)	11 - 113	0.6 - 35
	21	Correlation in accordance with CD 255 based on plasticity and thin construction	22 – 27	2 – 3
Head Deposits	1	Laboratory remoulded sample at Optimum Moisture Content (OMC)	42.5	6.4
	3	Correlation in accordance with CD 255 based on plasticity and thin construction	27 - 32	3 - 4
River Terrace Deposits	5	Laboratory remoulded sample at Natural Moisture Content (NMC)	61 - 108	12 - 32
	3	Laboratory remoulded sample at OMC	49 - 136	8.3 - 48
	14	Correlation in accordance with CD 255 based on plasticity and thin construction	87 25 (cohesive)	20 2.5 (cohesive)
Oxford Clay Formation	2	Laboratory remoulded sample at OMC	27 - 32	3 - 4
Kellaways Sand Member	6	Correlation in accordance with CD 255 based on plasticity and thin construction	77	18
Kellaways Clay Member	1	Laboratory remoulded sample at OMC	31	3.7 (Top)
	6	Correlation in accordance with CD 255 based on plasticity and thin construction	22 - 25	2 – 2.5

Where using the IAN method, 'k' has been back calculated from the Equivalent CBR.

### 5.6.9 Sulphate content

In accordance with BRE (Special Digest 1), the Design Sulphate (DS) classification and the Aggressive Chemical Environment for Concrete (ACEC) classification are presented in Table 5.12. The assessment summary sheets are presented in Appendix D.

Table 5.12: Aggressive chemical environment concrete classification

Stratum	No. tests	DS	ACEC
Head Deposits	2	DS-1	AC-1
Alluvium	8	DS-1	AC-1
River Terrace Deposits	15	DS-1	AC-1
Glacial Washout Till	1	DS-1	AC-1
Oxford Clay Formation	2	DS-4	AC-4
Kellaways Sand Member	5	DS-4	AC-4
Kellaways Clay Member	5	DS-4	AC-4
Cornbrash Limestone Formation	2	DS-2	AC-2
Forest Marble Formation	4	DS-4	AC-4
White Limestone Formation	1	DS-4	AC-4
GW around proposed Railway Bridge	5	DS-3	AC-3

### 5.6.10 Organic Matter Tests

The results of the Organic Matter Tests are presented in Table 5.13.

Table 5.13: Organic Matter

Stratum	No. tests	Organic Matter (%)
Agriculturally Disturbed Topsoil 0 - 100mm	50	2.0 – 8.4 (Average 3.9)
Agriculturally Disturbed Topsoil 100 - 200mm	50	1.3 – 6.8 (Average 3.5)
Agriculturally Disturbed Topsoil 200 - 300mm	50	0.9 – 4.4 (Average 2.5)
Alluvium	3	1.60 – 2.20
Head Deposits	1	0.60
River Terrace Deposits	3	0.20 – 0.40
Kellaways Sand Member	1	0.30
Kellaways Clay Member	1	0.60

### 5.6.11 Intact material strength – rock

Table 5.14 summarises information pertaining to the strength of the intact rock material according to geological stratum and, if applicable, weathering zones or other variations within particular strata. Results are summarised for laboratory and field tests. Where point load index tests are used to infer unconfined compressive strength (UCS), this is also tabulated. Rock strength terms follow the method of BS EN ISO 14689-1:2003.

Care should be exercised in using these assumed rock strength parameters for any purpose beyond the scope of this report because it may be that additional sampling and testing is required for certain purposes. The reader should refer to the original test results in Appendix D.

Note also that rock mass properties, in addition to intact rock material properties, should be taken into account for rock slope stability analysis and design purposes.

Table 5.14: Intact rock strength results and derived values

Stratum	No. of tests	Point load index (Range)		UCS (MPa) (range)	Method
		Is	Is(50)		
Cornbrash Limestone Formation	4	0.68 – 3.46	0.82 – 4.17	19.68 – 101.1	Axial point load [derived from 24x Is50]
	2	-	-	35.2 – 42.4	UCS test
Forest Marble Formation	4	0.54 – 1.63	0.69 – 2.10	16.56 – 50.4	Axial point load [derived from 24x Is50]
	1	-	-	24.4	UCS test
White Limestone Formation	3	0.66 – 1.43	0.80 – 1.81	19.2 – 43.4	Axial point load [derived from 24x Is50]
	1	-	-	27.2	UCS test

## 6. GEOTECHNICAL ASSESSMENT

### 6.1 Geotechnical categorization of the proposed development

The following geotechnical assessment is based on the preliminary Ground Model and understanding of the site. Further detailed investigation will be required to finalise foundation recommendations across the site.

Eurocode 7, Section 2 (EC7) advocates the use of geotechnical categorisation of the proposed structures to establish the design requirements.

Whilst the design of the development is not finalised to date, it is understood that the development will be mixed residential and non-residential uses with a number of greenspaces in the east and north of the site,.. Final site levels and cut/fill requirements are not available at this stage.

A proposed cycleway and footbridge is proposed across the Didcot and Chester Rail Line with up to approximately 9m of fill adjacent to bridge abutments and retaining walls. Whilst outside the scope of this report consideration should be undertaken with regards to settlement of fill and abutments, groundwater levels and ground deflection both vertically and laterally. Current plans approved in principle indicate a proposed piled foundation solution with up to 1.20m of existing ground level excavated and replaced beneath raised areas.

A second bridge is proposed to cross the canal in the south west with two options under consideration. second proposed bridge in the southeast of the site crossing Oxford Canal comprising either a roadway and path totalling 8.2m width or 4m shared path. Both designs include approximately 5m of fill either side of the bridge abutments. No further details are known. As above, consideration should be undertaken with regards to settlement of fill and abutments, groundwater levels and ground deflection both vertically and laterally

For a preliminary assessment, it has been assumed that all the proposed structures will be classified as Geotechnical Category 1 in accordance with EC7. However, based on the outline design it is likely that once confirmed a number of areas of the site will be classified as Geotechnical Category 2 including proposed bridges (understood to be undertaken by others).

The Geotechnical Category should be re-assessed at the design stage.

For Category 2 or 3 structures, specific geotechnical design is required together with Geotechnical Design Reports and Feedback Reports.

Following ground investigation and as part of the assessment provided in the following section, the preliminary geotechnical hazard identification undertaken in Section 3.3 has been updated.

A preliminary Geotechnical Risk Register following investigation is provided in Appendix H (Table H.3). This will need to be updated during future design works.

### 6.2 Characteristic design values

For design of Category 1 structures in accordance with BS EN ISO 1997-1 (EC 7), the geotechnical parameters given in Table 6.1 can be used for preliminary design, with additional investigation required to allow design for construction.

These values have been determined from laboratory testing, *in situ* testing and by professional judgement using published data together with knowledge and experience of the ground conditions. Care should be exercised in using these assumed soil strength parameters for any purpose beyond the scope of this report because it may be that additional sampling and testing is required for certain purposes. The reader should refer to the original test results summarised in Section 5 and provided in Appendix C and Appendix D.

Table 6.1: Geotechnical parameters recommended for design of Geotechnical Category 1 Structures (EC7)

Parameter	Bulk unit weight kN/m <sup>3</sup>	Effective angle of internal friction °	Undrained shear strength kN/m <sup>2</sup>	Coefficient of compressibility m <sup>2</sup> /MN	Modulus of subgrade reaction (IAN73/06) MN/m <sup>2</sup> /m
Stratum	$\gamma^a$	$\phi'^{bc}$	$c_u^d$	$m_v^e$	$k^f$
Head Deposits	15 – 17	27	75	0.04 – 0.05	30
River Terrace Deposits	15 – 18	30 – 52	30 – 75 (Cohesive unit)	0.01 – 0.48	60 25 (Cohesive)
Oxford Clay Formation	16 – 20	24	50kPa at 3.0m + 15 z* (depending on depths and levels) Increasing with depth	0.02 – 0.26	30
Kellaways Sand Member	15 – 18	42 – 52	50	0.01 – 0.08	30
Kellaways Clay Member	15 – 19	23	50kPa at 3.0m + 15 z* (depending on depths and levels) Increasing with depth	0.18 – 0.25	25

All design values should be selected based on specific conditions. This table is for general guidance only.

<sup>a</sup> Estimated based on the recommendations of BS 8004-2015.

<sup>b</sup> Internal friction ( $\phi'$ ) values for the granular *in situ* material derived from SPT data following the recommendations of Peck et al., (1967).

<sup>c</sup> Internal friction ( $\phi'$ ) values for the cohesive *in-situ* material derived from BS 8004-2015, where  $\phi_{cv}'$  is derived from plasticity index. The use of  $\phi_{cv}'$  in the analysis is considered to provide a conservative estimate of  $\phi'$ .

<sup>d, e</sup> Site measurements and laboratory data.

<sup>f</sup> Based upon the equilibrium long term CBR from DMRB IAN 73/06 Rev 1 Table 5.1.

\* Generally increased linearly with depth. z represents depth.

## 6.3 Groundwork

### 6.3.1 Site preparation

No significant buried obstructions were encountered by this investigation and are unlikely to be present outside of the landfill and areas of historical construction, and for most of the site the possibility of buried obstructions being encountered is low. However, the redevelopment will involve demolition of some existing buildings (at Parkers Farm and part of the Science Park. It is highly likely that buried obstructions will be encountered in areas of previous development. It is therefore recommended that allowance be made for breaking out obstructions, for example provision of pneumatic breakers for site plant. If underground structures cannot be removed, they could be surveyed in three dimensions and the new structures designed to accommodate them.

The presence of the shallow Cornbrash Limestone Formation (rock) in the north of the site may cause localised difficult excavation. Whilst the Cornbrash Limestone Formation can usually be excavated by large plant and toothed buckets, localised breaking out may be required for excavation of rock.

Several services cross the site, including overhead HV cables and a below ground rising sewage main, which will require either moving or consideration as part of the detailed design.

Topsoil should be removed from beneath all building and hardstanding areas, this will create significant volumes of soil, which will need to be managed as part of the development.

### 6.3.2 Groundworks

Noting the above comments regards excavation through buried construction, or intact rock, excavation of shallow soils should be generally feasible using conventional plant and equipment.

Collapse / spalling of trial pit faces was noted during trial pit excavation in several locations within Alluvium and River Terrace Deposits. This was noted particularly in the coarse soils and was exacerbated where groundwater ingress occurred.

In addition, the Oxford Clay can be fissured and whilst instability due to fissuring was not noted in the trial pit excavations, fissuring can cause instability of excavations open for longer periods or long lengths.

Shallow (1.00m deep) excavations should generally be stable for short periods of time, but random and sudden falls should be anticipated from the faces of near vertically sided deeper excavations put down at the site.

Temporary trench support, or battering of excavation sides, is recommended for all excavations that are close to, or below the water table, or are to be left open for any length of time, and must be provided for entry by personnel. Particular attention should be paid to excavation at, or close to, site boundaries and adjoining existing roads, railway (and embankment features), structures and buildings, where collapse of excavation faces could result in damage to property or risks to safety and accessibility.

A risk assessment of the stability of any open excavation should be undertaken by a competent person and appropriate measures adopted to ensure safe working practise in and around open excavations. Further guidance on responsibilities and requirements for working near, and in, excavations can be obtained from the Construction Design and Management Regulations (2015), Construction Information Sheet 47: Inspections and Reports (2005) and HSG47: Avoiding Danger from Underground Services.

To ensure no loads are imposed on the sides of the excavation, spoil should not be placed immediately adjacent to the excavation. Spoil should be placed a suitable distance from the side of the excavation (as assessed by a competent person).

Based on site observations, the rate of water ingress to the proposed excavations is likely to be significant through the River Terrace Deposits and Alluvium. Variable groundwater depths were encountered across the site, generally controlled by topography but as shallow as 1.30m bgl in the south and east as shown on Hydrock Drawing 19114-HYD-XX-ZZ-DR-GE-01009 (Appendix A). In these circumstances, groundwater control by sump pumping may not be sufficient to deal with anticipated flows and significant high volume pumps (running for extended time) are likely to be required. If high volume pumps are not sufficient, alternative methods of dewatering, or use of impermeable cut-offs would be required.

However, it should be recognised that groundwater levels may vary from those at the time of the investigation, for example in response to seasonal fluctuations and the timing of construction may dictate the extent of groundwater control required.

Any water pumped from excavations may need to be passed via silt controls (to reduce suspended solids) before being discharged (under license or consent as required).

### 6.3.3 Earthworks/reuse of site-won materials

At this stage, Hydrock is not aware of specific earthworks proposals. However, it is understood that general cut to fill will be required, along with the construction of bridge abutments, and a noise / visual screening bund along the railway. Given the relatively gentle slopes across the site, it is assumed (at this stage), that significant retaining walls will not be required (although this is subject to detailed design of site levels).

Supplementary earthworks testing and an Earthworks Specification will be necessary to ensure the appropriate design and specification of earthworks.

Significant earthworks, such as the construction of bridge abutments, and a noise / visual screening bund along the railway will be Category 2 in accordance with BS EN ISO 1997-1 (EC 7) and further geotechnical design may be necessary. Once site proposals have been further defined, more specific consideration will need to be given to the reuse of materials and reference should be made back to this office.

The classification of materials depends on both the proposed end use and whether the material will meet the performance requirements of that end use. Based on Hydrock's understanding of the proposed development, the following assessment (Table 6.2) is based on the preliminary geotechnical classification data (see Section 5.6 and Appendix D) and the assumption that fill is placed as General Fill.

Table 6.2: Preliminary earthworks assessment

Stratum <sup>^</sup>	Proposed end use	Preliminary classification (SHW Series 600)	Comment	Suitability for improvement by the inclusion of binders
Topsoil	Open Space	Class 4 (Landscape Fill)	Unsuitable for General Fill due to high organic content. Can only be used in areas which are not sensitive to settlement. Could be used for landscape bunding if designed appropriately.	-
Alluvium	External Areas	Class 2C Class 4 Class 1	Areas predominantly outside development areas and unlikely to be significant excavation. Generally more suitable to Class 4 use, but some pockets may be suitable for Class 2. Granular layers class 1.	-
Head Deposits*	External Areas	Class 2C	Dry of optimum moisture conditioning e.g. wetting down by bowser and rotavator potentially to be required.	Likely to be suitable



Stratum <sup>^</sup>	Proposed end use	Preliminary classification (SHW Series 600)	Comment	Suitability for improvement by the inclusion of binders
River Terrace Deposits*	External Areas	Class 1 – granular Class 2C – cohesive pockets	Near optimum.	Likely to be suitable
Kellaway’s Clay Member	External Areas	Class 2A/2B	No earthworks testing undertaken.	Unlikely to be suitable
Kellaway’s Sand Member	External Areas	Class 2C	No earthworks testing undertaken.	Unlikely to be suitable
Oxford Clay Formation	External Areas	Likely Class 2	No earthworks testing undertaken due to depth of unit beneath RTD	Unlikely to be suitable due to the high sulphate concentrations

<sup>^</sup> Cornbrash Formation soils are generally poor with regards to earthworks due to a mix of weathered platy rock, clay and unweathered rock. This may be suitable for Class 4 fill, but may need running through a crusher to homogenise the excavated materials.

\* It should be noted that sampling was during a significant and extended dry period, and natural moisture contents may be lower than normally present.

The earthworks will need to be undertaken under a Materials Management Plan (see Section 9.3).

This report is written on the understanding that the landfill is to remain open space, with any excavated landfill soils, to be disposed of off-site.

Before the use of hydraulic binders is approved, comprehensive testing will need to be completed by a specialist Contractor to satisfy both themselves and the Engineer of the suitability of the soils for treatment and to confirm that the requisite end-performance of the material is achievable. In all instances where improvement by the inclusion of binders is considered, a mix design is required and as part of this design, samples should be checked for swelling, even where very low sulphate values are recorded.

Where it is proposed to reuse site won materials as an engineered fill it will be necessary to understand the proposed levels and structures, undertake additional investigation and develop an appropriate geotechnical design, and site-specific Earthworks Specification. The basis for the Specification should be BS 6031:2009 and the latest version of the SHW, Series 600 Earthworks. Once site proposals have been further defined more specific consideration will need to be given to the reuse of materials and reference should be made back to Hydrock.

## 6.4 Slope stability

There are no significant existing slopes on the site. Therefore, Hydrock considers the existing slopes will not present significant constraints to the development.

However, the above preliminary conclusions should be reviewed as part of the separate geotechnical design once final levels are known, and in the light of proposed engineered changes in levels where slopes or retaining walls may be required.

As a preliminary assessment, 1V:3H slopes using natural subsoils are likely to be stable (subject to detailed design).

## 6.5 Foundation recommendations

This section provides recommendations for the foundations for Characteristic Design Situation 1 (low rise 1 to 2 story developments) founding in natural ground. The foundation recommendations should be reviewed once the final design and further detailed investigation works are known. It is considered that the majority of structures will be within the west, central and south of the site based on a preliminary understanding of the proposed site layout.

The recommendations in this report include recommendations in the current NHBC Standards (2023).

Preliminary foundation recommendations for the related buildings in this section are based on the geotechnical parameters provided in Section 6.2 and are subject to further assessment following detailed investigation.

The safe bearing pressures for foundations quoted for Category 1 structures in this report take into consideration traditional factors of safety against the risk of shear failure of the ground and should prevent undue or excessive total and differential settlement from the anticipated structural loadings.

A separate geotechnical design will be required at the design stage (subject to further detailed investigation) once the development proposals are finalised with regards to Geotechnical Category 2 assessment to take into account the risk of shear failure of the ground (ultimate limit state). Serviceability limit state assessment will need to be undertaken as part of the separate geotechnical design.

### 6.5.1 Foundation types

Based on the ground conditions indicated from the current investigation, the preliminary recommendations are as follows:

- For houses up to 2½ storeys: strip/trench fill foundations across the centre, north and west of the site (deepening due to trees as required) to depths of between 1m and a maximum depth of 2.5m bgl, depending on site specific ground conditions and the locations of existing and proposed trees and hedges. Groundwater ingress and stability is likely to be a limiting factor with regards to strip/trench fill.
- Pad foundations for commercial buildings with relatively light loads.
- Ground improvement by vibro stone columns (VSC) with reinforced strip foundations or pads in areas underlain by loose sands and soft clays, located to the east and south of the landfill.
- Piled foundations will be required in areas underlain by deep Made Ground, and soft compressible deposits such as Alluvium, or to the south and east of the landfill, due to risks of excessive settlement from anticipated structural loads.
- Piled foundations for houses where foundation depths are greater than 2.50m, such as due to trees on shrinkable clays, or deep low strength / loose / compressible strata.
- Pile foundations are likely to be required for bridge abutments.

A foundation zonation plan is presented in Hydrock Drawing 19114-HYD-XX-ZZ-DR-GE-01026 (Appendix A).

### 6.5.2 Strip / trench fill and pad foundations

Strip / trench fill foundations are considered suitable for houses up to 2.5 storeys in height across the centre, north and west of the site, where they can be restricted to 2.5m depth.

Pad foundations are likely considered suitable to support columns for commercial structures, where soil strengths or relative densities are adequate (across the centre, north and west of the site) and where excessive settlement can be mitigated. However, this will be dependent on the structural loads and limits of acceptability for settlement, which are unknown at this stage.

All foundations should be founded at least 300mm into the medium dense or better River Terrace Deposits and firm or better clay of the Head Deposits, Oxford Clay Formation or Kellaways Clay Member or the Cornbrash Limestone Formation if encountered. The Alluvium, landfill, and areas of deeper General Made Ground, and loose or soft natural deposits are unlikely to be suitable founding stratum.

Appropriate preliminary safe net bearing pressures are presented in Table 6.3. As Alluvium is not a suitable stratum for founding this is not included.

Table 6.3: Preliminary Safe Net Bearing Pressures, subject to site specific assessment and design

Stratum	Safe net bearing pressure (Strip) (kN/m <sup>2</sup> )	Safe net Bearing Pressure (Pad 1.0 x 1.0m) (kN/m <sup>2</sup> )	Minimum Founding Depth (m)
Head Deposits	100	170	0.75
River Terrace Deposits	130	190	0.75
Weathered Oxford Clay Formation	100	130	1.00
Kellaways Sand Member	100	130	0.75
Kellaways Clay Member	100	130	1.00
Cornbrash Limestone Formation	150 (assumed on rockhead)	150 (assumed on rockhead)	0.75

If enlarging the foundations is considered (for example because loads are such that the quoted bearing pressure is inadequate) this could lead to increased settlements and the above recommendations should be reviewed.

Based on the NHBC volume change potential (medium to high in cohesive soils), the minimum founding depth for pad, strip or trench fill foundations is variable across the site. Within cohesive units foundations should be a minimum of 1.00m below final ground level (bfgl), and within granular soils it is recommended that a minimum depth of 0.75m bfgl is allowed for.

Foundations should extend through the base of any Made Ground and below the soft cohesive soils, and loose granular deposits whichever is deeper, and at least 300mm into underlying competent material.

In addition, foundations may need to be deepened to below the depth of influence of trees from desiccation effects and roots.

Where foundation depths are stepped, for instance, in trench fill and strip foundations to match changes in depths due to trees or ground conditions, the steps should be designed in accordance with NHBC Standards.

If trees are to be removed, the roots should be grubbed out and foundations extended to below the zone of disturbance created by this activity and to below any remaining root hairs.

Deepening of foundations in accordance with NHBC Standards will be required where foundations are within the zone of influence of existing, removed or proposed trees and proposed shrub planting. A tree survey should be undertaken by an arboriculturist in accordance with BS 5873:2012 to identify the type, and height of existing trees on the site and including any off-site trees, which could have an effect on foundation design.

Where trench fill foundations are within the zone of potential desiccation from trees and are deeper than 1.50m bgl, a suitable compressible material or void former will be required on the inside faces of foundations to external walls and beneath ground bearing floor slabs.

Excavation of strip / trench fill and pad foundations in excess of 2.50m bgl (in some places, significantly shallower) is unlikely to be economical and may be impracticable to undertake due to loose granular soils (from generally 1.80m bgl but as low as 1.30m bgl in the south) and water bearing sands which could result in trench collapse. However, if trench fill foundations in excess of 2.50m depth are proposed, they should be designed by a Structural Engineer in accordance with the requirements of the NHBC Standards (Chapter 4.2.8) and NHBC Technical Requirement R5. In addition, Hydrock recommends that the design of foundations deeper than 2.50m should take into account soil desiccation risk from plot specific testing if within the influencing distance of trees.

Foundation formations should be inspected by a suitably competent person to ensure the founding conditions are suitable and as indicated in this report. Any formation materials deemed as unsuitable should be excavated and replaced with lean mix concrete or deepened to suitable strata. If this is not possible, alternative solutions (such as piling) should be undertaken.

As the ground conditions at formation level are likely to be of variable type and stiffness, for the strip/trench fill foundations, it is recommended that foundation concrete should be reinforced with mesh reinforcement (designed by others) across the zone of variable soil conditions.

Foundation excavations should be protected from rainfall, inflow of surface water, frost and freezing conditions. They should also be protected from drying out in hot dry weather.

Groundwater monitoring indicates a shallow groundwater table in topographic lows of the site within the River Terrace Deposits and excavations may be difficult to undertake. Alternative methods of groundwater control may be required as fast groundwater ingress is anticipated, which could result unstable excavations.

The Oxford Clay Formation is an over consolidated clay, which can swell and soften in contact with water. Therefore, care will be required to ensure that foundation excavations are kept as free of water as practicable. Foundation concrete should be poured as soon as practicable after excavation.

### 6.5.3 *Piled foundations*

Piled foundations are recommended, to deepen foundations to below the influence of trees (in the vicinity of cohesive soils), where foundation depths are greater than 2.50m and where loose granular deposits are encountered, and where foundation trenches are prone to collapse.

Depending on column loads and layouts, piles should extend to a suitable depth into the underlying solid geology. The choice of piling system should be undertaken by a specialist piling Contractor and the

design of piles is beyond the scope of this report. However, the decision on pile type and design should take into account the following factors relevant to the site:

- Obstructions in the ground are expected from rock bands which could cause piles to stop shallower than the design depths, or to deviate from the vertical, thereby reducing their capacity. In some circumstances, obstructions can lead to pile breakage.
- Pile installation can create preferential pathways for the migration of contaminants to the groundwater.
- Boring of piles through coarse soils can result in loosening of the material, with resultant risk of shaft collapse prior to concreting and reduced shaft friction.
- Groundwater levels are variable across the site and temporary casing is likely to be required for bored piles. If CFA piles are used, concrete is placed as the auger is withdrawn, which can balance the water pressure if the operation is undertaken carefully.
- Piles should extend a minimum of five pile diameters into the bearing stratum to mobilise sufficient shaft friction and end-bearing resistance to carry the required loads without unacceptable settlement.
- Piles should also be designed to cater for the potential down-drag effects of negative skin friction on piles from the secondary consolidation / creep.
- Collapse of the pile shaft can be caused by ‘necking’ of the pile in running sand conditions, leading to pile failure.
- Where foundations are constructed on clay soils within the influencing distance of trees design should include for the upper section of the pile to be sleeved or additional length allowed for to resist stresses from clay swelling or shrinkage. In addition, heave protection may be required on the inside faces and underside of the ground beams.

#### 6.5.4 *Vibro-replacement stone columns (VSC)*

VSC may be suitable where excavations through loose granular deposits are prone to collapse to reach a suitable stratum subject to further investigation, or in areas of loose / soft deposits (generally east and south of the landfill).

Treatment by VSC at suitable spacing should lead to significant improvement of the soils by the creation of stone columns, but also by the densification of the existing essentially granular soil. Soils with a high silt content or organic soils are typically unsuitable for VSC improvement. The depth and spacing of the VSC treatment should be determined by a specialist contractor.

Following treatment, a safe net bearing pressure of 125 kN/m<sup>2</sup> is typically available for design of spread foundations. Confirmation of the allowable net bearing pressure should be confirmed by *in situ*, maintained plate load testing.

Shrinkable soil reinforced with stone columns is still susceptible to volume change and foundations should be designed accordingly, particularly where they are in the zone of influence of existing or proposed trees.

Different VSC Contractors use different methods of emplacing the stone columns and an initial assessment by Hydrock indicates that there is no restriction on the type of emplacement method (top feed, bottom feed, wet mix, dry mix etc.) due to the ground conditions. However, due to the presence

of groundwater and / or weak soils (with the potential for collapse), it is recommended that bottom feed VSC is used.

The VSCs should be designed by a specialist in accordance with Chapter 4.5 of the NHBC Standards. In addition, Hydrock recommend a Specification for the use of VSCs is written in accordance with BRE 391 to assist with NHBC approvals and sign off.

#### 6.5.5 *Foundation works risk assessment*

A foundation risk assessment may be required to determine if the proposed piling and the installation of VSCs will result in a significant increase in risk of pollution to Controlled Waters, particularly if undertaken in close proximity to the landfill.

The foundation works risk assessment should be undertaken in accordance with the risk assessment flowchart from National Groundwater & Contaminated Land Centre Report NC/99/73 (Figure 6.1) and will need to identify what additional risks to the environment piling / VSC installation may introduce and, if necessary, identify mitigation measures that will need to be put in place to remove any significant adverse environmental impacts.

#### 6.5.6 *Working platform*

A working platform will be required prior to the arrival on site of tracked piling and VSC installation plant. This should be designed and installed in accordance with BR470 (BRE 2004) based on data on the specific plant in accordance with an FPS certificate for the rig loadings.

### 6.6 *Ground floor slabs*

#### 6.6.1 *Residential dwellings*

In accordance with the NHBC standards, as clay soils of medium to high volume change potential are present at the site, it is recommended that suspended floor slabs with a void be adopted in areas of cohesive soils where outcropping at surface.

However, a significant part of the site (central and central -western areas) has granular deposits near surface (non-plastic or low heave potential) and slabs without a void (ground bearing or suspended cast *in situ* onto the ground) may be used if all of the following criteria are satisfied:

- the foundation depth (such as due to the influence of trees) is less than 1.50m;
- any fill is suitable, well-compacted granular material and less than 600mm thick;
- it is demonstrated that the soils are not desiccated and are at their equilibrium moisture content; and
- ground floor construction is not undertaken when the surface soils are seasonally desiccated (i.e. during summer and autumn), unless NHBC is satisfied the soil is not desiccated.

Ground floor slabs should be designed to incorporate any gas mitigation measures that may be required, as discussed later within this report.

#### 6.6.2 *Commercial properties*

For small scale commercial buildings, suspended floor slabs are proposed.

For large scale commercial buildings, ground bearing floor slabs will likely be possible.

## 6.7 Roads and pavements

Based on the test results and subject to *in situ* testing during construction, it is considered likely an equilibrium CBR of 3% should generally be achievable over the majority of the site, and 5% where the sub-grade is granular. Where earthworks are undertaken to a suitable Specification, as 3% equilibrium CBR of 3% should assumed.

Proof rolling of the formation level will be required, and any loose or soft spots should be removed and replaced with an engineered fill, in accordance with a suitable Specification. The formation level will also need to be protected during inclement weather from deterioration; all slopes should be trimmed to falls to shed rainwater and the surface sealed to limit infiltration.

Prior to the placement of the founding materials and the construction of the road pavement, the sub-formation and formation will need to be inspected and checked in accordance with a suitable Specification to ensure the ground conditions are as expected. All testing should be carried out in accordance with DMRB IAN 73/06 to confirm that the ground conditions at time of construction are consistent with the previous design parameters.

## 6.8 Drainage

Infiltration rate tests are presented in Section 5.4.3 and are included in Appendix C for reference.

Assessment of the infiltration rate data the ground model concludes:

- The Alluvium, proven along the northern and southern edges of the site (and expected to be present along the eastern edge), is considered unsuitable for infiltration drainage due to a combination of high clay content (low permeability) and the presence of groundwater.
- The thicker River Terrace Deposits in the centre of the site (at a topographic high) are considered suitable (subject to further testing) for infiltration drainage where there is sufficient depth of gravel present above the water table. However, there will need to be sufficient thickness of permeable soil above the water table to allow soakaway design.
- The thinner River Terrace Deposits in the north, south and east of the site, at the topographic lower points, are considered unsuitable for infiltration due to shallow groundwater levels resulting in limited storage capacity, generally due to a limited thickness of River Terrace Deposits, merging with the Alluvium and overlying the Oxford Clay.
- The Kellaways Clay Member (sub-cropping around the periphery of the northern part of the site, and present at depth below the site), are considered unsuitable for infiltration drainage due to their low permeability (high clay content).
- Infiltration drainage should not be installed in the historical landfill site, located in the central-south of the site.

It should be noted that the ground slopes to the north, east and south and the presence of underlying relatively impermeable soils at shallow depth (Kellaways Clay Member and Oxford Clay Member) will need to be considered, as groundwater will track along the interface of these impermeable units and the overlying River Terrace Deposits. During the design process, the designer will need to consider the effects soil infiltration drainage and groundwater levels would have on the proposed development.

The works to date indicate that shallow groundwater is present in the north and south (and likely present in the east) of the site. If attenuation ponds are proposed in these parts of the site, subject to



groundwater monitoring, groundwater levels and the proposed base of pond levels, groundwater level may be above the base of the proposed ponds with a corresponding potential reduction in surface water volume attenuation (due to loss of storage). As such, the civils designer and flood risk designer will need to take groundwater water levels into account when designing the attenuation ponds.

The design options available are to either:

- increase the base level of the pond, so it is above the groundwater table; or
- line the pond. It should be noted that if it is proposed to line the ponds, the potential hydrostatic uplift needs to be considered with the design and the liner will need to be placed at an over excavated depth and covered with soil to prevent the liner lifting.

Due to the potential effects of a variable groundwater table on the sides of the attenuation ponds, subject to detailed assessment and design, Hydrock believe the ponds may require reinforcement to prevent wash out and collapse of the pond sides.

## 6.9 Buried concrete

Based on guidelines provided in BRE Special Digest 1 (BRE 2005) and the information presented in Section 5.6.9 (Table 5.12):

- The superficial soils (Head, Alluvium, Glacial Washout Till and River Terrace Deposits) can be classified as Design Sulphate Class DS-1 and ACEC Class AC-1.
- The Cornbrash Limestone Formation is classified as Design Sulphate Class DS-2 and ACEC Class AC-2.
- The Oxford Clay formation, White Limestone Formation, Forest Marble Formation, Kellaways Sand Member and Kellaways Clay Member can be classified as Design Sulphate Class DS-4 and ACEC Class AC-4 for strip / trench fill / pad foundations.

These equate to Design Chemical Classes<sup>1</sup> of:

- DC-1 for the Head, Alluvium, Glacial Washout Till and River Terrace Deposits;
- DC-1 for the Cornbrash Limestone Formation; and
- DC-4 for the Oxford Clay formation, White Limestone Formation, Forest Marble Formation, Kellaways Sand Member and Kellaways Clay Member.

Further sulphate testing is required as part of detailed investigation and design.

The designer should check and confirm the classification of concrete using the information presented in Appendix C and Appendix D during the design.

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<sup>1</sup> The calculated ACEC class can be used in accordance with BS 8500-1+A2 (2019), Table A.9 to select the Designated Concrete (DC) class for an intended working life of 50 years. However, the designer is referred to BS 8500-1+A2 (2019), for full details and notes to Table A.9, including any Additional Protective Measures (APMs).

## 7. GEO-ENVIRONMENTAL ASSESSMENT

### 7.1 Updated conceptual model

#### 7.1.1 *Updated ground model*

The iCSM developed from the Desk Study review and field reconnaissance survey in Section 3 has been updated using the findings of the ground investigations presented in Sections 4 and 5

#### 7.1.2 *Updated exposure model*

Following the ground investigation, the plausible contaminant sources, receptors and pathways identified in the preliminary geo-environmental exposure model Section 3 have been updated or confirmed as follows.

##### 7.1.2.1 *Sources*

No potential sources have been removed from, or added to, the exposure model.

##### 7.1.2.2 *Receptors*

No potential receptors have been removed from, or added to, the exposure model.

##### 7.1.2.3 *Pathways*

No potential pathways have been removed, or added, to the exposure model. However, the landfill investigation proved the absence of any capping layer or lining of the landfill, and therefore the potential pathways highlighted in the preliminary geo-environmental exposure model (Section 3) are plausible.

Using the updated Ground Model and updated exposure model, GQRA is undertaken as presented below.

### 7.2 Risk assessment approach

A Tier 2 GQRA for identified receptors, based on all media sampled, has been undertaken in accordance with the principles of LCRM.

Firstly, the risks associated with the identified potential contaminant linkages have been estimated using standardised methods (typically involving comparison of site data with published 'screening values'). Secondly, where screening values are exceeded, the result has been evaluated in an authoritative review of the findings with other pertinent information to determine whether or not the exceedance is or is not acceptable in the site-specific circumstances.

The data sets used in the assessment comprise the analytical results obtained by Hydrock as listed in Section 4.

In cases where potentially unacceptable risks are indicated and/or the land is potentially unsuitable for its intended use, actions such as more advanced stages of risk assessment (Tier 3, detailed quantitative risk assessment (DQRA)) or remediation are proposed in Section 11.

## 7.3 Human health risk assessment

### 7.3.1 Soils Assessment

#### 7.3.1.1 Generic Assessment Criteria

The soil screening values used are generic assessment criteria (GAC) derived in accordance with EA CLEA guidance (2009) using the updated exposure model detailed in Defra SP1010 (2014), with the exception of published C4SLs. The term 'GAC' used in this report is inclusive of all generic soil screening values.

Based on the proposed development, and at this stage for completeness across the site, GAC based on a default residential with homegrown produce, CLEA land use scenario have been adopted for the wider site, and POS (residential) (POSresi) for the landfill area.

GAC are selected based on the following hierarchy:

- Category 4 Screening Levels (C4SL), where available.
- SoBRA Acute GAC for free cyanide, as acute dose toxicity is the primary risk driver.
- Hydrock GAC, derived by Hydrock as detailed in Appendix F.

The results of the assessment are presented in Appendix F.

It is noted that since the initial issue (P01) of this report, including the contamination assessment, Hydrock have updated the in-house assessment methodology including GAC and therefore the assessment undertaken previously has been updated as part of this report and is therefore superseded by this assessment.

#### 7.3.1.2 Data sets

The data set(s) used in this report is based on the CSM and the proposed development, and is split into:

- the wider site Made Ground, Topsoil and natural soils;
- the Landfill Area, with the data separated into:
  - » Landfill - Made Ground;
  - » Topsoil – Made Ground;
  - » Natural soils.

GAC are conservatively based on a soil organic matter (SOM) of 1%. Assessment sheets are presented in Appendix F.

### 7.3.2 Assessment Results – Wider Site excluding Landfill area

Based on individual test results that exceed the GAC, the chemicals of potential concern (CoPC) which require further assessment are summarised in Table 7.1 for the wider site.

Table 7.1: CoPC in soils which require further assessment (human health) – Wider Site

CoPC	GAC (mg/kg)	GAC Source	No. samples	Min. (mg/kg)	Max. (mg/kg)	No. samples >GAC
<b>Made Ground</b>						
Arsenic	37	C4SL CL:AIRE 2014	6	25	73	3
<b>Topsoil</b>						
Arsenic	37	C4SL CL:AIRE 2014	78	13	71	29
Beryllium	1.7	Hydrock Derived	78	0.64	1.90	3
Dibenz(a,h)anthracene	0.25	Hydrock Derived	78	0.05	0.38	1
<b>Natural Soils</b>						
Arsenic	37	C4SL CL:AIRE 2014	25	16	93	16
Beryllium	1.7	Hydrock Derived	25	0.81	2.5	5

All samples submitted for analysis of petroleum hydrocarbons (PHCs), SVOCs, and VOCs reported concentrations below the GAC and/or laboratory limit of detection.

The individual analytical results have been compared with the relevant GAC in the summary table with individual assessment sheets presented in Appendix F. From this, the CoPC are

- Made Ground:
  - » arsenic (3 out of 6 samples);
- Topsoil:
  - » arsenic (29 out of 78 samples);
  - » beryllium (3 out of 78 samples), and
  - » dibenz(a,h)anthracene (1 out of 78) samples.
- Natural Soils:
  - » arsenic (16 out of 29 samples); and
  - » beryllium (5 out of 29 samples).

The presence of arsenic in the Made Ground, arsenic, beryllium and dibenz(a,h)anthracene in the Topsoil and arsenic and beryllium in the natural soils at concentrations above the GAC requires further consideration.

The phrase ‘further assessment required’ is used to denote soil concentrations that exceed a GAC. This does not necessarily mean that the soil is ‘contaminated’ or not otherwise suitable for use. The assessment and any mitigation required are to ensure the site does not pose an ‘unacceptable risk’ as defined under Planning and Part 2A of EPA 1990.

### *Pesticides and Herbicides*

No pesticides and herbicides were identified within the samples submitted for chemical testing.

### *Asbestos*

No visual evidence of ACM was visible within the exploratory holes undertaken by Hydrock.

However, suspected asbestos cement fragments were observed on the surface in the vicinity of Parkers Farm in the central-east of the site as well as asbestos sheet roofing as part of the two barn structures.

The presence of ACM requires further consideration.

#### *Groundwater (dissolved phase) assessment*

The risks to human health arising from vapours in dissolved phase groundwater have been assessed in accordance with the SoBRA GW GAC guidance (2017). This is a preliminary approach whereby GAC have been developed using the CLEA v1.071 model for indoor air and outdoor inhalation pathways only, assuming a residential or commercial end-use.

A review of the groundwater screening values, indicate a low risk with regard to dissolved phase VOC in groundwater. As such, dissolved phase VOC in groundwater does not require further consideration.

### *7.3.3 Risk evaluation – Wider Site excluding Landfill area*

The screening exercise has identified arsenic in the Made Ground, arsenic, beryllium and dibenz(a,h)anthracene in the Topsoil and arsenic and beryllium in the natural soils at concentrations above the GAC. These are considered further here to assess if the exceedance may be acceptable with respect to the proposed development.

#### *Arsenic and Beryllium in Natural Soils and Arsenic in Made Ground*

There is no evidence of a man-made source of arsenic on the site and whilst the units underlying the site are not generally known to contain naturally high levels of arsenic, the superficial soils are to the south of an area shown to be high in naturally occurring arsenic according to the Advanced Geochemical Atlas of England and Wales (Rawlins et al 2012). As such it is considered likely that the superficial soils are derived from soils containing higher concentrations of arsenic (as indicated by presence of ironstone in some locations).

Consequently, these exceedances are not considered a significant risk to human health in line with the current Contaminated Land Statutory Guidance, which accepts that there may be natural background levels of substances as a result of the geology, but it is recommended that further assessment be undertaken using bio accessibility testing, in consultation with the regulatory authorities.

Concentrations of beryllium were identified in the natural soils and topsoil at concentrations of up to 2.50mg/kg compared to a GAC of 1.70mg/kg. These are considered marginal exceedances and are considered not to represent an unacceptable risk to end users. Hydrock believes mitigation measures with regards to beryllium are not required.

#### *PAH in Topsoil*

Dibenz(a,h)anthracene is recorded in one location (HP202) within the Topsoil at 0.38 mg/kg compared to a GAC of 0.25mg/kg. It is likely that the exceedance is associated with activities as part of the allotment uses (ash spreading as fertilizer for soil and/or burning of waste products).

As the exceedance is marginal, it is not considered to pose a significant risk to human health and no further consideration is required.

### Asbestos

No ACM have been noted in exploratory holes with fragments of suspected asbestos cement visible on the surface around the two farm outhouses in the central-east of the site as well as in use as sheet roofing.

Risk factors applicable to the site, based on potential for inhalation of airborne fibres, are considered below:

- No visible evidence of asbestos materials was noted in the exploratory holes, suggesting that asbestos materials are present on the surface; and
- No asbestos was detected in the soils on site including around the farm buildings.

Subject to regulatory and warranty provider approval, whilst Hydrock consider it plausible for asbestos to be present in any of the Made Ground soils, overall, the risk associated with the identified presence of asbestos is considered to be low. However, mitigation will be required to ensure risks to site users and adjacent off-site receptors remains negligible.

### 7.3.4 Assessment Results – Landfill

Based on individual test results that exceed the GAC, the CoPC which require further assessment are summarised in Table 7.2 for the landfill area.

Table 7.2: CoPC in soils which require further assessment (human health) – Landfill

CoPC	GAC (mg/kg)	GAC Source	No. samples	Min. (mg/kg)	Max. (mg/kg)	No. samples >GAC
<b>POS</b>						
<b>Topsoil Made Ground</b>						
Beryllium	2.2	Hydrock Derived	4	<0.06	8.2	1
Dibenz(a,h)anthracene	0.57	Hydrock Derived	4	<0.05	1.4	1
<b>Landfill Made Ground</b>						
Arsenic	79	C4SL CL:AIRE 2014	17	25	85	2
Beryllium	2.2	Hydrock Derived	4	<0.06	8.2	6
Lead	630	C4SL CL:AIRE 2014	17	45	830	2
Benzo(b)fluoranthene	7.2	Hydrock Derived	17	0.05	9.70	1
Dibenz(a,h)anthracene	0.57	Hydrock Derived	17	0.05	1.60	1
<b>Natural</b>						
Arsenic	79	C4SL CL:AIRE 2014	4	25	84	1
Dibenz(a,h)anthracene	0.57	Hydrock Derived	4	0.05	0.60	1

With regards to POS land Use, the presence of a number of metals and metalloids in the Topsoil, landfill and natural soils, and PAH in the landfill and natural soils require further consideration.

If the area of the landfill is proposed for residential use the above assessment will need to be updated.

## Asbestos

No evidence of ACM was observed on within the Landfill area. However, the presence of ACM cannot be discounted.

In addition, asbestos was identified by laboratory screening and testing of soil samples within the Landfill-Made Ground as summarised in Table 7.3.

Table 7.3: Asbestos in soil samples (laboratory testing)

Location	Depth (m bgl)	% Asbestos (w/w)	Comment
BH03	1.00	0.323	Chrysotile - Rope (ACM)
WS09	3.00	<0.001	Amosite - Loose Fibres
WS10	0.60	<0.001	Chrysotile – Loose Fibres

The presence of ACM and asbestos fibres in soil requires further consideration.

### 7.3.5 Risk Evaluation – Landfill (as proposed POS)

The screening exercise has identified elevated concentrations of the following which require further consideration:

- beryllium and dibenz(a,h)anthracene in the Topsoil Made Ground;
- ACM, arsenic, beryllium, lead, benzo(b)fluoranthene and dibenz(a,h)anthracene in the Landfill – Made Ground; and
- arsenic and dibenz(a,h)anthracene in the natural soils.

These are considered further here to assess if the exceedances may be acceptable with respect to the proposed development. The phrase ‘further assessment’ does not necessarily mean that the soil is ‘contaminated’ or not fit for use.

#### Topsoil Made Ground

Elevated beryllium up to 8.2mg/kg compared to a GAC of 2.2mg/kg was identified in one location and dibenz(a,h)anthracene of 1.4mg/kg compared to a GAC of 0.57mg/kg.

Whilst the exceedance is slight for dibenz(a,h)anthracene and less than 4x the GAC for beryllium in only one of four samples for both CoPC and not considered a significant risk, given the nature of the site and the presence of PAH and other contaminants (ACM and asbestos fibres) in the underlying Landfill Made Ground, Hydrock consider the presence of beryllium and dibenz(a,h)anthracene) in the Topsoil Made Ground to be an unacceptable risk, which requires mitigation for end use as POS

#### Landfill Made Ground

##### Asbestos

There was one exploratory hole location (BH03) where ACM were present. In addition, low concentrations of asbestos fibres (<0.001%v/v) of chrysotile and amosite have been detected in two additional samples of the Landfill Made Ground.

Hydrock considers it plausible for asbestos to be present in any of the Landfill Made Ground soils and asbestos, (even at low concentrations), represents an unacceptable risk with regard to the potential



POS use and mitigation measures would be required in this area of the site in the form of an engineered cover system.

#### Arsenic, Beryllium and Lead

Arsenic is present in the landfill at up to 85mg/kg compared to a GAC of 79mg/kg (2 exceedances above the GAC), beryllium within the landfill at up to 8.20mg/kg compared to a GAC of 2.2mg/kg (6 exceedances) and lead up to 830mg/kg compared to a GAC of 630mg/kg (2 exceedances).

Whilst the exceedances are slight, given the nature of the site and the presence of other contaminants (ACM and asbestos fibres), Hydrock consider the presence of arsenic, beryllium and lead in the Landfill Made Ground to be an unacceptable risk, which requires mitigation for end use as POS.

#### PAH in Landfill Made Ground

Benzo(b)fluoranthene was identified in 1 sample at 9.70mg/kg above the GAC of 7.20mg/kg and dibenz(a,h)anthracene of 1.4mg/kg compared to a GAC of 0.57mg/kg in one sample. Whilst the exceedance of both is slight, given the nature of the site and the presence of other contaminants (ACM and asbestos fibres), Hydrock consider the presence of benzo(b)fluoranthene and dibenz(a,h)anthracene in the Landfill Made Ground to be an unacceptable risk, which requires mitigation for end use as POS.

#### *Natural Soils (River Terrace Deposits)*

Concentrations of arsenic were identified in the natural soils with of 84mg/kg compared to a GAC of 79mg/kg in one of four samples. This is considered a marginal exceedance and is considered not to represent an unacceptable risk to end users. Hydrock believes mitigation measures with regards to arsenic are not necessary for end use as POS.

Dibenz(a,h)anthracene was identified in one sample at 1.4mg/kg compared to the GAC of 0.29mg/kg. This exceedance is considered to have originated from the overlying Landfill Made Ground rather than the River Terrace Deposits (due to no exceedance across the rest of the site) and is therefore not considered to be representative of these soils.

Hydrock do not believe any further consideration is required with regards to natural soils below the landfill.

## 7.4 Phytotoxicity risk assessment

### 7.4.1 Risk estimation

Priority phytotoxic chemical concentrations have been screened against published values to determine the likely risk to plant growth (phytotoxic GAC). Phytotoxic GAC based on a pH of 7% have been adopted for all soils based on laboratory results.

As with human health, individual sample test results are compared directly with the phytotoxic GAC.

Based on individual test results that exceed the GAC, the CoPC which require further assessment with regards to phytotoxicity within the landfill area are presented in Table 7.4.

Table 7.4: Chemicals of potential concern for which further assessment is required (risk to plants)

Chemical of potential concern	Generic criterion (mg/kg)	Basis for generic criterion	No. samples	Min. (mg/kg)	Max. (mg/kg)	No. samples exceeding generic criterion
<b>General Made Ground</b>						
No exceedances						
<b>Site Wide Topsoil</b>						
No exceedances						
<b>Natural soils</b>						
No exceedances						
<b>Topsoil - Made Ground</b>						
Copper	135	BS 3882 2015	4	1	780	1
Nickel	75	BS 3882 2015	4	19	88	1
Zinc	300	BS 3882 2015	4	1	570	1
<b>Landfill Made Ground</b>						
Boron	5	Nable, et al.1997	17	0.9	17	9
Copper	135	BS 3882 2015	17	21	1000	8
Nickel	75	BS 3882 2015	17	24	150	4
Zinc	300	BS 3882 2015	17	110	6500	9
<b>Natural</b>						
Boron	5	Nable, et al.1997	4	0.90	5.70	1

For the wider site, there are no exceedances, and no further consideration is required.

Within the landfill, the Topsoil Made Ground and the Landfill Made Ground, indicate copper, nickel and zinc exceed the GACs. In addition, in the Landfill Made Ground and natural soils boron exceeds the GAC. Whilst the exceedances in the Topsoil Made Ground and natural soils are marginal, the exceedances in the Landfill Made Ground are significant.

Detriment to plant life is difficult to quantify and many of the GAC are based on agricultural crop yields rather than harm to particular plant species. However, the significant exceedance of the GAC (especially for the Landfill Made Ground, indicates the probability of an unacceptable risk to plant life and mitigation should be undertaken.

Notwithstanding the concentrations of contamination identified, there is little to no suitable subsoil or topsoil growing medium on the site and this will require import.

The requirement for mitigation of risk to human health will also serve (in part) to mitigate risks to plant life.

## 7.5 Pollution of controlled waters risk assessment

### 7.5.1 Risk estimation

The risks to groundwater and surface water from contaminants on site have been assessed in accordance with the Environment Agency (2006) Remedial Targets Methodology (RTM).

Site contaminant loadings are compared with relevant screening values WQTs, which are linked to the CSM.

Acceptable WQT are defined for protection of human health (based on Drinking Water Standards (DWS)) and for protection of aquatic ecosystems (Environmental Quality Standards (EQS)).

As related specifically to this site, the data are compared with criteria selected in accordance with the methodology presented in Appendix F. This methodology involves selecting which of several alternative risk scenarios apply in this case. The assessment is presented in Table 7.5 below, with the justification for the scenarios selected explained in the following text:

- The River Terrace Deposits and Alluvium are classified as a Secondary A Aquifer;
- The solid geology of the Cornbrash Limestone Formation and Kellaways Sand Member are classified as a Secondary A Aquifer.
- The thickness of the Cornbrash Limestone Formation and the Secondary A Aquifers is unlikely to provide sufficient flow for extraction on strategic scale and therefore groundwater abstraction has been discounted as a secondary receptor at this stage. The thickness of the Oxford Clay Formation across the majority of the site and Kellaways Clay, and Blisworth Clay at depth will restrict groundwater migration into the deeper geology.
- Groundwater levels are relatively shallow in the north, east and south of the site and may provide base flow to the stream in the north.
- Hydrock do not consider groundwater at the site to be in hydraulic continuity with the Oxford Canal, as it is assumed that the canal is lined. As discussed in Section 2.8.2, Rushy Meadows SSSI is up gradient of the site and it is therefore not feasible for this to be impacted by the site. Shallow groundwater within the sands and gravels, and the landfill, may be in hydraulic continuity with Rowel Brook and other surface water features in the immediate area.

Table 7.5: Summary of water quality risk assessment protocol

Hydrock scenario	Water body receptors	Secondary receptors	Example contaminant linkages	RTM level and data used	Water quality targets
B	Groundwater Surface water.	Aquatic ecosystem.	Contaminants from site leach or seep into a groundwater body that feeds inland surface water by base flow. The surface water is an aquatic ecosystem.	RTM Level 2 - Groundwater.	EQS (inland)
<p>Notes:</p> <p>Some EQS are water hardness dependent. This is measured either in the receiving surface water or in groundwater (if it is part of the pathway), or is estimated from national maps.</p> <p>Inland waters EQS applicable to freshwater, 'other' waters EQS applicable to coastal or transitional waters.</p> <p>This table and the results of the assessment are considered as a first screening for potential risks of pollution of Controlled Waters. More specific requirements may be stipulated by the relevant Agency.</p>					

The results of the screening assessment are presented in Appendix F and are summarised in Table 7.6.

There are no WQT for petroleum hydrocarbon fractions in water. However, because of the sensitivity of the water environment to petroleum hydrocarbons, an initial screening exercise is also included in Table 7.6 irrespective of the assessment scenario(s) stated in Table 7.5.

In some instances, the reporting limit (or detection limit) quoted by the laboratory may be greater than the WQT that it is being assessed against. As the current exercise is an initial screening assessment, further assessment of these elements has not been undertaken.

Table 7.6: CoPC which require further assessment (controlled waters)

CoPC	WQT (µg/l)	Basis for WQT	No. samples	No. samples above LoD	Min. (µg/l)	Max. (µg/l)	No. samples exceeding WQT and above LoD
<b>Shallow groundwater in the River Terrace Deposits External to and near the Landfill</b>							
Cadmium	0.08	EQS	31	9	<0.02	0.1	2
Cobalt	3	EQS	31	18	<0.2	11	2
Chromium(III)	4.7	EQS	31	2	<5	7.9	2
Copper	1	EQS bio <sup>+</sup>	31	28	<0.5	3.6	15
Manganese	123	EQS bio <sup>+</sup>	31	31	0.05	940	7
Nickel	4	EQS bio <sup>+</sup>	31	27	<0.5	13	10
Ammoniacal Nitrogen	300	EQS	13	13	<15	7300	3
Sulphate (SO <sub>4</sub> <sup>-</sup> )	400000	EQS	31	31	31600	606000	1
<b>Shallow groundwater within the Landfill area</b>							
Cobalt	3	EQS	6	4	1.5	19	4
Chromium (III)	4.7	EQS	6	6	5.3	9.2	6
Copper	1	EQS bio <sup>+</sup>	6	6	1.5	8.5	6
Manganese	123	EQS bio <sup>+</sup>	6	6	230	2500	6
Nickel	4	EQS bio <sup>+</sup>	6	6	5.6	16	6
Ammoniacal Nitrogen	300	EQS	6	4	69	18000	4
Sulphate	400000	EQS	6	4	127000	645000	4
Note: the maximum recorded value is compared with the water quality target.							

### 7.5.2 Risk evaluation

The data indicates that the EQS for cadmium, cobalt, chromium (III), copper, manganese, nickel, ammoniacal nitrogen and sulphate, in groundwater are exceeded external to the landfill and the EQS for chromium (III), copper, manganese, nickel ammoniacal nitrogen and sulphate within groundwater samples taken within the landfill site area. These require further consideration.

There are no recorded concentrations of VOCs, SVOCs, PAH or petroleum hydrocarbons in the groundwater.

Cadmium, cobalt, chromium (III) copper, manganese and nickel exceedances are relatively slight across the site. Furthermore, the inland waters EQSs for copper, manganese and nickel are based on the bioavailable fraction and because bioavailability has not been calculated for these metals the assessment is conservative as it assumes 100% bioavailability.

Sulphate is considered to be a naturally occurring chemical and is due to the elevated sulphate concentrations which are usually present within the Oxford Clay Formation. As such, sulphate is not considered a risk to Controlled Waters.

Ammoniacal Nitrogen concentrations have been observed with the landfill materials in excess of the Environmental Agency's physio-chemical 'Good' standard for rivers, of 0.3mg/l with concentrations of ammoniacal nitrogen within the landfill recorded up-to 18mg/l. Ammoniacal nitrogen is a typical contaminant associated with biodegradation of organic materials in historical landfills. The concentrations that have been observed in the landfill soils are, in Hydrock's experience' towards the lower end of typical concentrations in historical landfills. As part of the further works Ammoniacal Nitrogen is exceeded in 3 locations as part of the monitoring with exceedances in WS252 at 1.2mg/l (located in the south-east of the site) BH01 (Jubb) at 7.2mg/l and BH07 (Jubb) at 0.31mg/l compared to a EQS of 0.3mg/l and moving south and east in BH202, H203, BH204 and WS246 at a maximum concentration of 0.003mg/l indicating attenuation (via dispersion, dilution and degradation) is occurring externally to the landfill and as such, is not considered a significant risk to Controlled Waters. In the remainder of the locations Ammoniacal Nitrogen was recorded below the limit of detection.

It is also noted that WS252 is located in the far south-east of the site, likely as a result of farming activities impacting groundwater as a source rather than the landfill solely.

## 7.6 Ground gases risk assessment

### 7.6.1 Data

It is judged from the available evidence that the gas generation potential at the site is high (due to Alluvium present on site, along with the landfill present in the central-south of the site and that the sensitivity of the development is high (due to a mixed end use (including residential) across most of the site). Consequently, and in accordance with CIRIA C665 (Table 5.5a and 5.5b), an appropriate minimum monitoring regime is 24 readings over 12 months, provided other monitoring requirements are also met, such as prevailing atmospheric pressure conditions (for example, BS 8485:2015+A1:2019 suggests monitoring should include a period of falling atmospheric pressure).

Hydrock has undertaken six readings within the landfill and 14 readings in the areas beyond the landfill (including during periods of falling and low atmospheric pressure), with further visits being undertaken in 2023. As such, the conclusions presented below are considered to approximate to worst-case conditions and are interim, pending ongoing ground gas monitoring.

### 7.6.2 Assessment

The risks associated with the ground gases methane (CH<sub>4</sub>) and carbon dioxide (CO<sub>2</sub>) have been assessed using BS 8485:2015 +A1:2019, which cites the guidelines published by CIRIA (C655, 2007).

The assessment guidelines set out in Table 2 of BS 8485 are based on interpretation of the gas concentrations and the gas flow rates. The quantitative assessment has been carried out by comparing

the individual gas concentrations and gas screening values (GSV<sup>2</sup>) in Appendix E with the published CS thresholds (BS 8485 Table 2), in addition to a worst-case GSV assessment in accordance with section 6.3.7 of BS 8485. The assessment is summarised in Table 7.7 and Table 7.8 and the full assessment is presented in Appendix E.

Table 7.7: Ground gas risk assessment – Wider Site (excluding flooded wells)

	Min	Max	Typical	Comment
Steady Flow Rate (l/hr)	-4.5	2.1	<1	-
Methane (%)	0.1		<1	The typical methane concentration is <1% and the typical carbon dioxide concentration is less than 5%.
Carbon Dioxide (%)	0.1	4.2	<5	Whilst it is considered that there is a potential source related to the landfill in the central-south of the site (although not included within the site) the GSV is indicated as CS1 conditions.
Carbon Monoxide (ppm)	0	4	0	-
Hydrogen Sulphide (ppm)	0	5	0	-
Oxygen (%)	11.6	21.9		-
Carbon Dioxide GSV Maximum flow and Concentration Per Visit (l/hr)	<0.07	0.087	<0.07	Generally, CS1. CS2 conditions relating to GSV indicated in WS242
Methane GSV Maximum Concentration Per Visit (l/hr)	<0.07	<0.07	<0.07	CS1

The majority of the gas readings are indicative of CS1 conditions when compared against worst case flow and worst gas carbon dioxide concentrations per borehole. Boreholes where GSVs are indicative of CS2 conditions on a borehole basis are:

- WS242 at a GSV of 0.08 combining a flow of 3.8l/hr to a carbon dioxide concentration of 2.3%. The flow rate was recorded as a negative flow and therefore this GSV is not considered to be representative of conditions. It is also noted that there was minimal headspace within the borehole and it subsequently became flooded from the next reading onwards and therefore it is considered to be unreliable.

Table 7.8: Ground gas risk assessment – Landfill (excluding flooded wells)

	Min	Max	Typical	Comment
Steady Flow Rate (l/hr)	0.1	0.3	<1	There is generally low flow rate, with no discernible change in flow rate, or ground gas

<sup>2</sup> Note: GSV is synonymous with 'site characteristic hazardous gas flow rate' ( $Q_{HGS}$ ) of BS 8485:2015 +A1:2019 Table.

	Min	Max	Typical	Comment
				concentrations with changes in atmospheric pressure.
Methane (%)	0.1	0.3	<1	The typical methane concentration is less than 1% and the typical carbon dioxide concentration is greater than 10%. Given that there is a potential source (landfill), Hydrock considers that as a precautionary measure the Characteristic Situation indicated by the GSV requires raising by one level.
Carbon Dioxide (%)	0.4	16.3	<15	
				Assessment of the data on a ternary plot of ground gas ratios (O <sub>2</sub> + N <sub>2</sub> , CO <sub>2</sub> and CH <sub>4</sub> ), in accordance with guidance by Wilson et. al. (2018), indicates the ground gas present is likely to represent microbial respiration of organic material in soil. Whilst the site is a former landfill, the source soils are predominantly ash, with little organic material.
Oxygen (%)	1.1	20.3	-	-
Carbon Dioxide GSV (l/hr)	<0.07	<0.07	<0.07	CS1
Methane GSV (l/hr)	<0.07	<0.07	<0.07	CS1

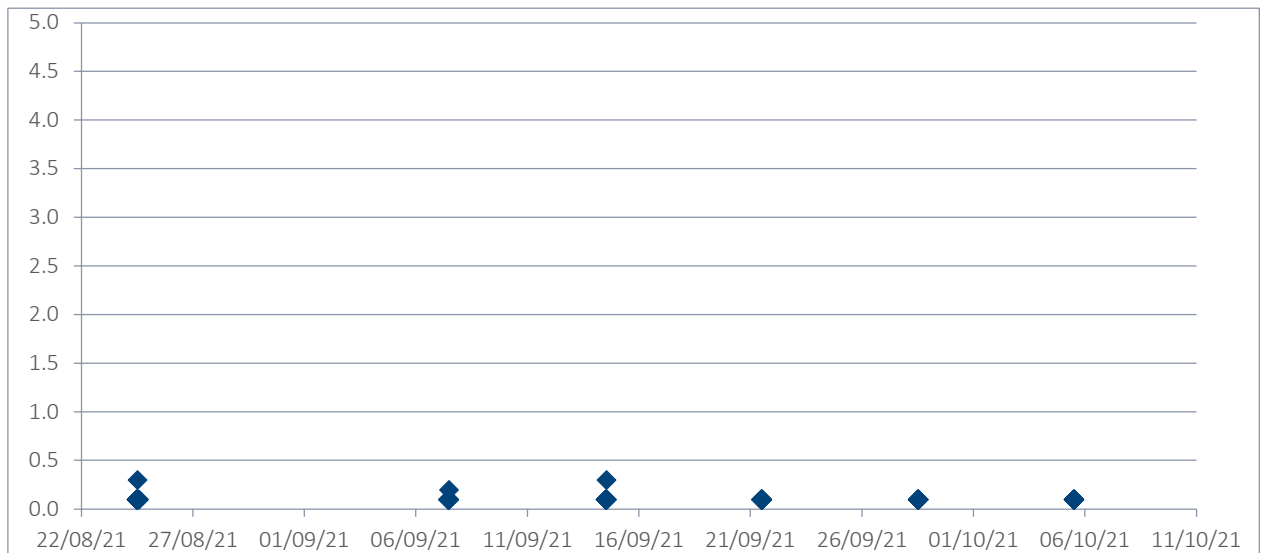


Figure 7.1: Methane Concentrations within the landfill



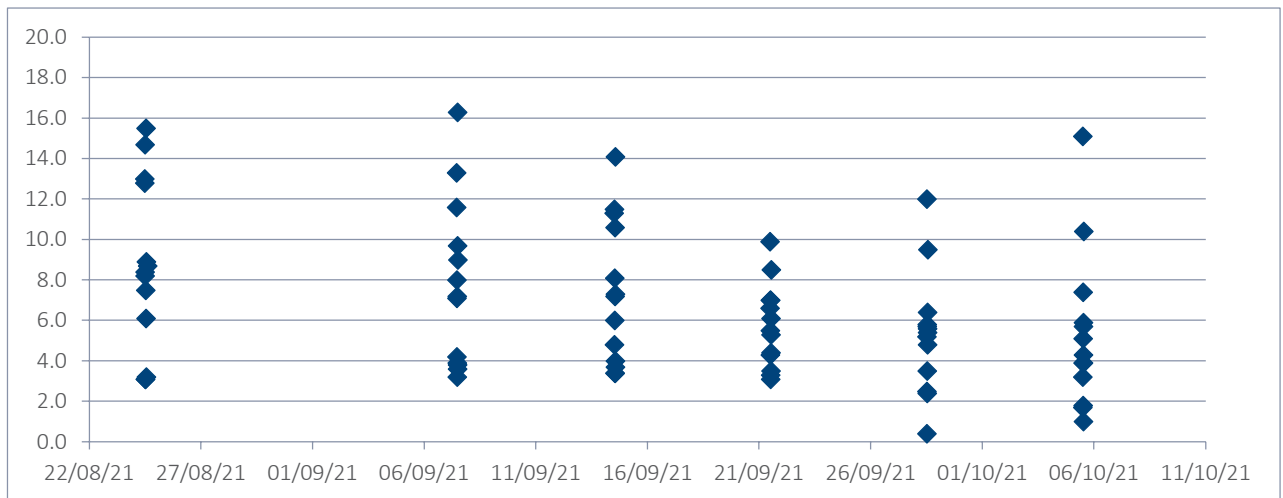


Figure 7.2: Carbon dioxide Concentrations within the landfill

As indicated in Table 7.7, Table 7.8 and, Figure 7.1 and Figure 7.2:

#### Within the landfill

- There is no recognisable difference between the gas concentrations in the landfill and the underlying Oxford Clay, indicating fissuring is present in the Oxford Clay.
- Recorded concentrations of carbon dioxide are as high as 16.3%, but generally less than 15%.
- In non-flooded wells, the gas flow readings are generally low (<1.0 l/hr).
- The computed GSVs would generally accord with CS1 conditions. However, given the number of carbon dioxide values that are in excess of 10%. Hydrock would recommend the classification is raised by one value to CS2 for the landfill itself.
- In conclusion, if the landfill site is proposed for residential land use, on the basis of the low gas flows, the consistently high carbon dioxide concentrations, Hydrock considers that a CS2 classification is appropriate for the site, subject to agreement by Local Planning Authority (LPA) and warranty provider.
- If proposed for residential land use, significant further monitoring will be required to confirm the assessment presented above.
- If proposed for POS land use, no mitigation is required on site. However, detailed monitoring would be required on the adjacent areas of the wider site to fully assess risks to adjacent receptors.

#### Wider Site

- Gas flow readings are generally low (<1.0l/hr) which is not considered significant. It is noted that readings of up to 2.1l/hr.
- The computed GSVs would generally accord with CS1 conditions. Where CS2 conditions are recorded this is likely the results of water levels being above the response zone and confined within minimal head space.
- There is no indication of significant gas migration from the landfill to boreholes in vicinity to the landfill is noted.

- As indicated in Table 7.7, the computed GSV for carbon dioxide and methane indicates CS1 conditions and methane and carbon dioxide at concentrations are 'typically' below 1% and 5% respectively.
- Whilst historical gas monitoring inside the landfill indicated CS2 conditions, no evidence of ground gas migration within the River Terrace Deposits have been recorded around the site or in close proximity to the landfill.
- As such, the site is provisionally classified as Characteristic Situation 1. Based on the data to date no mitigation measures are required externally to the Landfill.

The areas requiring gas protection measures are presented in Hydrock drawing 19114-HYD-XX-ZZ-DR-GE-01027.

### 7.6.3 *Off-site risks from carbon dioxide and methane*

The National Planning Policy Framework requires that a developed site should be incapable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990. This position includes a consideration of the potential for off-site migration of ground gases that may impact on adjacent properties.

The risk to receptors (dwellings and commercial properties) constructed in close proximity to the landfill, is considered to be low.

### 7.6.4 *Radon*

A full radon report was obtained by Hydrock in March 2023 (see Appendix B), which indicates that the far northern part of the site (Radon Report ID BGS\_331991/43780), north of Rowel Brook, is in a Radon affected area of between 3-5% and 10-30%, where either basic or full protection measures are required. It is understood that there are no proposed residential buildings within this area as part of the development, but buildings associated with the proposed community farm may be present.

The remainder of the site (Radon Report ID: BGS\_331991/43779) is not considered to be in a Radon affected area (<3%) and no radon protection measures are required.

## 7.7 *Construction materials risk assessment*

### 7.7.1 *Water pipelines*

A formal water pipe investigation and risk assessment is beyond the scope of this report. However, the findings of this investigation have been compared to the threshold values in Water UK HBF (2014), Table 1 as far as is practicable.

The majority of the site is previously undeveloped, and the preliminary risk assessment and investigation has indicated no plausible contaminant sources. It is envisaged that standard pipework will be suitable for delivery of potable water to the site. However, confirmation should be sought from the water supply company at the earliest opportunity.

Within the landfill organic contamination (PAH) has been identified in exceedance of the threshold values and if potable water pipes are installed across the landfill areas, Hydrock considers barrier pipe should be used. However, confirmation should be sought from the water supply company at the earliest opportunity.

In addition, over-excavation of service runs, and replacement with clean soils would be required. Where pipes cross the landfill.

### 7.7.2 *Other construction materials*

Plastic pipes for drains and sewers are manufactured from unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) or polyethylene (PE). These materials may be affected by the presence of organic compounds in the soil.

In accordance with the British Plastics Federation Guidance (August 2018), as the concentrations of PAH, and BTEX are below 100mg/kg and the concentrations of petroleum hydrocarbons (TPH) are below 200 mg/kg, PVC-U, PP or PE pipework is considered suitable.

Within the landfill local concentrations of TPH above 100mg/kg were recovered. Discussions with regards to pipework should be undertaken with regards to suppliers. Regardless of the type of pipework installed, over-excavation of service runs, and replacement with clean soils would be required.

The implications for buried concrete are discussed in Section 6.9.

## 7.8 Contamination risks to ground workers

### 7.8.1 Introduction

Whilst risks to construction workers are not discussed in detail, the following section discusses potential risks that should be considered.

Information presented in this document is provided to assist in managing the risk associated with contamination in soil and groundwater at the site but is not definitive. The Contractors are responsible for undertaking their own assessments and assessing what risks are present and what control measures are required.

Task specific risk assessments and method statements should be in place, and risks and required mitigation measures communicated to all relevant personnel prior to the works commencing. Appropriate PPE and, if required, RPE should be provided and utilised.

### 7.8.2 Metals and metalloids

The soils contain metals and metalloids recorded as pervasive concentrations throughout the Made Ground.

### 7.8.3 Ground Gas

It is noted that concentrations of carbon dioxide (an asphyxiant) in the soil exceed HSE Workplace Exposure Limits for personnel in the working environment of 1.5% for short term (15 minutes) exposure and / or 0.5% for long term exposure. Furthermore, soil concentrations of oxygen are below the HSE recommendations of 18%.

Soil gas concentrations are not necessarily reflected by those in the breathing zone, as such, all Contractors and maintenance workers should be made aware of the possible presence of carbon dioxide and should take all necessary health and safety precautions when working in trenches or confined spaces.

### 7.8.4 Asbestos

Visible fragments of suspected asbestos cement sheeting have been identified on the surface around Parkers Farm during the ground investigation and visible on the barn roofs and are likely present at the landfill. In addition, asbestos fibres (<0.001%) and rope loose fibrous debris are present in the soils in the landfill was identified in laboratory testing.

All site staff should be made aware that there is a likelihood of encountering further ACM and at any stage of the development. It is advised that the Contractor should supply suitable and sufficient 'Asbestos Awareness' training (specific to asbestos in soils) to all site staff who could foreseeably encounter asbestos containing materials during the course of their work.

The Contractor for each stage of works must undertake a suitable and sufficient Risk Assessment in accordance with Regulation 6 of the Control of Asbestos Regulations 2012 (CAR2012). The results of the assessment should be used to compile a methodology in accordance with Regulation 7 of CAR2012, which limits potential exposure and spread of asbestos fibre. Appropriate training should be provided to all site staff identified within the risk assessment as having the potential to be exposed or encounter asbestos during their work in accordance with Regulation 10 of CAR2012.

It is the responsibility of the Contractor to ensure that mitigation measures are suitable and sufficient to prevent exposure to airborne asbestos so far as is reasonably practicable in accordance with Regulation 11 of CAR2012.

It is recommended that any asbestos cement sheeting encountered is handpicked under controlled conditions in accordance with HSG210 'Asbestos Essentials'. Hand picking needs to be undertaken by suitably qualified Contractors in accordance with HSE guidance and an Environmental Permit. All ACM must be suitably packaged, placed in a dedicated, covered and lockable skip pending off-site disposal to a suitably licensed waste facility.

## 7.9 Findings of the generic contamination risk assessments

The potential sources, pathways and receptors identified in the desk study (Section 3) have been investigated (Sections 4 and 5) and assessed (Sections 7.2 to 7.7). A SPR linkage assessment has been undertaken and is presented in Appendix I (Table I.2).

A summary of the SPR contaminant linkages for which the risks may be unacceptable and require mitigation (those that are moderate or higher) are discussed in:

- Table 7.9 for POS end use within the landfill area; and
- Table 7.10 for residential end use with plant uptake (Wider Site).

Table 7.9 and Table 7.10 assume the following SPR linkages which have been discounted (subject to agreement) as not requiring further consideration (mitigation). If these assumptions are not agreed during regulatory discussions, the conclusions as noted in Table 7.9 and Table 7.10 will need to be updated:

- Elevated concentration of naturally occurring arsenic and beryllium.
- Slightly elevated dibenz(a,h)anthracene in one location (HP202) in Topsoil in the allotment areas.
- Slightly elevated concentrations of cadmium, cobalt, chromium (III), copper, manganese, nickel, ammoniacal nitrogen and sulphate within the groundwater beneath the site.
- Ground gases outside the landfill.

Table 7.9: Residual risks following risk evaluation (POS) within the landfill area\*

Contaminant Linkage	Sources	Pathways	Receptors	Comments
CL 1.	CoPC identified in soils.	Ingestion, inhalation or dermal contact with soils and soil-derived dust.	Site end users.	Exceedance of the GAC. Mitigation required in the form of an engineered cover system.
		Inhalation and ingestion of soil-derived dust.	Site end users. Neighbours.	
		Root uptake	Plant life.	Exceedance of the GAC. Imported growing material will be required to form the engineered cover system.
CL 2.	Asbestos fibres and ACM in Landfill Made Ground.	Inhalation of fibres.	Site end users. Neighbours.	Chrysotile and amosite fibres (<0.001% w/w) and chrysotile rope (0.323%w/w) detected in Landfill Made Ground. Mitigation required in the form of an engineered cover system.

Table 7.10: Residual risks following risk evaluation – Wider Site

Pollutant Linkage	Sources	Pathways	Receptors	Comments
CL 3.	Asbestos fibres from ACM at the site surface and in existing building materials.	Inhalation of fibres.	Site end users. Neighbours.	Asbestos sheet roofs were noted in farm structures and sporadic fragments were noted on the site surface in the vicinity of the farm structures. Although not noted in soils, the potential for fibres remains. Surface ACM and suspected ACM should be removed by a licenced specialist.
CL 4.	Asbestos fibres in soils around Parkers Farm.	Inhalation of fibres.	Site end users. Neighbours.	Any suspected ACM encountered during earthworks will need to be handpicked and removed from site. If ACM encountered in the remaining building on site, removal under controlled conditions will be required. Removal of ACM under controlled conditions should limit off-site emissions. Shallow Made Ground around the farm structures should be removed and the removal documented.
CL 5.	Radon	Migration through soils and accumulation in indoor air.	End users of new buildings.	The area north of Rowel Brook is in a Radon affected area and basic or full radon protection measures in buildings in this area.

Pollutant Linkage	Sources	Pathways	Receptors	Comments
				To be installed by competent installer, validated and verified.

### 7.10 Conclusions and recommendations for development (Landfill area)

The site investigation works have proven the presence of the historical landfill identified within the Desk Study as well as confirming the surrounding geological model for the site although further works will be required at a later date to allow design.

The landfill is predominantly ash, with significant man-made materials present throughout. An odour is present during excavation of the landfill and some areas of hydrocarbon odour have been noted.

Groundwater is generally encountered at the base of the River Terrace Deposits and at shallow depths in the south and east of the site. It is assumed the gravel workings undertaken prior to landfilling operated as a dry operation, which stopped on encountering the summer groundwater level (which will be lower than the winter / spring groundwater level).

Chemical testing of soils has confirmed there are elevated CoPC within the soils which require mitigation within the landfill. The remainder of the site has no elevated CoPC.

Chemical testing of groundwater has confirmed there are elevated CoPC within the groundwater. However, subject to the Environment Agency agreement, this is not considered to be a significant risk to Controlled Waters.

Given the findings to date, whilst mitigation measures could be proposed to allow development of the landfill site for residential use, the risks and costs (principally associated with excavation and disposal, and ground gas mitigation) are likely to be significantly higher than those for a proposed POS land use. This is coupled with waste regulation issues and the inability to re-use any Landfill excavated soils under a Materials Management Plan. Given the size of the development, and the need to create suitable POS areas as part of the development, Hydrock would recommend that the landfill site is not included in the area allocated for residential or non-residential use, but is allocated as an area of POS with minimal excavation of the landfill undertake.



## 8. MITIGATION MEASURES & OUTLINE REMEDIATION STRATEGY

### 8.1 Introduction

The outline remediation strategy presented below is provided for guidance only, and does not represent a 'Remediation Options Appraisal', or a 'Remediation Strategy', prepared in accordance with LCRM (2022).

As shown in Table 7.10 and Table 7.9 (and subject to regulatory and warranty provider agreement), Hydrock consider the following mitigation is required to ensure the site is suitable for use for the proposed end use. The mitigation measures are shown on Hydrock Drawings 19114-HYD-XX-ZZ-DR-GE-01027 (Gas Zonation Plan) and 19114-HYD-XX-ZZ-DR-GE-01028 (Remediation Zonation Plan) included in Appendix A.

### 8.2 POS proposed end use within the Landfill Area as per Table 7.9

Based on a proposed POS land use (with the assumption that no services are proposed to cross the landfill area), outline mitigation measures are proposed below. If the proposed land use changes, additional significant mitigation measures would be required.

Subject to regulatory (and NHBC) agreement), Hydrock consider the following mitigation is required to ensure the landfill area is suitable for use for the proposed end use. The mitigation measures include:

- The installation of a 450mm engineered cover, comprising a bonded geogrid break layer (to deter burrowing animals), subsoil beneath a topsoil thickness of between 150mm and 300mm (CL1-CL2).
- Import of subsoil/topsoil in line with the Materials Management Plan (PL6).

To assist with land forming, it is recommended the landfill is compacted using a High Energy Impact Compactor, utilising specialist compaction equipment fitted with Surface Covering Dynamic Compaction Control (SCDCC) or similar to provide a continuous measurement of the ground response. Typical compaction plant which is suitable for this operation and can be fitted with SCDCC is the Bomag BW 226 and BW 332). These works would be undertaken to densify the existing landfill soils, reduce site levels and allow the cover system to be placed, whilst minimising disposal.

As part of the mitigation, Hydrock would recommend that the cover system is placed across the landfill, and extending outside the landfill boundary by a minimum of 3.00m (to allow embedment).

Given the potential human health risks of burrowing animals such as badgers bringing potentially contaminated materials to surface, Hydrock recommend the closure of the badger setts which are present on the edges of the site (and associated re-location of the badgers under the supervision of suitably qualified ecologists). If these cannot be closed and artificial setts need to be provided on the landfill, design to prevent burrowing into the landfill will be required (steel mesh).

In addition, to prevent disturbance of the landfill material by roots and potential tree collapse, subject to ecological and arboricultural agreement, Hydrock recommend removal of existing trees and hedges (and re-planting, as necessary). This will also allow the cover system to be firmly embedded beyond the edge of the landfill and to mitigate any potential human health risks from contact with the landfill soils.

### 8.3 Wider Site (excluding the landfill area) as per Table 7.10

Subject to regulatory (and NHBC) agreement, Hydrock consider the following mitigation is required to ensure the wider site is suitable for use for the proposed end use. The mitigation measures include:

- Removal of asbestos by specialist Contractors in accordance with the asbestos survey and relevant legislation) (CL3).
- Removal of Made Ground around Parkers Farm and supplementary testing to confirm absence of asbestos fibres in soils (CL4).
- Installation of basic/full radon protection measures in buildings north of Rowel Brook (CL5).

### 8.4 Future documentation

The methodology for the remediation should be set out in a Remediation Strategy (which will include the 'Implementation Plan', the 'Verification Plan' and the 'Long Term Monitoring and Maintenance Plan'), which will need to be submitted to the warranty provider and the regulatory authorities for approval.

In addition, the production of a Materials Management Plan and its approval by a Qualified Person will be required to allow reuse of suitable material at the site (as part of the cover system) in accordance with waste regulations. The landfill material would not be able to be re-used (unless an Environmental Permit was obtained) and would need to be disposed.

Verification reports by a competent independent geo-environmental specialist will be required following completion of any remedial works.

## 9. WASTE AND MATERIALS MANAGEMENT

### 9.1 Introduction

The Waste Framework Directive (WFD) (2009/98/EC) defines waste as ‘*any substance which the holder discards or intends to discard.*’ In a geo-environmental context, the waste is most often ‘soil’ and the two main scenarios are offsite disposal of the material as a waste and/or reuse of the material on site. For cost and sustainability reasons, reuse is preferred to off-site disposal.

Section 9.2 below describes the key issues relating to off-site disposal to landfill and Section 9.3 considers requirements relating to reuse of soils and materials management.

### 9.2 Waste disposal

#### 9.2.1 Principles

Based on the WFD, any material excavated on site may be classified as waste and it is the responsibility of the producer of a material to determine whether or not it is waste. Where off-site disposal is undertaken, the following guidance applies.

Classification is a staged process:

- Hazardous waste is defined under the WFD as one which possesses one or more of fifteen defined hazardous properties. If a waste is not defined as hazardous, then it must be considered as non-hazardous.
- Where the materials are soil, it is then be assigned using the ‘List of Waste Codes’, which classifies the material as either:
  - » hazardous (17-05-03), which is defined as “*soil and stones containing hazardous substances*”; or
  - » non-hazardous (17-05-04), which is defined as “*soil and stones other than those mentioned in 17-05-03*”.
  - » Hydrock utilise the proprietary assessment tool, HazWasteOnline™ to undertake this assessment.
- Waste Acceptance Criteria (WAC) testing is then undertaken if required, and are only applicable following classification of the waste, and only where the waste is destined for disposal to landfill. The WAC are both qualitative and quantitative. The WAC and the associated laboratory analyses (leaching tests) are not suitable for use in the determination of whether a waste is hazardous or non-hazardous.

It should be noted that some non-hazardous wastes may be suitable for disposal at an inert landfill as non-hazardous waste, subject to meeting the appropriate waste acceptance criteria.

It should be noted that classification must be undertaken on the waste produced, by the waste producer. Necessary sampling frequency to adequately characterise a soil population is defined within WM3.

### 9.2.2 Preliminary waste disposal options

The majority of the site is greenfield (as proven by the desk study assessment and a visual assessment of the soils). However, WAC testing and the HazWasteOnline™ assessment have been undertaken. As long as no unexpected contamination is encountered and if suitable segregation of different types of natural waste streams is put in place, for soils to be disposed of, it is considered that:

- The topsoil generally has a low organic content (as proven by the Loss on Ignition and Total Organic Carbon tests) and is likely to be classified as non-hazardous waste for disposal at a non-hazardous landfill.
- The Made Ground (Topsoil Made Ground and Landfill Made Ground) within the landfill likely to comprise a mix of hazardous and non-hazardous waste, with the hazardous elements due to elevated TPH and zinc.
- The natural uncontaminated subsoils are likely to be classified as non-hazardous waste and based on the WAC testing should be able to be disposed of at an inert landfill.
- The wider site Made Ground is likely to be classified as non-hazardous waste.
- In addition, asbestos is identified in one of the samples (0.323%) and any soils containing > 0.1% asbestos or visible asbestos containing materials would be considered as hazardous.

### 9.2.3 General waste comments

It should be noted that:

- It is the waste producer's responsibility to segregate the waste at source and waste producers must not mix waste materials/streams or dilute hazardous components, for example by mixing with less or non-hazardous waste on site to meet WAC limit values.
- The above preliminary assessment has been made on the basis of the soils tested as part of the ground investigation, using WAC testing and the HazWasteOnline™ assessment. However, the formal classification of waste can only be undertaken on the material to be disposed of, and by the waste producer and the receiving landfill as license conditions vary from landfill to landfill.
- Basic Characterisation should be undertaken in accordance with Environment Agency guidance by the waste producer. Hydrock can assist if required and this report will assist the characterisation. However, Basic Characterisation does not form part of the current commission and would require further assessment and testing on the wastes actually to be disposed.
- Once the waste producer has undertaken an initial Basic Characterisation on each waste stream, they can manage the soils as part of the on-site processing programme (for example, stockpiling, treatment, screening and separation). The waste producer and landfill operator will then need to agree the suite of compliance testing for regularly generated waste to demonstrate compliance with the initial Basic Characterisation prior to disposal.
- At the time of disposal, additional testing on the excavated soils to be disposed of, will likely be necessary.
- Non-hazardous and hazardous soils require pre-treatment (separation, sorting and screening) prior to disposal.
- The costs for disposal of non-hazardous and hazardous soils are significant compared to disposal of inert material.

- In addition to disposal costs, landfill tax will be applicable. Non-hazardous and hazardous waste will generally be subject to the Standard Rate Landfill Tax. Inert or inactive waste will generally be subject to the Lower Rate Landfill Tax. The landfill tax value changes each April and can be found at <https://www.gov.uk/government/publications/rates-and-allowances-landfill-tax/landfill-tax-rates-from-1-april-2013>.
- Before a waste producer can move waste to a landfill site for disposal, they need to check the landfill site has the appropriate permit and must have completed the following<sup>3</sup>:
  - » Duty of care transfer note / Hazardous Waste consignment note, including comment as to if pre-treatment has been undertaken; and
  - » Basic Characterisation of the waste, to include: description of the waste; waste code (using list of wastes); composition of the waste (by testing, if necessary) and; WAC testing (if required).

### 9.3 Landfill Site Materials management

It should be noted that the landfill soils are currently a waste and will remain a waste until they are recovered.

A materials management plan for the Landfill area of the site would not apply to the excavation and management of soils from the landfill. Soils would need to be re-used under a Waste Recovery Plan (and associated Deposit for Recovery Permit).

Given the difficulties in obtaining a Deposit for Recovery Permit at the current time, Hydrock recommend excavation of the landfill is kept to a minimum, as any excavated soils will need to be disposed of off-site as waste.

### 9.4 Wider Site Materials management

#### 9.4.1 Introduction

Soils that are to remain on site, should be managed and reused in accordance with a Materials Management Plan (MMP), prepared in accordance with 'The Definition of Waste: Development Industry Code of Practice', Version 2 (CL:AIRE), known as the DoWCoP. Where all aspects of the DoWCoP are followed the soils are considered not to be waste, because they were never discarded in the first place.

Version 2 of the DoWCoP clearly sets out the principles and an outline of the requirements of a MMP. The following compliance criteria must be seen to apply to the MMP for the site:

- Factor 1: Protection of human health and protection of the environment.
- Factor 2: Suitability for use, without further treatment.
- Factor 3: Certainty of Use.
- Factor 4: Fixed Quantity of Material.

The reuse of soils at sites should be considered during the planning and development design process so that compliance with issues such as fixed quantity and certainty of use clearly relate to agreed site levels. Suitability of Use is normally evident from the remediation strategy or the design statement,

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<sup>3</sup> ENVIRONMENT AGENCY. November 2010. Guidance on waste acceptance procedures and criteria. Waste acceptance at landfills. The Environment Agency.

which form an integral part of a MMP. However, some soils may need to be tested post-excavation to prove they are suitable for use.

Once the MMP is finalised, it must be declared by a Qualified Person (QP). The Declaration is an on-line submission as part of which the QP is required to confirm that the declaration is being made before the relevant works have commenced (i.e. it is not a retrospective application).

Once all material movements have been completed in accordance with the MMP a verification report must be produced, kept for 2 years and provided to the EA on request.

It should be noted that failure to comply with the requirements of the DoWCoP when re-using materials has potentially significant consequences for the waste holder. The risk is that the reused materials are still regarded as a waste that has been illegally deposited. From 1 April 2018, the scope of Landfill Tax has been extended to sites operating without the appropriate environmental disposal permit, and operators of illegal waste sites will now be liable for Landfill Tax. Further information is available at: <https://www.gov.uk/government/publications/landfill-tax-disposals-not-made-at-landfill-sites/landfill-tax-disposals-not-made-at-landfill-sites>.

If soils are excavated and reused on sites (or moved to another site) without a MMP, exemption, or appropriate Permit in place, anyone who knowingly facilitates the disposal may be 'jointly and severally liable' to any assessment of tax, fines or prosecution.

#### 9.4.2 *Materials management scenarios*

The materials management scenarios present on site are discussed below.

It should be noted that more than one scenario may apply, dependent upon where the soils are proposed for reuse.

##### 9.4.2.1 *Clean, naturally occurring materials – reused on the site of origin*

Where soils are naturally occurring, uncontaminated and are reused on the site they are excavated (i.e. greenfield site with documented site history, with no Made Ground), they will fall outside the Waste Framework Directive (WFD) (i.e. they will not be a waste when reused on the site of origin).

However, there needs to be certainty of that reuse, and evidence is necessary to support this strategy, for example through information provided during the planning process. The onus is on the developer to demonstrate that the materials are not a waste and will never become a waste. As such, a Materials Re-use Strategy is recommended to show certainty. Alternatively, if the volume of material is under 1,000 tonnes, then a U1 waste exemption may be applied for from the Environment Agency.

It may be noted that some 'clean naturally occurring materials' may still fail the 'suitable for use' test, for example, soils with a naturally high organic content may not be suitable for use because of their propensity to produce ground gases such as methane. Rules regarding other more unusual circumstances such as where natural soils contain an unacceptably high mineral content are described in the DoWCoP.

##### 9.4.2.2 *Clean, naturally occurring materials – transferred to other sites*

Where soils are naturally occurring, uncontaminated and are transferred to other sites (i.e. direct transfer), they will not become waste as long as the transfer is undertaken in accordance with the

DoWCoP. A MMP must be prepared for the receiving site and the materials movement must be noted in the MMP of the Donor site. This movement must have been declared to CL:AIRE prior to the works commencing.

#### *9.4.2.3 Geotechnical improvement requirements*

Construction activities carried out on uncontaminated soils solely for the purpose of improving geotechnical properties e.g. lime / cement modification, are not generally regarded as waste treatment operations and do not require a permit.

However, should processing be needed (such as screening, treatment or improvement), that would constitute a waste activity and require a mobile treatment permit. This may be as simple as removing oversize material with an excavator bucket, to using a riddle bucket to remove hardcore to full mechanical screening.



## 10. UNCERTAINTIES AND LIMITATIONS

### 10.1 Site-specific comments

The investigation works were undertaken on a relatively wide spacing as part of pre-planning investigation works. Further detailed investigation works will be required to fully characterise the site to allow design at a later date.

Due to access constraints for ecological reasons, it was not possible to identify precisely the outer perimeter of the landfill area.

The scheduled ground gas monitoring is complete but is insufficient at this stage to fully characterise the site in accordance with CIRIA Report 665. Whilst the monitoring completed to date provides a preliminary indication of the gas regime, additional monitoring is required and the conclusions of this report will need to be updated following completion of the additional monitoring.

Groundwater monitoring is ongoing until September 2023.

### 10.2 General comments

Hydrock Consultants Limited (Hydrock) has prepared this report in accordance with the instructions of Oxford University Development Limited (the Client), under the terms of appointment for Hydrock, for the sole and specific use of the Client and parties commissioned by them to undertake work where reliance is placed on this report. Any third parties who use the information contained herein do so at their own risk. Hydrock shall not be responsible for any use of the report or its contents for any purpose other than that for which it was prepared or for use of the report by any parties not defined in Hydrock's appointment.

This report details the findings of work carried out in August to October 2021, September 2022 – November 2022 & January to March 2023. The report has been prepared by Hydrock on the basis of available information obtained during the study period. Although every reasonable effort has been made to gather all relevant information, not all potential environmental constraints or liabilities associated with the site may have been revealed.

Hydrock has used reasonable skill, care and diligence in the design of the investigation of the site and in its interpretation of the information obtained. The inherent variation of ground conditions allows only definition of the actual conditions at the locations and depths of trial pits and boreholes at the time of the investigation. At intermediate locations, conditions can only be inferred.

Groundwater data are only representative of the dates on which they were obtained and both levels and quality may vary.

Unless otherwise stated, the recommendations in this report assume that ground levels will remain as existing. If there is to be any re-profiling (e.g. to create development platforms or for flood alleviation) then the recommendations may not apply.

Information provided by third parties has been used in good faith and is taken at face value; however, Hydrock cannot guarantee its accuracy or completeness.

Where the existing report(s) prepared by others have been provided by the Client, it is assumed that these have been either commissioned by the Client, or can be assigned to the Client, and can be relied

upon by Hydrock. Should this not be the case Hydrock should be informed immediately as additional work may be required. Hydrock is not responsible for any factual errors or omissions in the supplied data, or for the opinions and recommendations of others. It is possible that the conditions described may have since changed through natural processes or later activities.

The work has been carried out in general accordance with recognised best practice. Unless otherwise stated, no assessment has been made for the presence of radioactive substances or unexploded ordnance. Where the phrase 'suitable for use' is used in this report, it is in keeping with the terminology used in planning control and does not imply any specific warranty or guarantee offered by Hydrock.

The chemical analyses reported were scheduled for the purposes of risk assessment with respect to human health, plant life and controlled waters as discussed in the report. Whilst the results may be useful in applying the Hazardous Waste Assessment Methodology given in Environment Agency Technical Guidance WM3, they are not primarily intended for that purpose and additional analysis will be required at the time of disposal to fully classify waste. Discussion and comment with regards to waste classification are preliminary and do not form the requirements of 'Basic Characterisation' as required.

Unless otherwise stated, at the time of this investigation the future routes of water supply pipes had not been established. This investigation and sampling strategy may not be fully compliant with UKWIR recommendations. Consequently, a targeted investigation and specific sampling and chemical testing may be required at a later date once the routes of the supply pipes are known. In addition, it is recommended that the relevant water supply company be contacted at an early stage to confirm its requirements for assessment, which may not necessarily be the same as those recommended by UKWIR.

Whilst the preliminary risk assessment process has identified potential risks to construction workers, consideration of occupational health and safety issues is beyond the scope of this report.

The non-specialist UXO screening has been undertaken for the purposes of ground investigation only (i.e. low risk activity in accordance with CIRIA Report C681). Further assessment should be undertaken with regards to other higher risk activities e.g. construction.

Please note that notwithstanding any site observations concerning the presence or otherwise of archaeological sites, asbestos-containing materials or invasive weeds, this report does not constitute a formal survey of these potential constraints and specialist advice should be sought.

Any site boundary line depicted on plans does not imply legal ownership of land.

## 11. RECOMMENDATIONS FOR FURTHER WORK

Following the ground investigation works undertaken to date, the following further works will be required for planning and high-level design:

- Additional investigation to the east and south of the landfill to further define the softer, looser soils.
- Demolition / refurbishment asbestos survey of farm structures.
- Completion and reporting of the ongoing gas monitoring, hence the conclusions in this report are provisional, subject to the completion of monitoring.

The following works should be undertaken once the development layout has been finalised;

- supplementary detailed ground investigation as required and on a development phase basis to allow design;
- discussion and agreement with utility providers regarding the materials suitable for pipework;
- discussions with regulatory bodies and the warranty provider regarding the conclusions of this report;
- assessment of tree influence on foundations and design of foundations;
- discussions with Vibro-stone Column Contractors regarding the viability of, and potential improvement by, VSCs;
- discussions with piling Contractors regarding conclusions of this report and design of the piles;
- provision of geotechnical design for the Category 2 (earthworks, retaining, floor slabs, foundations, bridge construction etc.);
- production of a Remediation Strategy and Verification Plan (and agreement with the regulatory bodies and the warranty provider);
- production of a Materials Management Plan relating to reuse of soils at the site;
- remediation and mitigation works; and
- verification of the earthworks, remediation and mitigation works.

If the landfill site is proposed for residential or non-residential land use (other than POS), the recommendations in this report will need to be reviewed and extensive mitigation and geotechnical investigation would be necessary.

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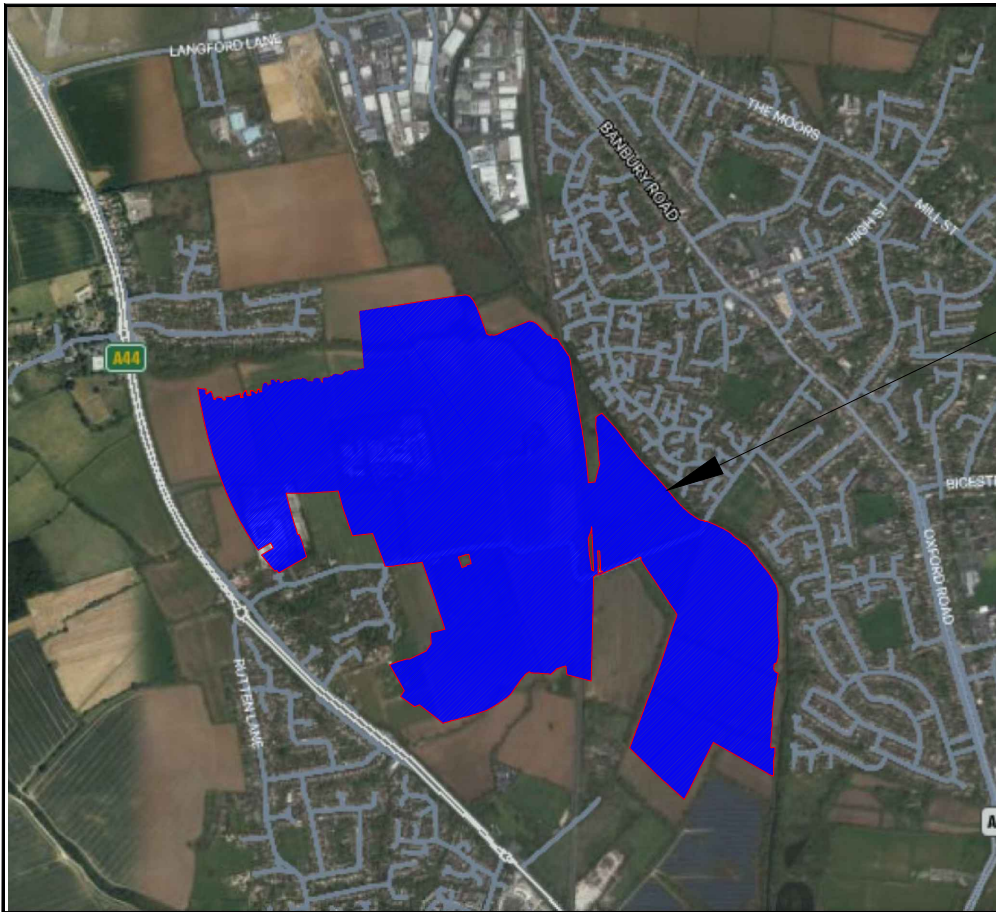


# Appendix A Drawings

OS NORTH



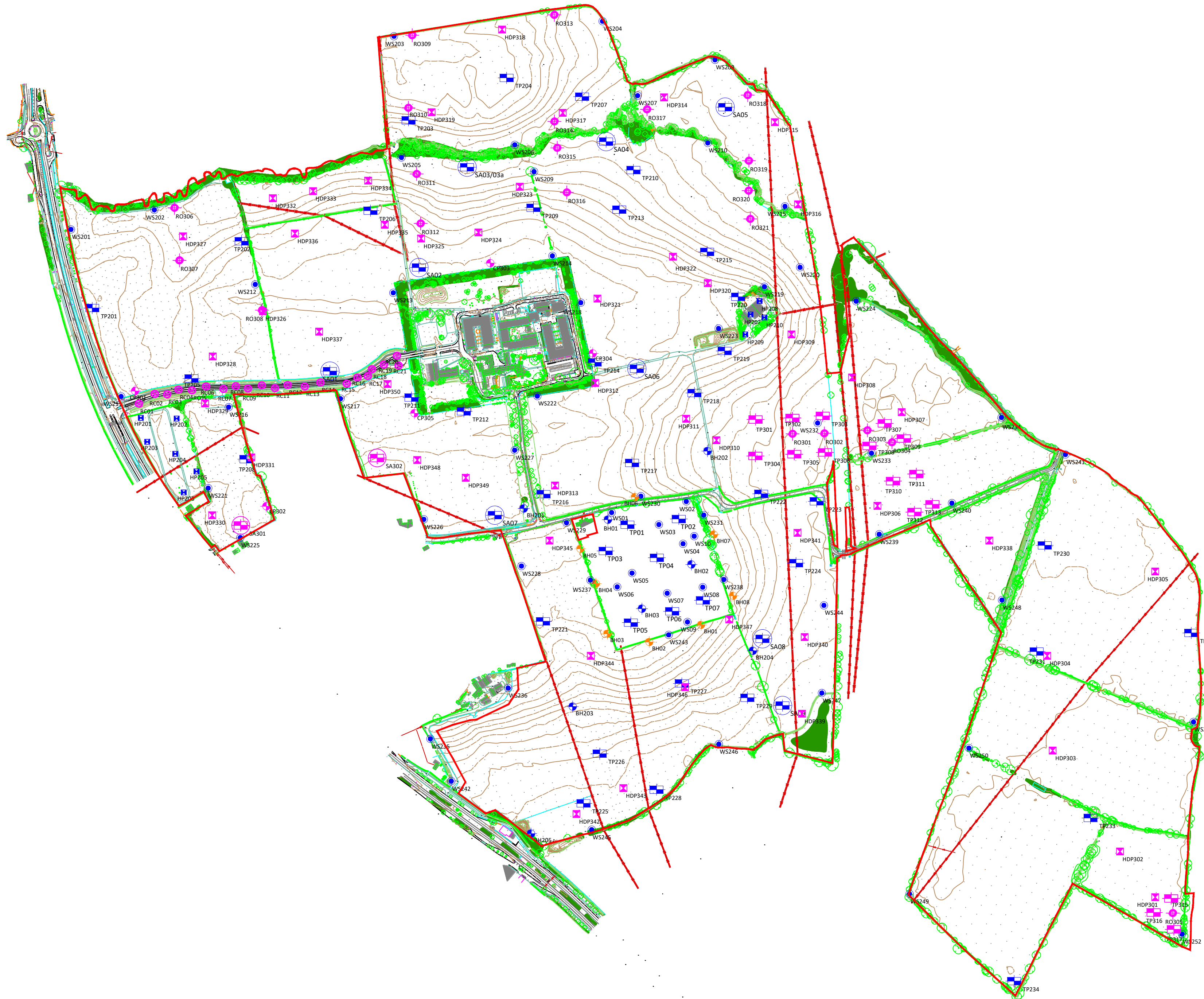
THE SITE



THE SITE

P03	FIRST ISSUE					
	SD	12/04/23	NT	12/04/23	CD	12/04/23
P02	FIRST ISSUE					
	SD	01/11/22	NT	01/11/22	AB	01/11/22
P01	FIRST ISSUE					
	SD	06/10/21	NT	06/10/21	AB	06/10/21
REV.	REVISION NOTES/COMMENTS					
	DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE
		Hawthorn Park Holdenby Road Sparston Northampton NN6 8LD TEL: 01604 842 888 E-Mail: northampton@hydrock.com or visit www.hydrock.com				
CLIENT						
Oxford University Development Ltd						
PROJECT						
Begbroke, Oxfordshire						
TITLE						
SITE LOCATION PLAN						
HYDROCK PROJECT NO.		SCALE @ A4				
19114		See Drawing				
PURPOSE OF ISSUE					STATUS	
SUITABLE FOR INFORMATION					S2	
DRAWING NO. (PROJECT - ORIGINATOR VOLUME LEVEL TYPE ROLE NUMBER)					REVISION	
19114-HYD-XX-ZZ-DR-GE-01000					P03	





**KEY**

Cable Percussion Borehole	Rotary Borehole	Soakaway Pit	Trial Pit
Hydrock Soil Infiltration Rate Test Pit	Hydrock Dynamic Sampler Borehole	Hydrock Trial Pit	Hydrock Borehole
Hydrock Hand Dug Pit	Road Core Location	Hand Dug Pit	

**Initial Site Investigation (September 2022)**

**JUBB Site Investigation (December 2019)**

Borehole

**NOTES**

- All dimensions are to be checked on site before the commencement of works. Any discrepancies are to be reported to the Architect & Engineer for verification. Figured dimensions only are to be taken from this drawing.
- This drawing is to be read in conjunction with all relevant Engineers' and Service Engineers' drawings and specifications.
- This drawing has been based on the following drawings and information: Topographical Survey number:180133 by:Interlock Surveys dated:11/02/2019.
- A minimum 9metre stand off zone has been applied to (and must be adhered to for all siteworks) all proposed SI positions in relation to Overhead power lines shown on the Survey.

**LEGEND**

Site Boundary
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P07	SITE BOUNDARY ADDED					
	SD	12/04/23	NT	12/04/23	CD	12/04/23
P06	HAND PITS ADDED					
	SD	14/03/23	NT	14/03/23	AB	14/03/23
P05	UPDATED FOLLOWING FURTHER SITE INVESTIGATION					
	SD	21/02/23	NT	21/02/23	AB	21/02/23
P04	SURVEYED LOCATIONS FOLLOWING SITE INVESTIGATION					
	NS	27.10.22	NT	27.10.22	AB	27.10.22
P03	THIRD ISSUE - UPDATED LOCATIONS					
	SD	15/08/22	NT	16/08/22	AB	16/08/22
P02	SECOND ISSUE - PROPOSED LOCATIONS					
	NT	29/06/22	AB	29/06/22	AB	29/06/22
P01	FIRST ISSUE					
	SD	07/12/21	NT	07/12/21	AB	07/12/21
REV.	REVISION NOTES/COMMENTS					
	DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE

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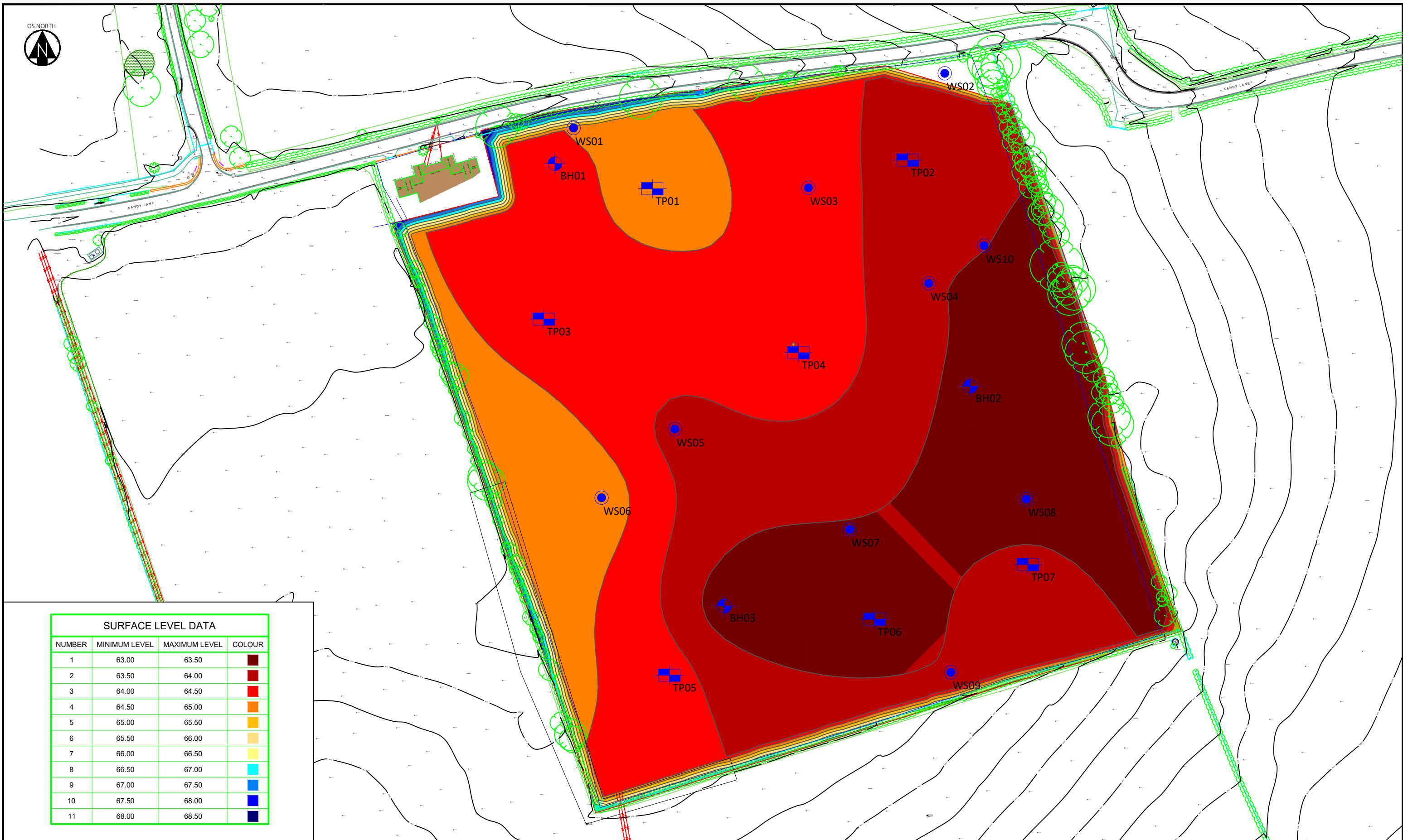
CLIENT  
Oxford University Development Ltd

PROJECT  
Begbroke, Oxfordshire

TITLE  
Exploratory Hole Location Plan

HYDROCK PROJECT NO. C-19114-C	SCALE @ A2 1:5000
PURPOSE OF ISSUE SUITABLE FOR INFORMATION	STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 19114-HYD-XX-ZZ-DR-GE-01001	REVISION P07





SURFACE LEVEL DATA			
NUMBER	MINIMUM LEVEL	MAXIMUM LEVEL	COLOUR
1	63.00	63.50	Dark Red
2	63.50	64.00	Red
3	64.00	64.50	Orange
4	64.50	65.00	Light Orange
5	65.00	65.50	Yellow
6	65.50	66.00	Light Yellow
7	66.00	66.50	Yellow-Green
8	66.50	67.00	Light Green
9	67.00	67.50	Green
10	67.50	68.00	Dark Green
11	68.00	68.50	Dark Blue

**KEY**

Hydrock Trial Pit

Hydrock Borehole

**NOTES**

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- This drawing is to be read in conjunction with all relevant Engineers' and Service Engineers' drawings and specifications.
- This drawing has been based on the following drawings and information:  
- Topographical Survey number:180133 by:Interlock Surveys dated:11/02/2019.
- Surfaces have been created using Hydrock Site Investigation data. Levels and depths are accurate at investigation locations. Between investigation locations, levels and depths have been extrapolated and are indicative only.
- Boundary landfill slopes have been assumed to be 1:2

REV.	DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE
P1	NS	12.10.21	NT	12.10.21	AB	12.10.21

FIRST ISSUE		PROJECT	
NS	12.10.21	NT	12.10.21
REVISION NOTES/COMMENTS		Brebroke, Oxfordshire	

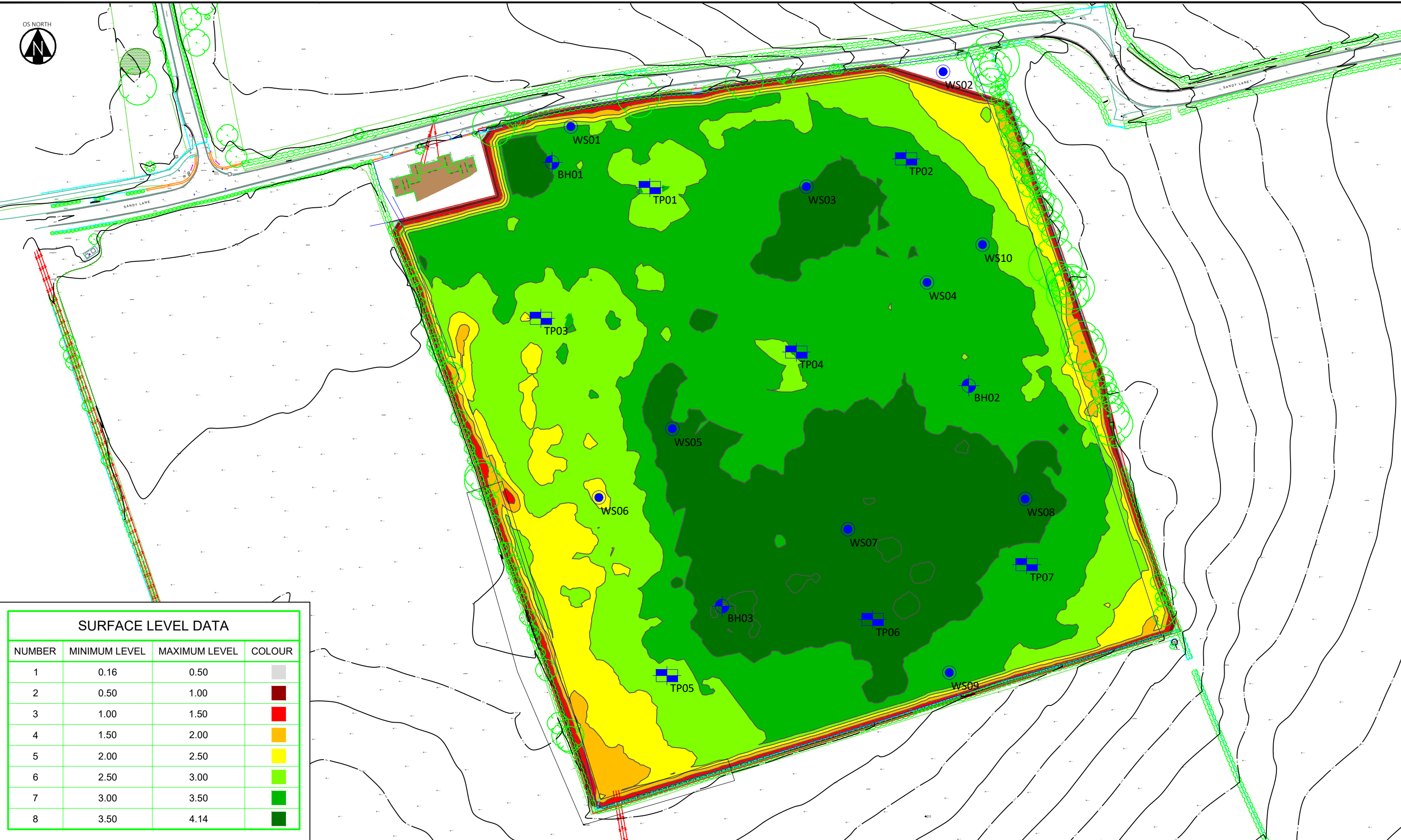
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CLIENT  
Oxford University Development Ltd

TITLE Base of Landfill (mOD)		SCALE @ A3 1:1250	STATUS S2
HYDROCK PROJECT NO. C-19114	PURPOSE OF ISSUE SUITABLE FOR INFORMATION		REVISION P1
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 19114-HYD-XX-ZZ-DR-GE-01003			





SURFACE LEVEL DATA			
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2	0.50	1.00	Dark Red
3	1.00	1.50	Red
4	1.50	2.00	Orange
5	2.00	2.50	Yellow
6	2.50	3.00	Light Green
7	3.00	3.50	Green
8	3.50	4.14	Dark Green

KEY	
	Hydrock Trial Pit
	Hydrock Borehole

**NOTES**

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- Boundary landfill slopes have been assumed to be 1:2

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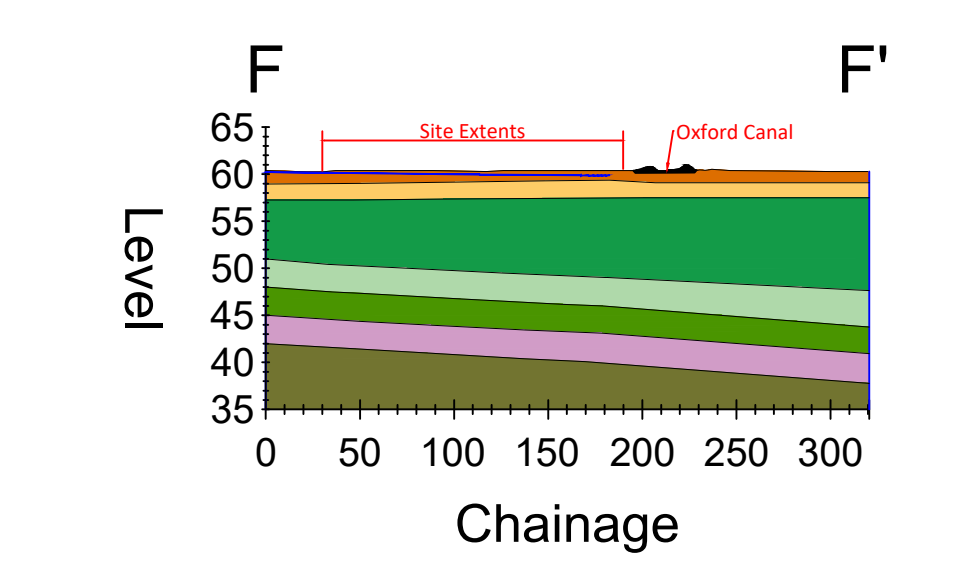
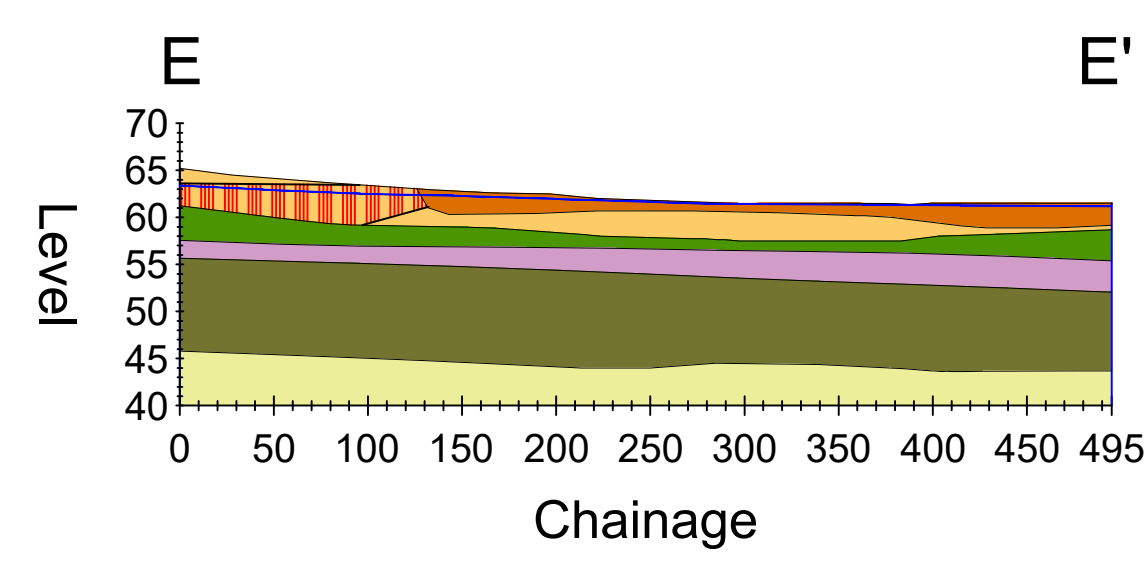
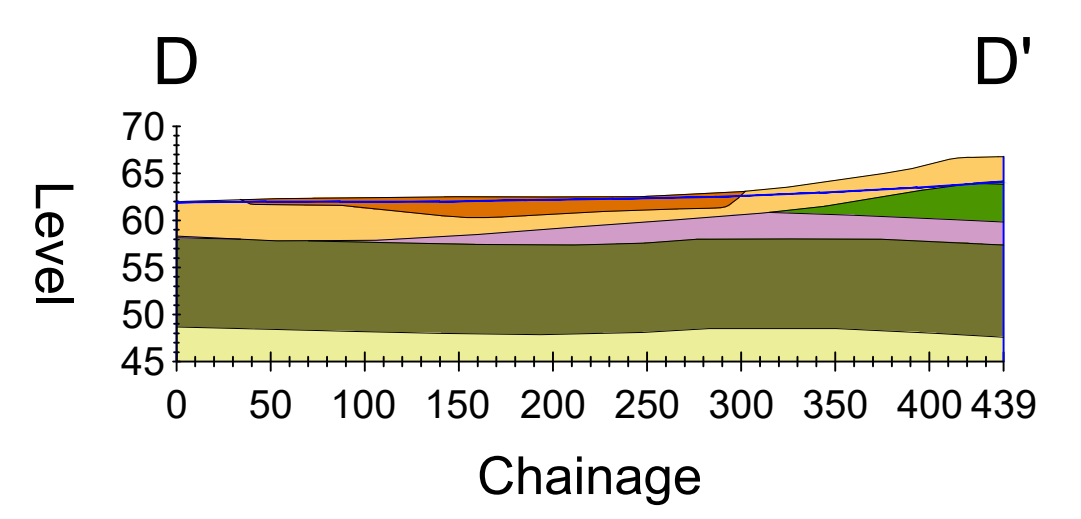
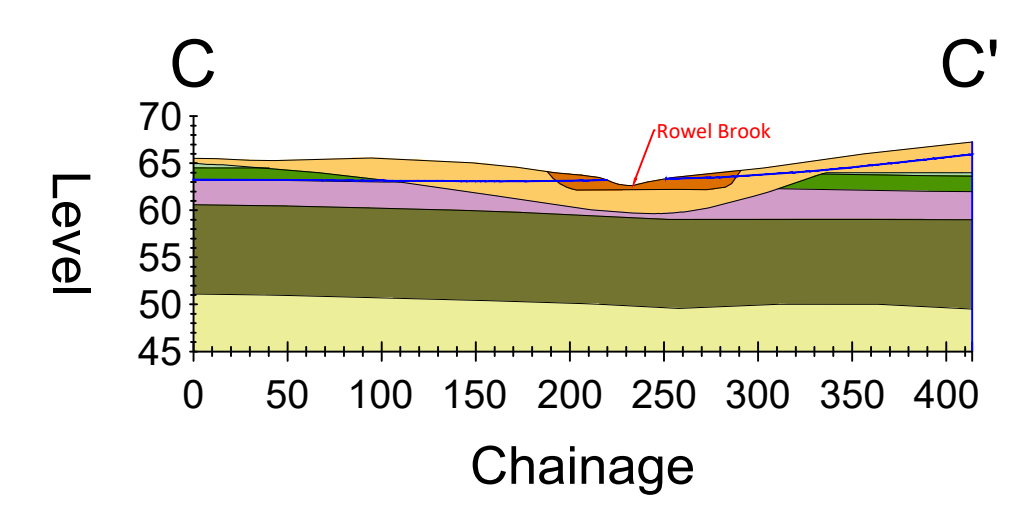
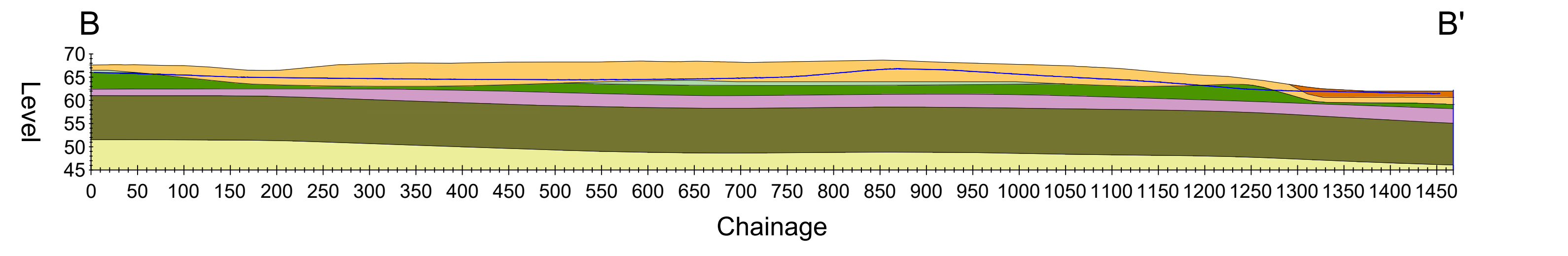
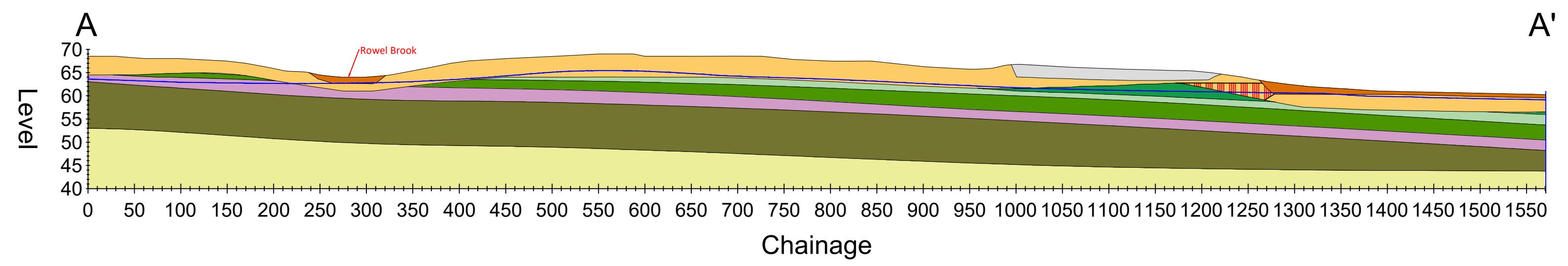
 Hawthorn Park Holdenby Road Spratton Northampton NN6 8LD TEL: 01604 842 888 E-Mail: northampton@hydrock.com or visit www.hydrock.com	
CLIENT	
Oxford University Development Ltd	
PROJECT	
Begbroke, Oxfordshire	

TITLE	
Base of Landfill (mbgl)	
HYDROCK PROJECT NO.	SCALE @ A3
C-19114	1:1250
PURPOSE OF ISSUE	STATUS
SUITABLE FOR INFORMATION	S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER)	REVISION
19114-HYD-XX-ZZ-DR-GE-01004	P1





Scale 1:6000



- Key**
- Landfill Madeground
  - Madeground
  - Alluvium
  - River Terrace deposit
  - River Terrace deposit Soft Cohesive
  - Oxford Clay
  - Kellaways Sand
  - Kellaways Clay
  - Cornbrash Limestone
  - Forest Marble
  - White Limestone
  - Groundwater

Scale 1:4000 5x vertical exaggeration

**KEY**

**Hydrock January/February 2023**

- Cable Percussion Borehole
- Rotary Borehole
- Soakaway Pit
- Trial Pit
- Road Core Location
- Hand Dug Pit

**Initial Site Investigation (September 2022)**

- Hydrock Soil Infiltration Rate Test Pit
- Hydrock Dynamic Sampler Borehole
- Hydrock Trial Pit
- Hydrock Borehole
- Hydrock Hand Dug Pit

**JUBB Site Investigation (December 2019)**

- Borehole

**NOTES**

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5. Surfaces have been created using Hydrock Site Investigation data (August 2021, September 2022 and January/February 2023). Levels and depths are accurate at investigation locations. Between investigation locations, levels and depths have been extrapolated and are indicative only.

**LEGEND**

- Site Boundary

SITE BOUNDARY ADDED		CLIENT	
SD	12/04/23	CO	12/04/23
SECOND ISSUE		Oxford University Development Ltd	
RT	21/03/23	AB	21/03/23
FIRST ISSUE		PROJECT	
RT	26/10/22	AB	26/10/22
REVISION NOTES/COMMENTS			
DRAWN BY	DATE	CHECKED BY	DATE
		APPROVED BY	DATE

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**CLIENT**  
Oxford University Development Ltd

**PROJECT**  
Begbroke, Oxfordshire

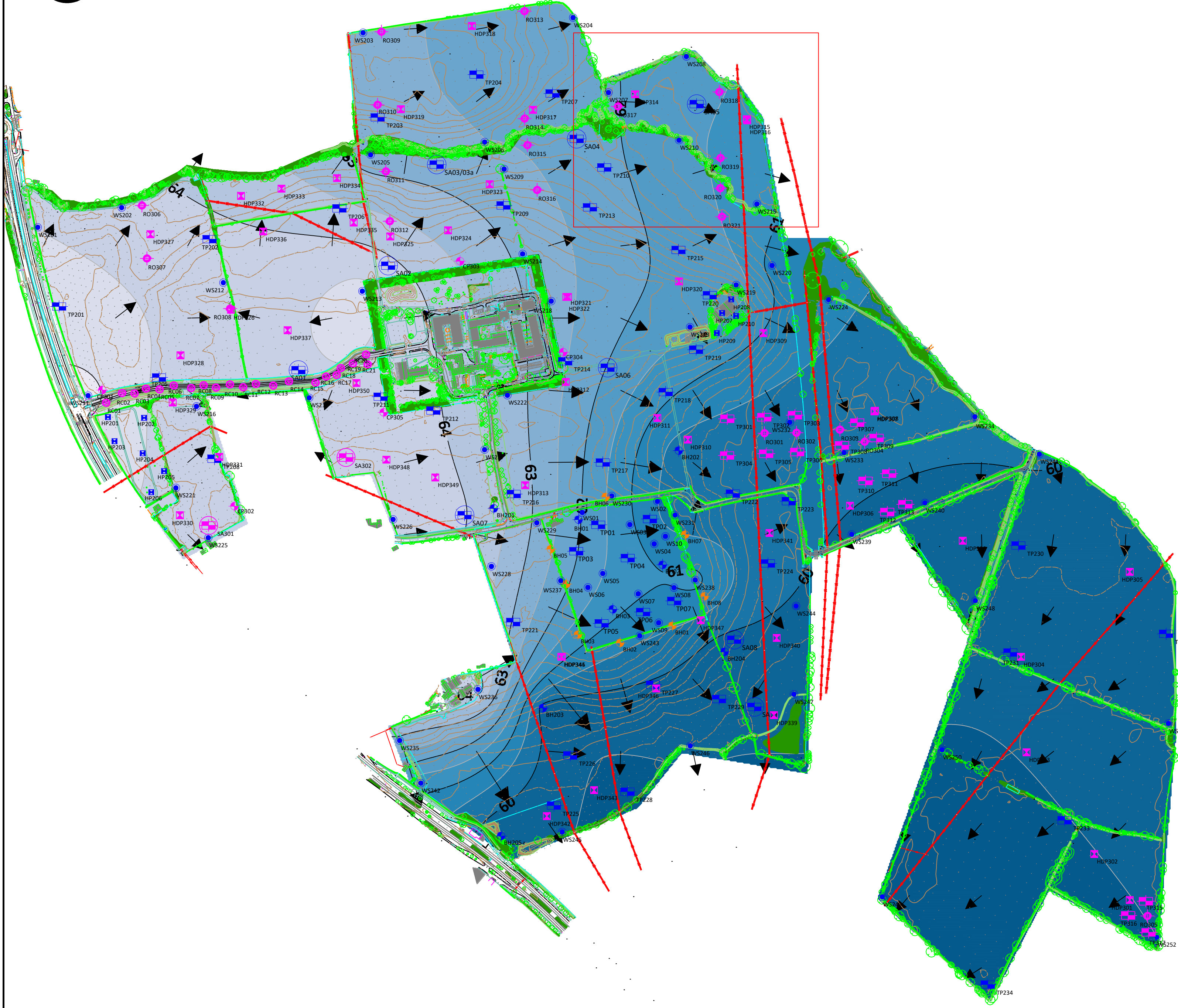
**TITLE**  
Indicative Geological Cross Sections

HYDROCK PROJECT NO. C-19114-C		SCALE @ A1 AS SHOWN
PURPOSE OF ISSUE SUITABLE FOR INFORMATION	STATUS S2	
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 19114-HYD-XX-ZZ-DR-GE-01007	REVISION P03	

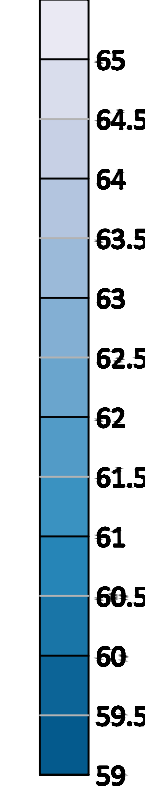




# Level of Ground water mOD (19.10.22)



Level  
(mOD)



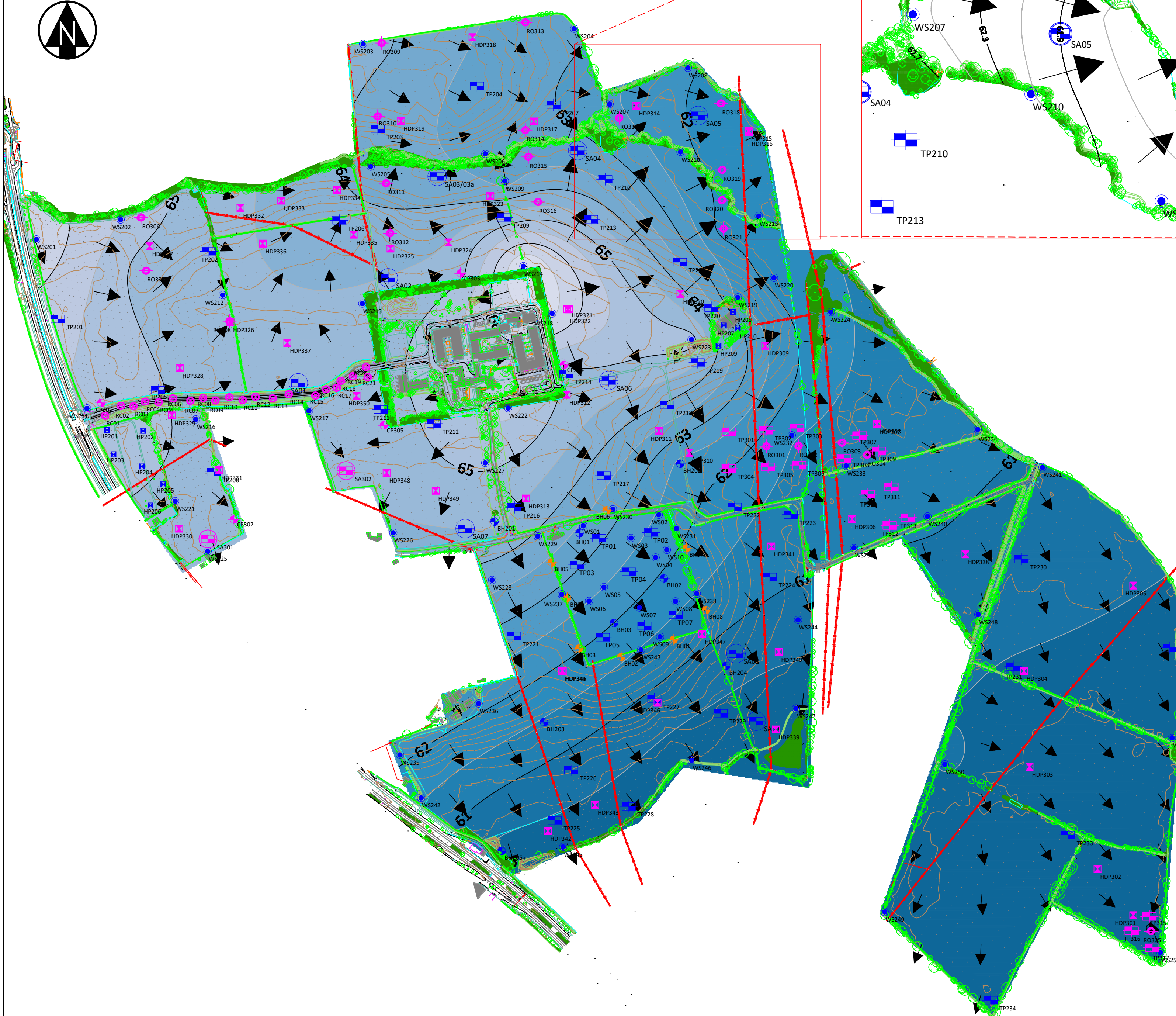
KEY

	Cable Percussion Borehole		Trial Pit
	Rotary Borehole		Road Core Location
	Soakaway Pit		Hand Dug Pit
<b>Initial Site Investigation (September 2022)</b>			
	Hydrock Soil Infiltration Rate Test Pit		Hydrock Dynamic Sampler Borehole
	Hydrock Trial Pit		Hydrock Borehole
	Hydrock Hand Dug Pit		JUBB Site Investigation (December 2019)
	Borehole		

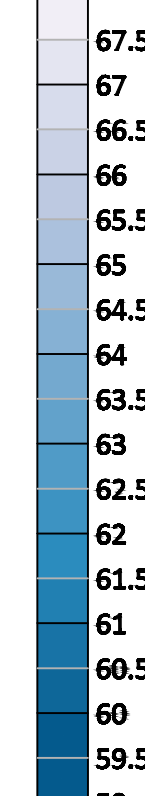
- NOTES
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# Level of Ground water mOD (10.03.23)



Level  
(mOD)



P2	SECOND ISSUE					
RT	29.03.23	NT	29.03.23	AB	29.03.23	
P1	FIRST ISSUE					
NS	27.10.22	NT	27.10.22	AB	27.10.22	
REV.	REVISION NOTES/COMMENTS					
	DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE

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CLIENT  
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PROJECT  
Begbroke, Oxfordshire

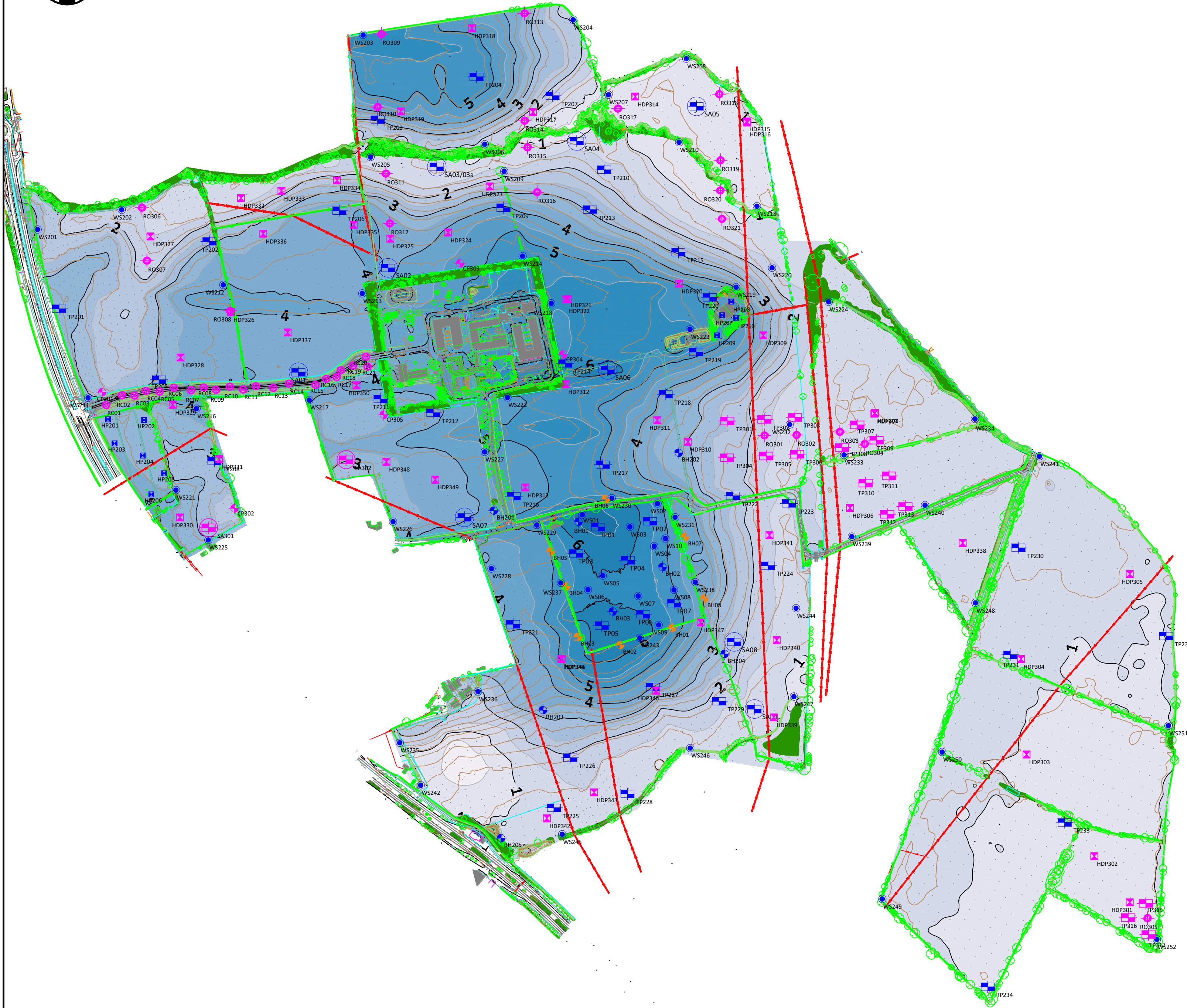
TITLE  
Level of Groundwater in Superficial Deposits (mOD)

HYDROCK PROJECT NO. C-19114-C	SCALE @ A1 1:5000	
PURPOSE OF ISSUE SUITABLE FOR INFORMATION		STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE/NUMBER) 19114-HYD-XX-ZZ-DR-GE-01008		REVISION P2





# Depth to Ground water mbgl (19.10.22)



**KEY**

**Hydrock January/February 2023**

- CP388 Cable Percussion Borehole
- RC388 Rotary Borehole
- SA388 Soakaway Pit
- TP388 Trial Pit
- RC388 Road Core Location
- HP388 Hand Dug Pit

**Initial Site Investigation (September 2022)**

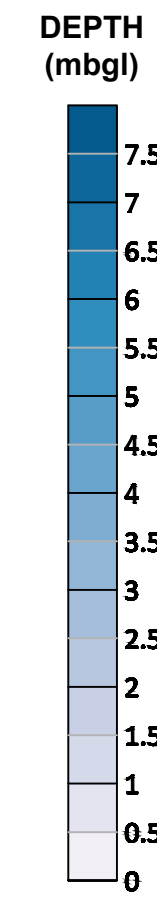
- SAXXX Hydrock Soil Infiltration Rate Test Pit
- WSXX Hydrock Dynamic Sampler Borehole
- TPXX Hydrock Trial Pit
- HPXX Hydrock Hand Dug Pit
- BHXX Hydrock Borehole

**JUBB Site Investigation (December 2019)**

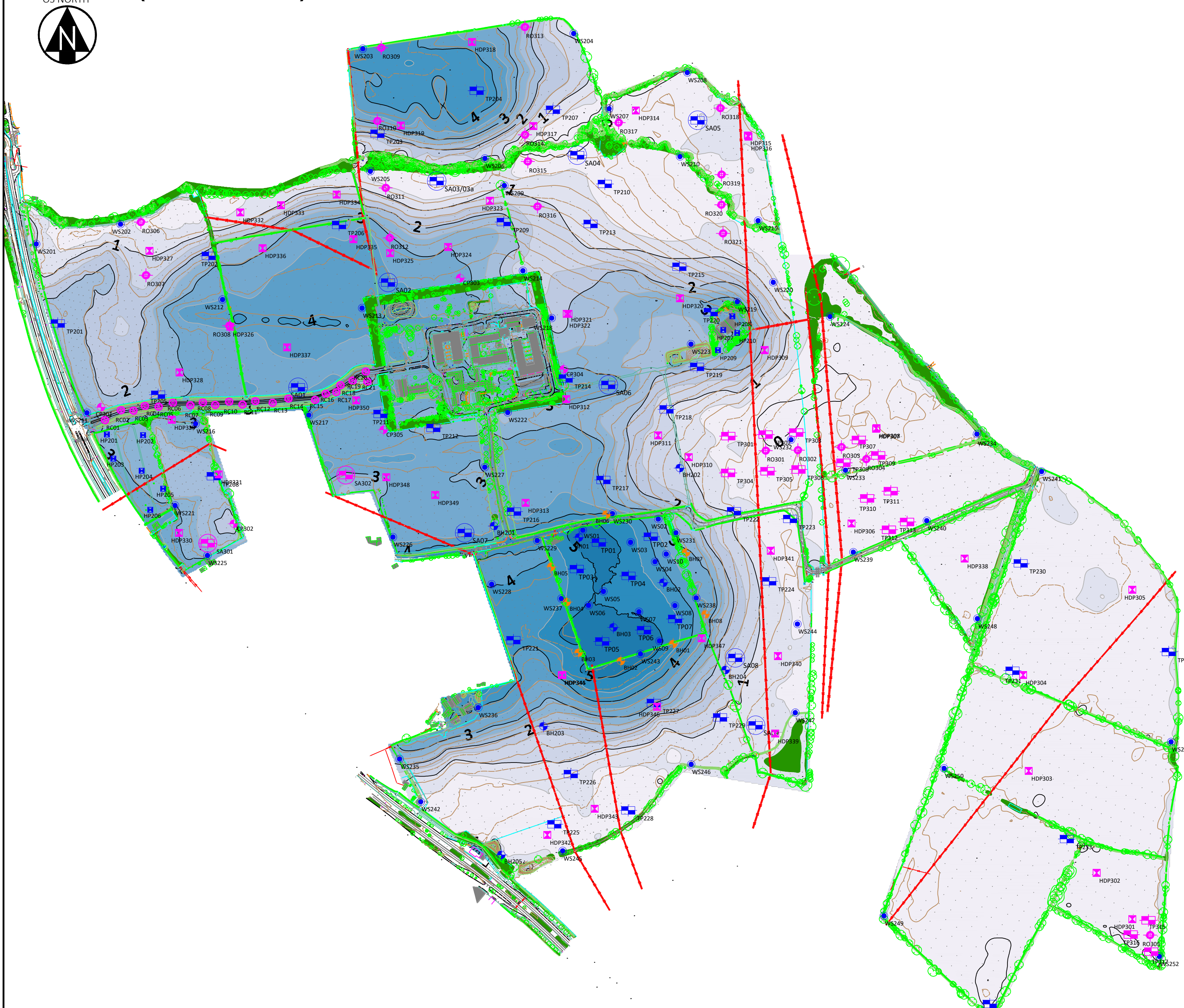
- BH07 Borehole

**NOTES**

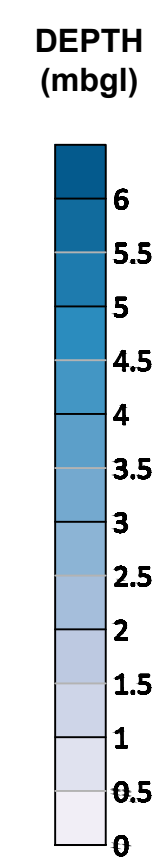
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# Depth to Ground water mbgl (10.03.23)



P2	SECOND ISSUE					
RT		29.03.23	NT	29.03.23	AB	29.03.23
P1	FIRST ISSUE					
NS		27.10.22	NT	27.10.22	AB	27.10.22
REV.	REVISION NOTES/COMMENTS					
	DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE



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**CLIENT**

Oxford University Development Ltd

**PROJECT**

Begbroke, Oxfordshire

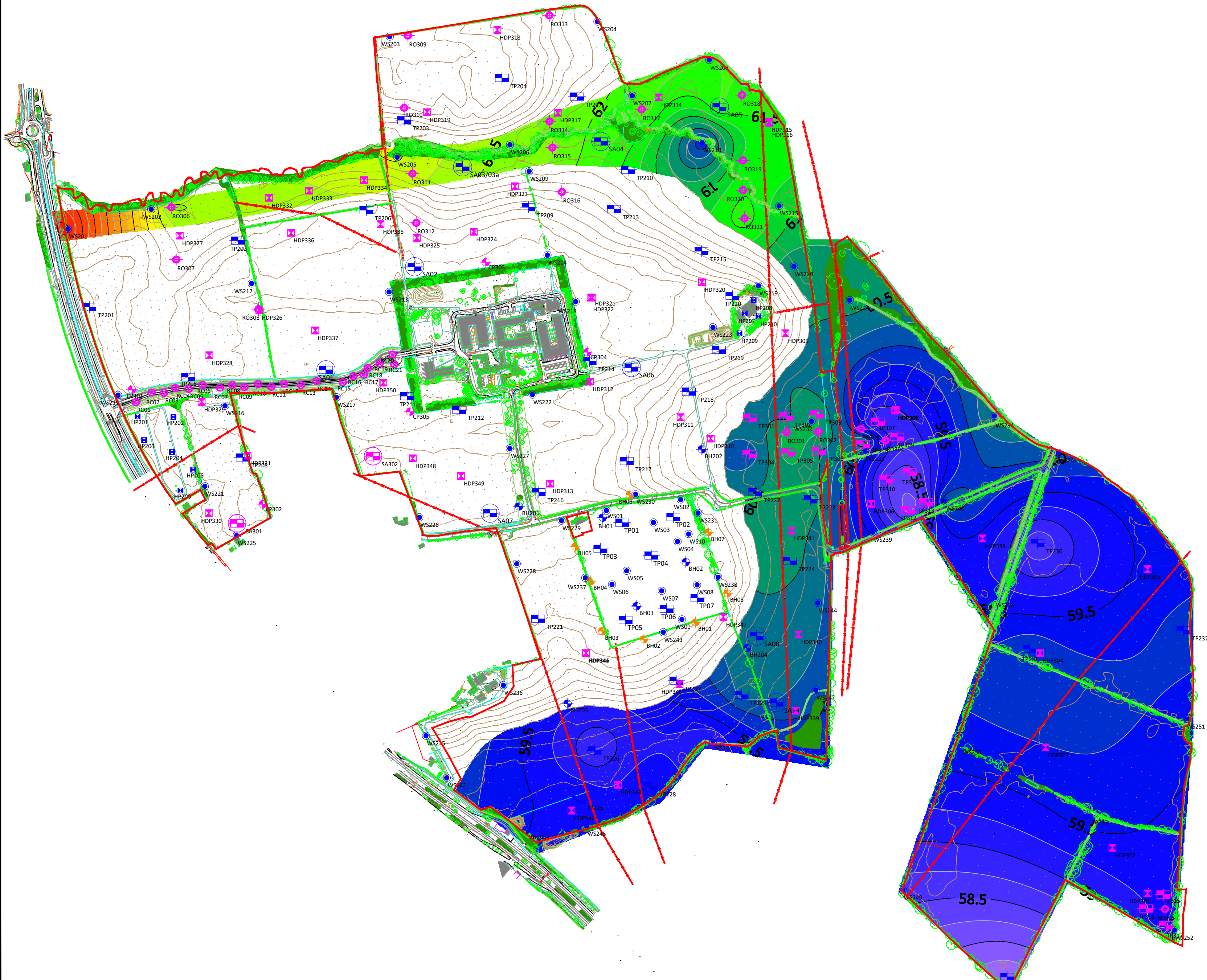
**TITLE**

Depth to Groundwater in Superficial Deposits (mbgl)

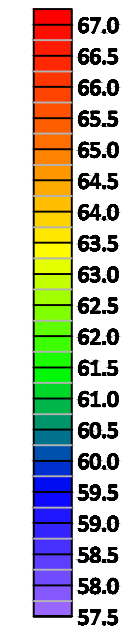
HYDROCK PROJECT NO.	SCALE @ A1
C-19114-C	1:5000
PURPOSE OF ISSUE	STATUS
SUITABLE FOR INFORMATION	S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER)	REVISION
19114-HYD-XX-ZZ-DR-GE-01008	P2



OS NORTH



Level (mOD)



- KEY**
- Hydrock January/February 2023
    - CP304 Cable Percussion Borehole
    - RC308 Rotary Borehole
    - SA308 Soakaway Pit
    - TP308 Trial Pit
    - RC308 Road Core Location
    - HDP308 Hand Dug Pit
  - Initial Site Investigation (September 2022)
    - SA00X Hydrock Soil Infiltration Rate Test Pit
    - WSXX Hydrock Dynamic Sampler Borehole
    - TPXX Hydrock Trial Pit
    - HPXX Hydrock Hand Dug Pit
    - BHXX Hydrock Borehole
  - JUBB Site Investigation (December 2019)
    - BH07 Borehole

- NOTES**
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**LEGEND**

— Site Boundary

P02	SITE BOUNDARY ADDED					
	SD	12/04/23	NT	12/04/23	CD	12/04/23
P01	FIRST ISSUE					
	RT	21/03/23	NT	21/03/23	AB	21/03/23
REV.	REVISION NOTES/COMMENTS					
	DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE

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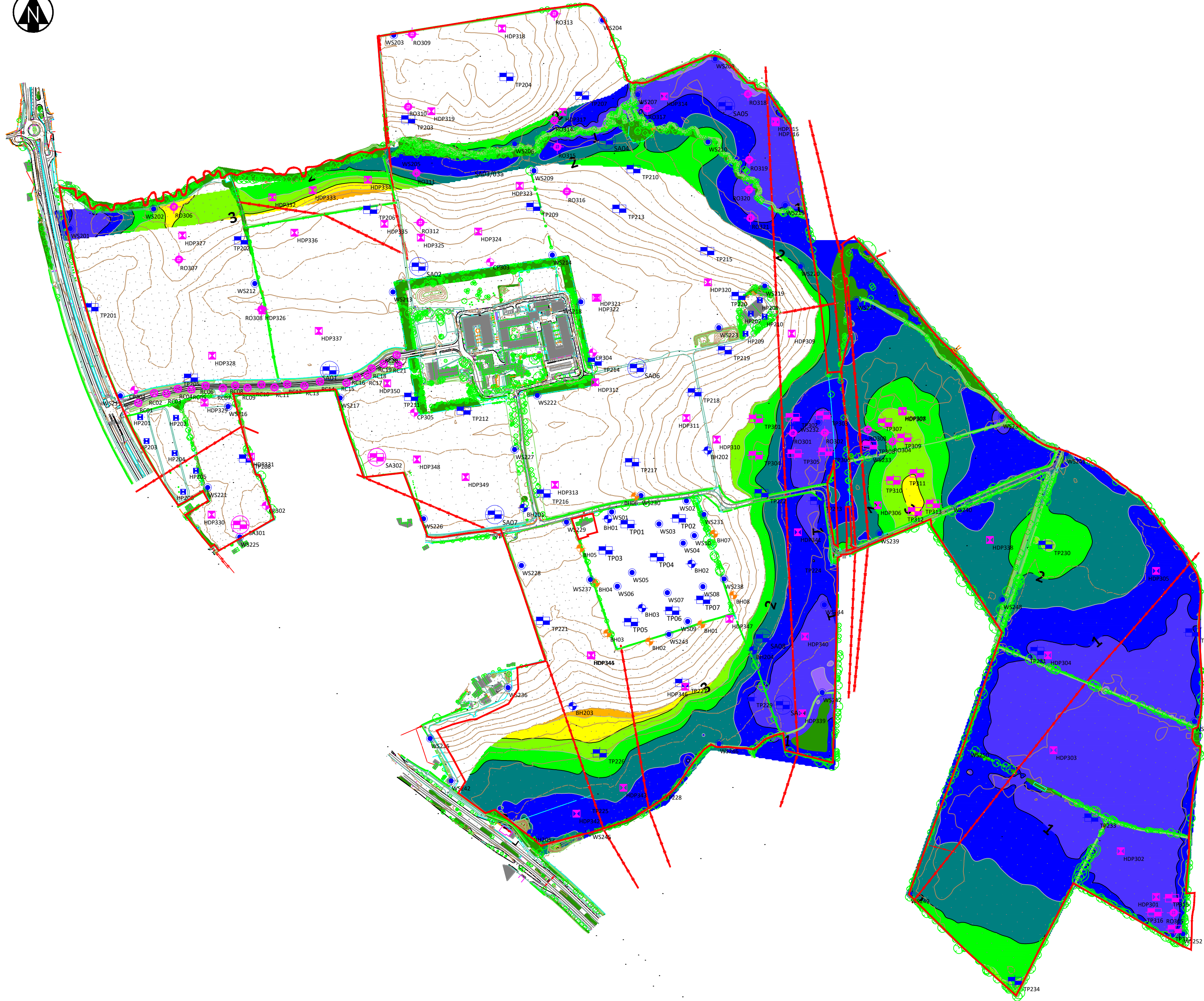
PROJECT  
Begbroke, Oxfordshire

TITLE  
Level of Base of Alluvium

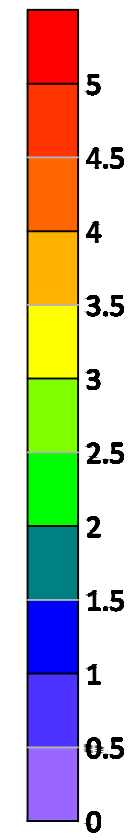
HYDROCK PROJECT NO. C-19114-C	SCALE @ A2 1:5000
PURPOSE OF ISSUE SUITABLE FOR INFORMATION	STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 19114-HYD-XX-ZZ-DR-GE-01018	REVISION P02



OS NORTH



Depth (mbgl)



- KEY**
- Hydrock January/February 2023
    - Cable Percussion Borehole
    - Rotary Borehole
    - Soakaway Pit
    - Trial Pit
    - Road Core Location
    - Hand Dug Pit
  - Initial Site Investigation (September 2022)
    - Hydrock Soil Infiltration Rate Test Pit
    - Hydrock Dynamic Sampler Borehole
    - Hydrock Trial Pit
    - Hydrock Borehole
    - Hydrock Hand Dug Pit
  - JUBB Site Investigation (December 2019)
    - Borehole

- NOTES**
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**LEGEND**

— Site Boundary

PO2	SITE BOUNDARY ADDED				
SD	12/04/23	NT	12/04/23	CD	12/04/23
PO1	FIRST ISSUE				
RT	21/03/23	NT	21/03/23	AB	21/03/23
REV.	REVISION NOTES/COMMENTS				
DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE

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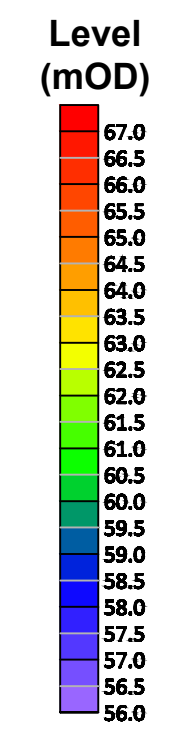
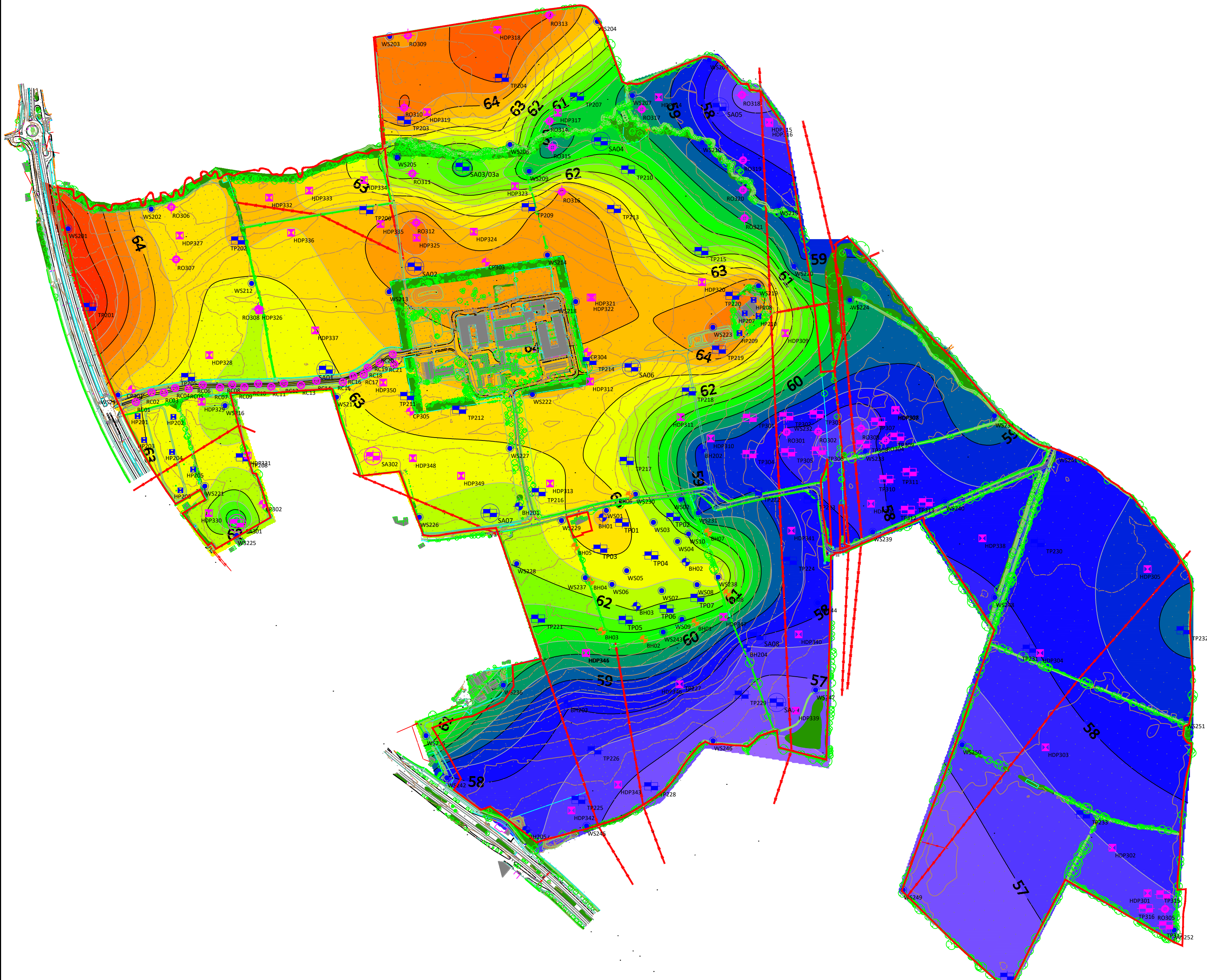
PROJECT  
Begbroke, Oxfordshire

TITLE  
Depth to base of Alluvium (mbgl)

HYDROCK PROJECT NO. C-19114-C	SCALE @ A2 1:5000	PURPOSE OF ISSUE SUITABLE FOR INFORMATION	STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 19114-HYD-XX-ZZ-DR-GE-01019			REVISION PO2



OS NORTH



**KEY**

**Hydrock January/February 2023**

- CP304 Cable Percussion Borehole
- RO308 Rotary Borehole
- SA308 Soakaway Pit
- TP308 Trial Pit
- RC308 Road Core Location
- HDP308 Hand Dug Pit

**Initial Site Investigation (September 2022)**

- SA00X Hydrock Soil Infiltration Rate Test Pit
- WSXX Hydrock Dynamic Sampler Borehole
- TPXX Hydrock Trial Pit
- HPXX Hydrock Hand Dug Pit

**JUBB Site Investigation (December 2019)**

- BH07 Borehole

**NOTES**

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**LEGEND**

- Site Boundary

SITE BOUNDARY ADDED					
SD	12/04/23	NT	12/04/23	CD	12/04/23
FIRST ISSUE					
RT	21/03/23	NT	21/03/23	AB	21/03/23
REVISION NOTES/COMMENTS					
DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE

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**CLIENT**

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**PROJECT**

Begbroke, Oxfordshire

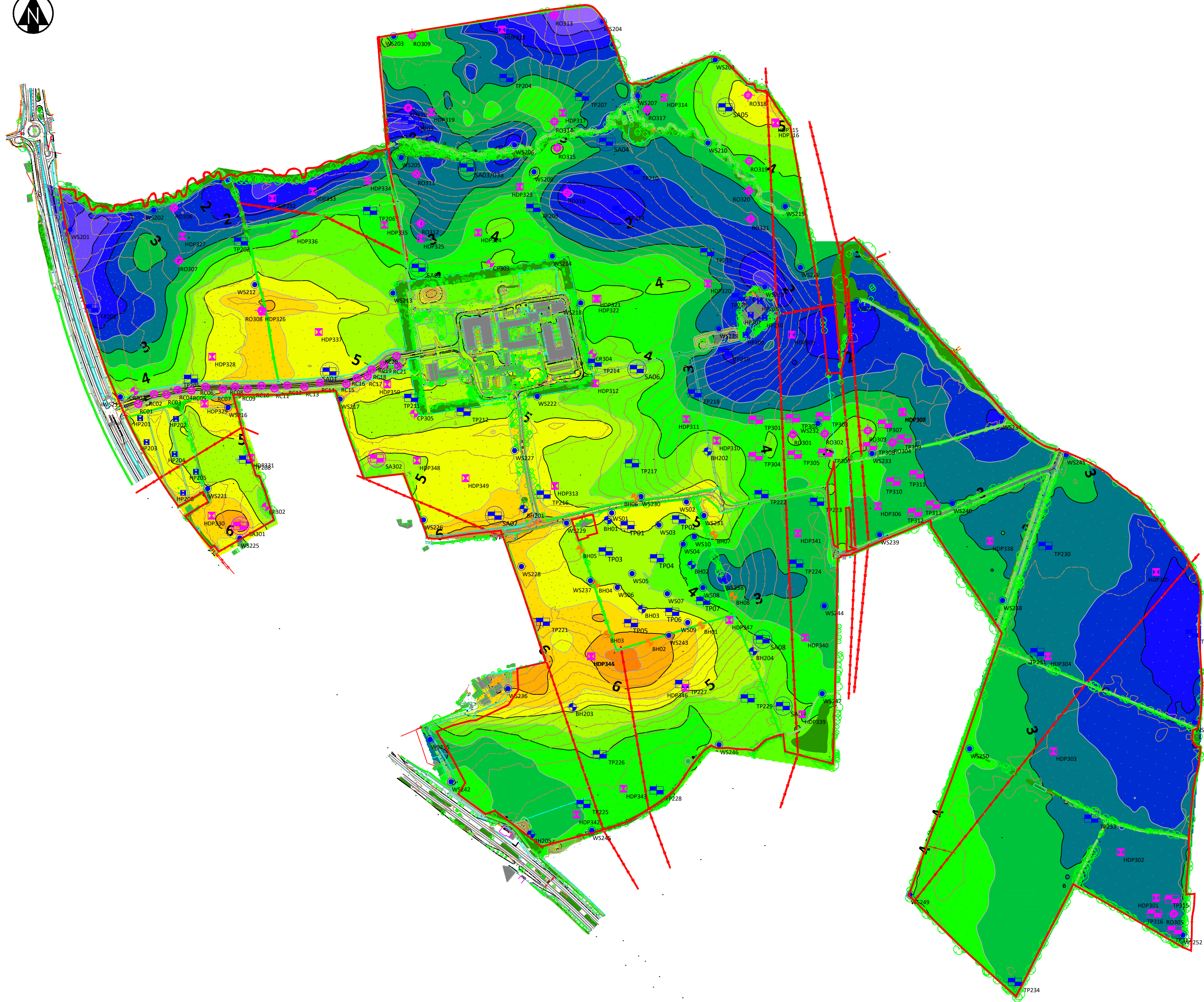
**TITLE**

Level of Base of River Terrace Deposits (mOD)

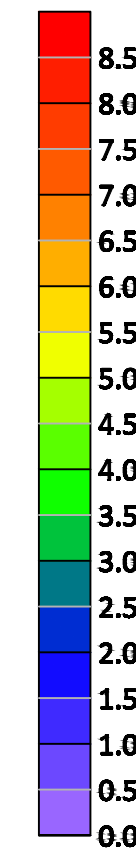
HYDROCK PROJECT NO. C-19114-C	SCALE @ A2 1:5000
PURPOSE OF ISSUE SUITABLE FOR INFORMATION	STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 19114-HYD-XX-ZZ-DR-GE-01020	REVISION P02



OS NORTH



Depth (mbgl)



- KEY**
- Hydrock January/February 2023
    - Cable Percussion Borehole
    - Rotary Borehole
    - Soakaway Pit
    - Trial Pit
    - Road Core Location
    - Hand Dug Pit
  - Initial Site Investigation (September 2022)
    - Hydrock Soil Infiltration Rate Test Pit
    - Hydrock Dynamic Sampler Borehole
    - Hydrock Trial Pit
    - Hydrock Borehole
    - Hydrock Hand Dug Pit
  - JUBB Site Investigation (December 2019)
    - Borehole

- NOTES**
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**LEGEND**

- Site Boundary

SITE BOUNDARY ADDED					
SD	12/04/23	NT	12/04/23	CD	12/04/23
FIRST ISSUE					
RT	21/03/23	NT	21/03/23	AB	21/03/23
REVISION NOTES/COMMENTS					
DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE

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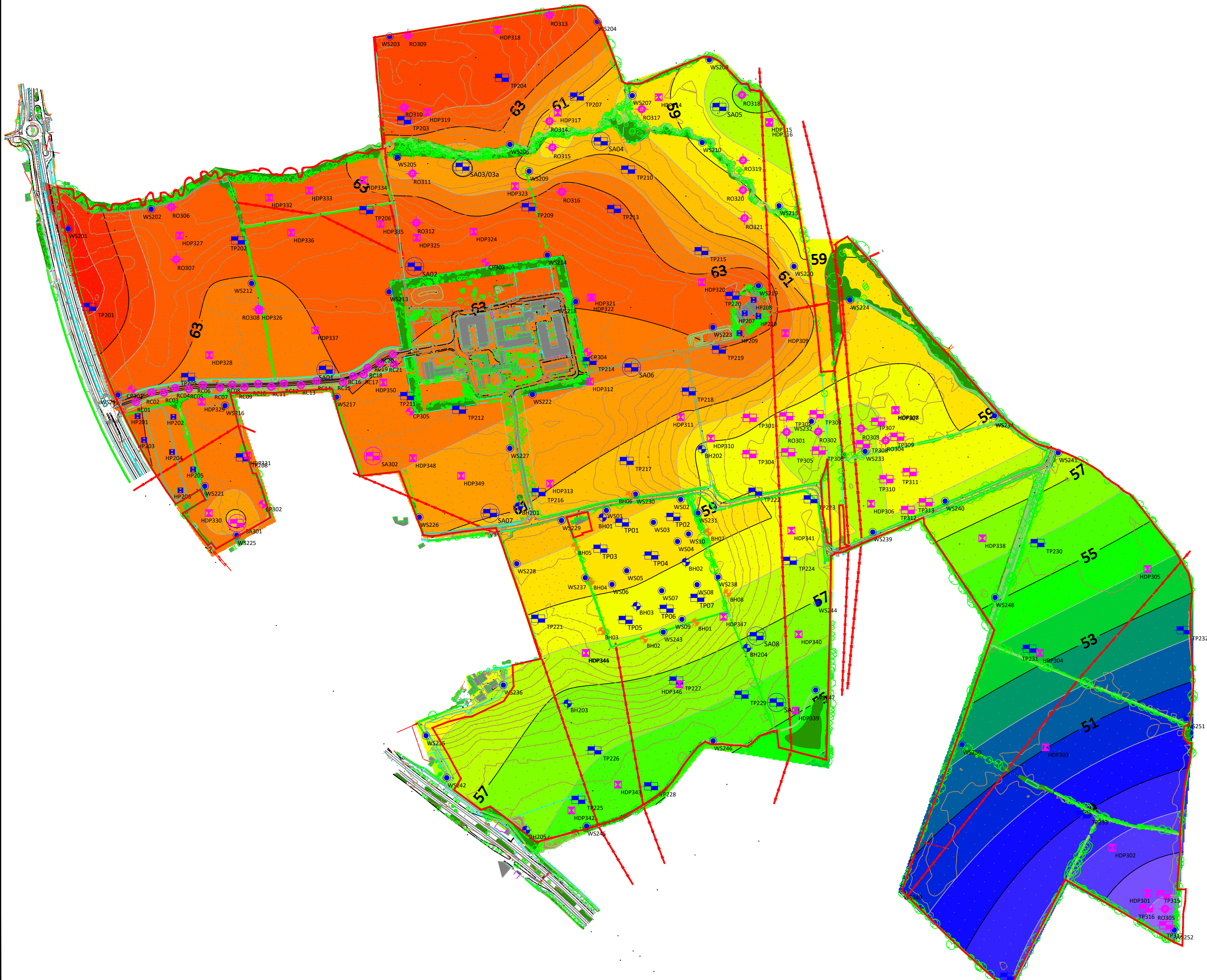
PROJECT  
Begbroke, Oxfordshire

TITLE  
Depth to base of River Terrace Deposits (mbgl)

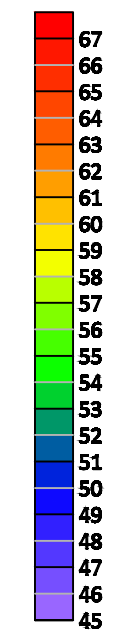
HYDROCK PROJECT NO. C-19114-C	SCALE @ A2 1:5000	PURPOSE OF ISSUE SUITABLE FOR INFORMATION	STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 19114-HYD-XX-ZZ-DR-GE-01021		REVISION P02	



OS NORTH



Level (mOD)



LEGEND

— Site Boundary

KEY

- Hydrock January/February 2023
  - CP304 Cable Percussion Borehole
  - RO308 Rotary Borehole
  - SA308 Soakaway Pit
  - TP308 Trial Pit
  - RC308 Road Core Location
  - HDP308 Hand Dug Pit
- Initial Site Investigation (September 2022)
  - SA00X Hydrock Soil Infiltration Rate Test Pit
  - WSXX Hydrock Dynamic Sampler Borehole
  - TPXX Hydrock Trial Pit
  - HPXX Hydrock Hand Dug Pit
- JUBB Site Investigation (December 2019)
  - BH07 Borehole

NOTES

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P02	SITE BOUNDARY ADDED					
	SD	12/04/23	NT	12/04/23	CD	12/04/23
P01	FIRST ISSUE					
	RT	22/03/23	NT	22/03/23	AB	22/03/23
REV.	REVISION NOTES/COMMENTS					
	DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE

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CLIENT  
Oxford University Development Ltd

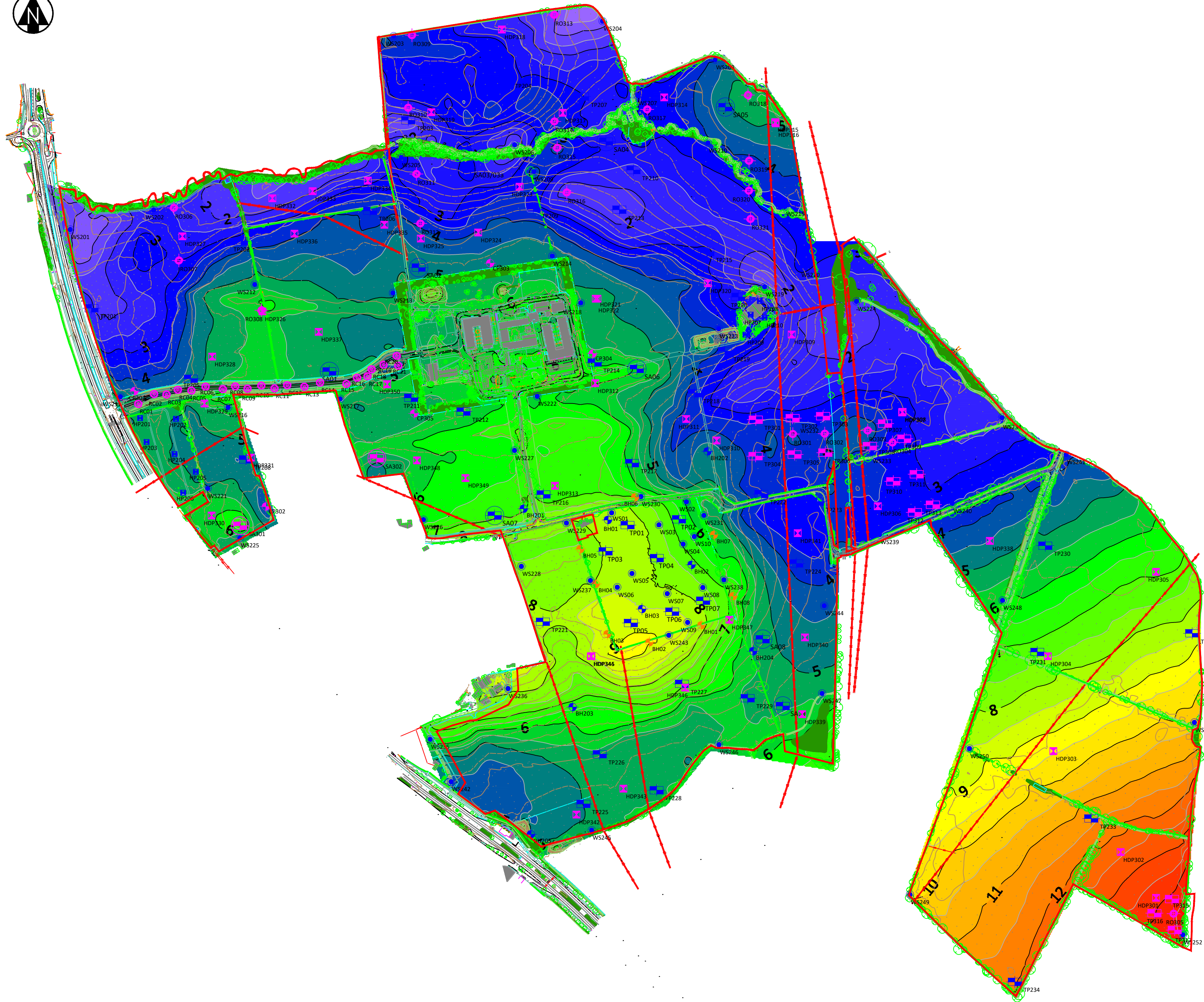
PROJECT  
Begbroke, Oxfordshire

TITLE  
Level of Top of Cornbrash Limestone (mOD)

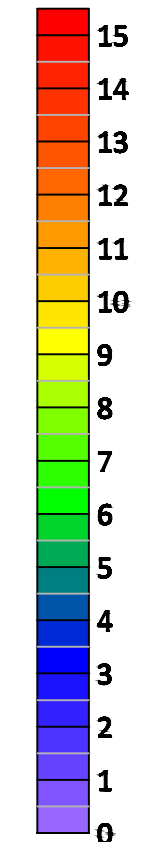
HYDROCK PROJECT NO. C-19114-C	SCALE @ A2 1:5000
PURPOSE OF ISSUE SUITABLE FOR INFORMATION	STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 19114-HYD-XX-ZZ-DR-GE-01022	REVISION P02



OS NORTH



Depth (mbgl)



- KEY**
- Hydrock January/February 2023
    - Cable Percussion Borehole
    - Rotary Borehole
    - Soakaway Pit
    - Trial Pit
    - Road Core Location
    - Hand Dug Pit
  - Initial Site Investigation (September 2022)
    - Hydrock Soil Infiltration Rate Test Pit
    - Hydrock Dynamic Sampler Borehole
    - Hydrock Trial Pit
    - Hydrock Borehole
    - Hydrock Hand Dug Pit
  - JUBB Site Investigation (December 2019)
    - Borehole

- NOTES**
- All dimensions are to be checked on site before the commencement of works. Any discrepancies are to be reported to the Architect & Engineer for verification. Figured dimensions only are to be taken from this drawing.
  - This drawing is to be read in conjunction with all relevant Engineers' and Service Engineers' drawings and specifications.
  - This drawing has been based on the following drawings and information: Topographical Survey number:180133 by:Interlock Surveys dated:11/02/2019.
  - A minimum 9metre stand off zone has been applied to (and must be adhered to for all siteworks) all proposed SI positions in relation to Overhead power lines shown on the Survey.
  - Surfaces have been created using Hydrock Site Investigation data (August 2021, September 2022 and January/February 2023). Levels and depths are accurate at investigation locations. Between investigation locations, levels and depths have been extrapolated and are indicative only.

**LEGEND**  
Site Boundary

SITE BOUNDARY ADDED						
PO2	SD	12/04/23	NT	12/04/23	CD	12/04/23
FIRST ISSUE						
PO1	RT	22/03/23	NT	22/03/23	AB	22/03/23
REVISION NOTES/COMMENTS						
REV.	DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE

**Hydrock**

Hawthorn Park  
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Spratton  
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TEL: 01604 842 888  
E-Mail: northampton@hydrock.com  
or visit www.hydrock.com

CLIENT  
Oxford University Development Ltd

PROJECT  
Begbroke, Oxfordshire

TITLE  
Depth to Top of Cornbrash (mbgl)

HYDROCK PROJECT NO.  
C-19114-C

SCALE @ A2  
1:5000

PURPOSE OF ISSUE  
SUITABLE FOR INFORMATION

STATUS  
S2

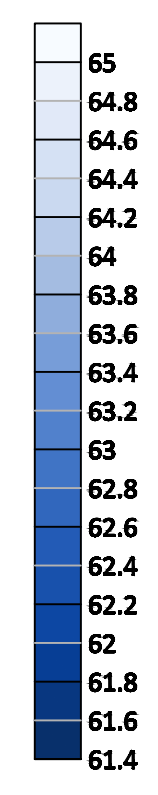
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER)  
19114-HYD-XX-ZZ-DR-GE-01023

REVISION  
PO2





Level (mOD)



KEY

	Cable Percussion Borehole		Trial Pit
	Rotary Borehole		Road Core Location
	Soakaway Pit		Hand Dug Pit
<b>Initial Site Investigation (September 2022)</b>			
	Hydrock Soil Infiltration Rate Test Pit		
	Hydrock Dynamic Sampler Borehole		
	Hydrock Trial Pit		Hydrock Borehole
	Hydrock Hand Dug Pit		
<b>JUBB Site Investigation (December 2019)</b>			
	Borehole		

NOTES

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- Surfaces have been created using Hydrock Site Investigation data (August 2021, September 2022 and January/February 2023). Levels and depths are accurate at investigation locations. Between investigation locations, levels and depths have been extrapolated and are indicative only.

LEGEND

Site Boundary

SITE BOUNDARY ADDED					
SD	12/04/23	NT	12/04/23	CD	12/04/23
FIRST ISSUE					
RT	27.03.23	NT	27.03.23	AB	27.03.23
REVISION NOTES/COMMENTS					
DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE

**Hydrock**

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E-Mail: northampton@hydrock.com  
or visit www.hydrock.com

CLIENT  
Oxford University Development Ltd

PROJECT  
Begbroke, Oxfordshire

TITLE  
Solid Geology Groundwater level (mOD)

HYDROCK PROJECT NO. C-19114-C	SCALE @ A2 1:5000	PURPOSE OF ISSUE SUITABLE FOR INFORMATION	STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 19114-HYD-XX-ZZ-DR-GE-01024		REVISION P02	

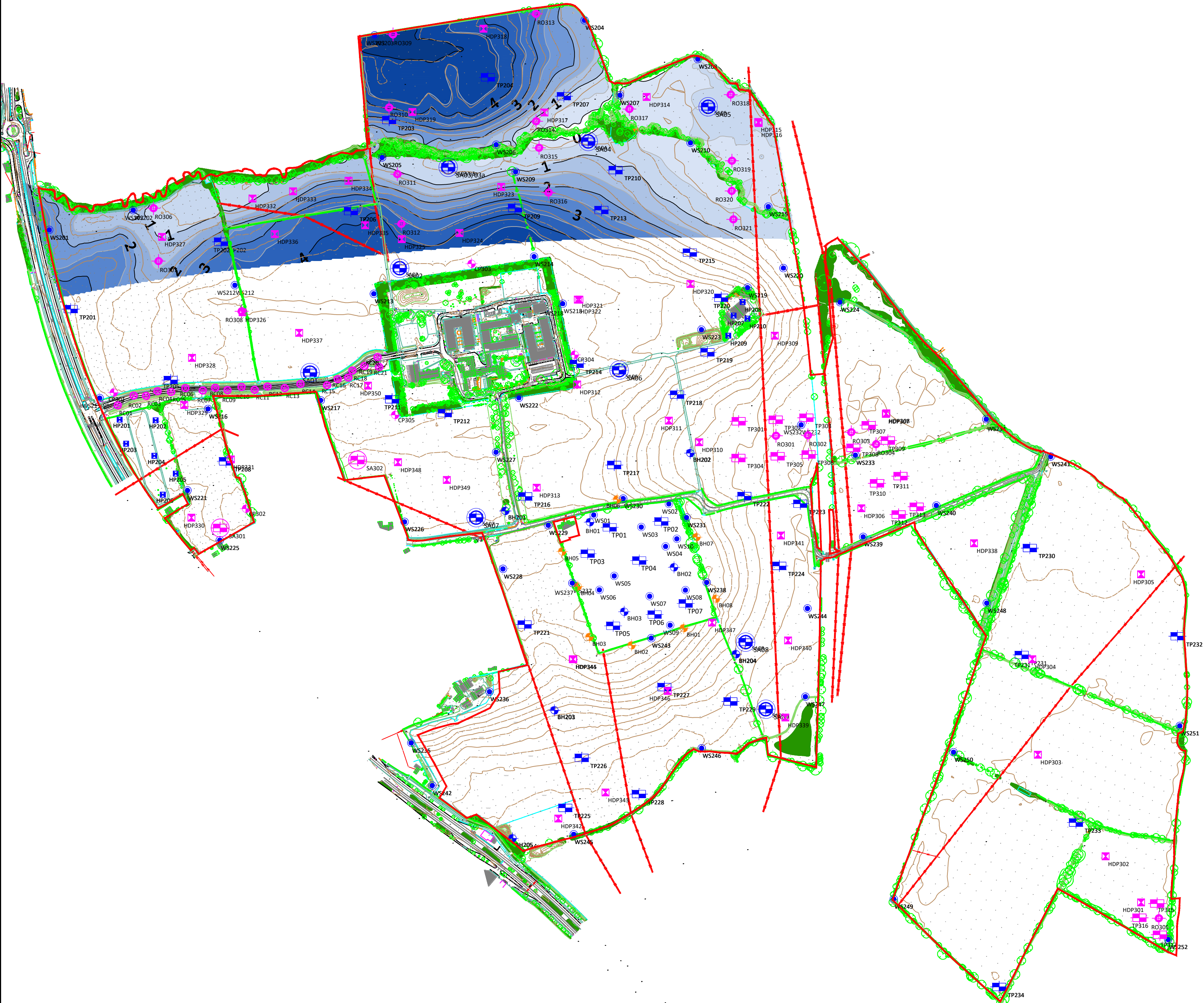




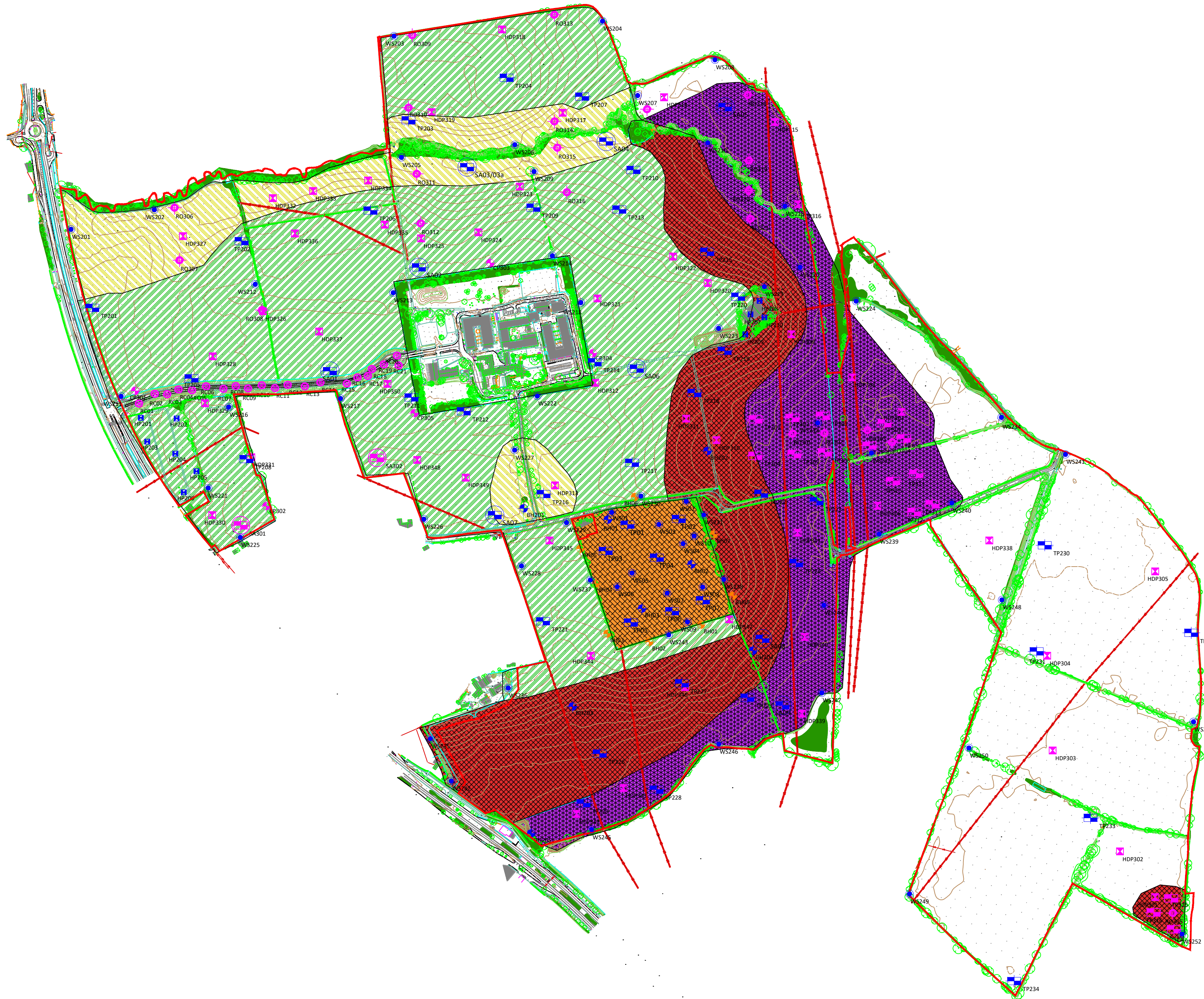
KEY

	Cable Percussion Borehole		Trial Pit
	Rotary Borehole		Road Core Location
	Soakaway Pit		Hand Dug Pit
<b>Initial Site Investigation (September 2022)</b>			
	Hydrock Soil Infiltration Rate Test Pit		Hydrock Dynamic Sampler Borehole
	Hydrock Trial Pit		Hydrock Borehole
	Hydrock Hand Dug Pit		
<b>JUBB Site Investigation (December 2019)</b>			
	Borehole		

- NOTES
1. All dimensions are to be checked on site before the commencement of works. Any discrepancies are to be reported to the Architect & Engineer for verification. Figured dimensions only are to be taken from this drawing.
  2. This drawing is to be read in conjunction with all relevant Engineers' and Service Engineers' drawings and specifications.
  3. This drawing has been based on the following drawings and information: Topographical Survey number:180133 by:Interlock Surveys dated:11/02/2019.
  4. A minimum 9metre stand off zone has been applied to (and must be adhered to for all siteworks) all proposed SI positions in relation to Overhead power lines shown on the Survey.
  5. Surfaces have been created using Hydrock Site Investigation data (August 2021, September 2022 and January/February 2023). Levels and depths are accurate at investigation locations. Between investigation locations, levels and depths have been extrapolated and are indicative only.







**KEY**

**Hydrock January/February 2023**

- Cable Percussion Borehole
- Rotary Borehole
- Soakaway Pit
- Trial Pit
- Road Core Location
- Hand Dug Pit

**Initial Site Investigation (September 2022)**

- Hydrock Soil Infiltration Rate Test Pit
- Hydrock Dynamic Sampler Borehole
- Hydrock Trial Pit
- Hydrock Hand Dug Pit

**JUBB Site Investigation (December 2019)**

- Borehole

**NOTES**

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- This drawing is to be read in conjunction with all relevant Engineers' and Service Engineers' drawings and specifications.
- This drawing has been based on the following drawings and information: Topographical Survey number:180133 by:Interlock Surveys dated:11/02/2019.
- A minimum 9metre stand off zone has been applied to (and must be adhered to for all siteworks) all SI positions (excluding hand pits) in relation to Overhead power lines shown on the Survey.
- Foundation zonation does not include increase in foundations for existing or proposed vegetation.
- Foundation zonation does not include increase or decrease in foundations due to cut to fill.
- Foundation zonation is subject to further works to allow detailed zonation and design.

**LEGEND**

- Site Boundary
- Trench Fill <1m
- Trench Fill 1m to 2.5m
- Pile >2.5m (Landfill)
- Pile >2.5m (Soft cohesive deposits, further SI required to determine extents).
- Pile >2.5m (Due to groundwater ingress and instability of pits during excavation).

PO2	SITE BOUNDARY ADDED					
	SD	12/04/23	NT	12/04/23	CD	12/04/23
PO1	FIRST ISSUE					
	SD	28/03/23	NT	28/03/23	AB	28/03/23
REV.	REVISION NOTES/COMMENTS					
	DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE

**Hydrock**

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E-Mail: northampton@hydrock.com  
or visit www.hydrock.com

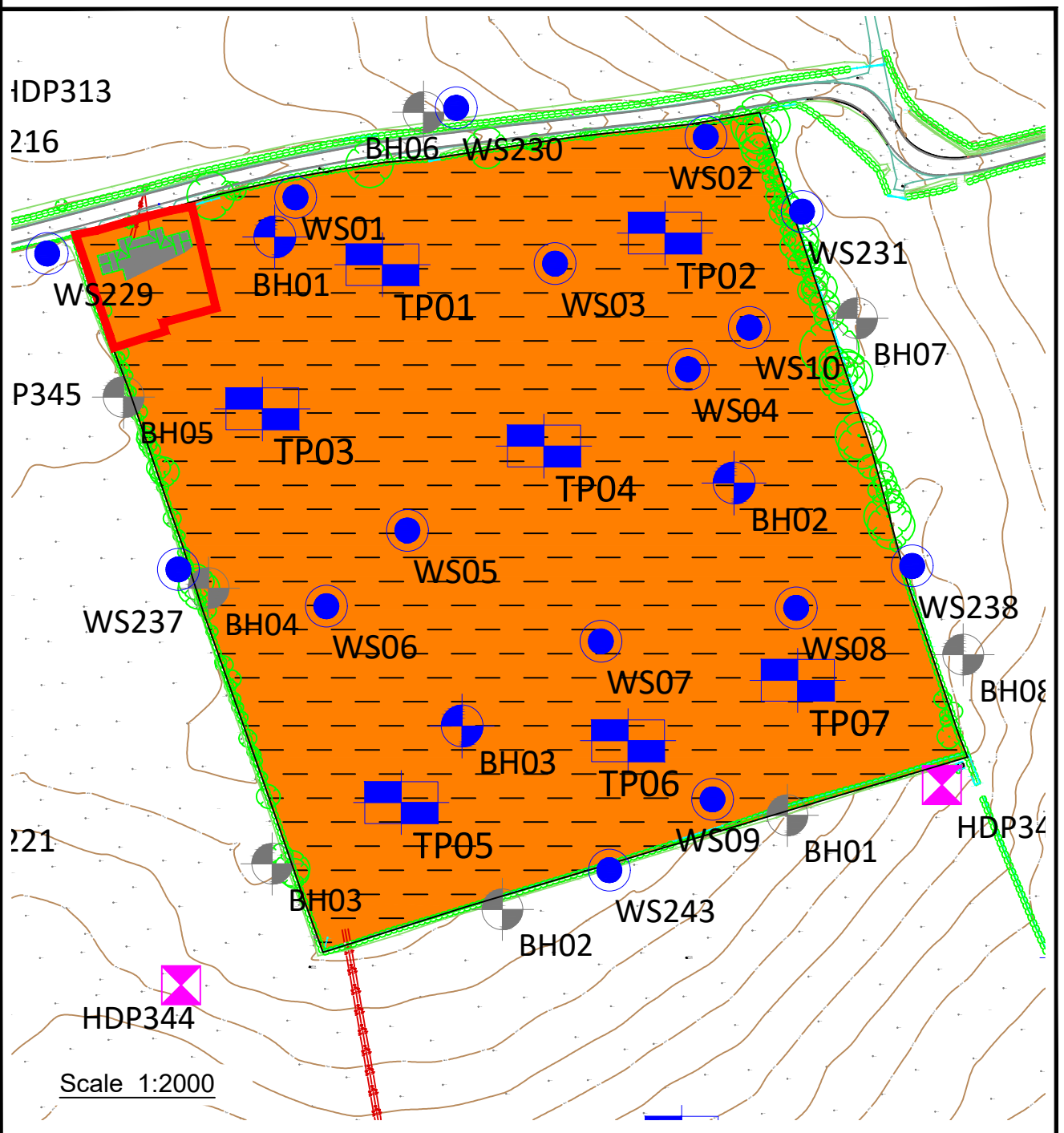
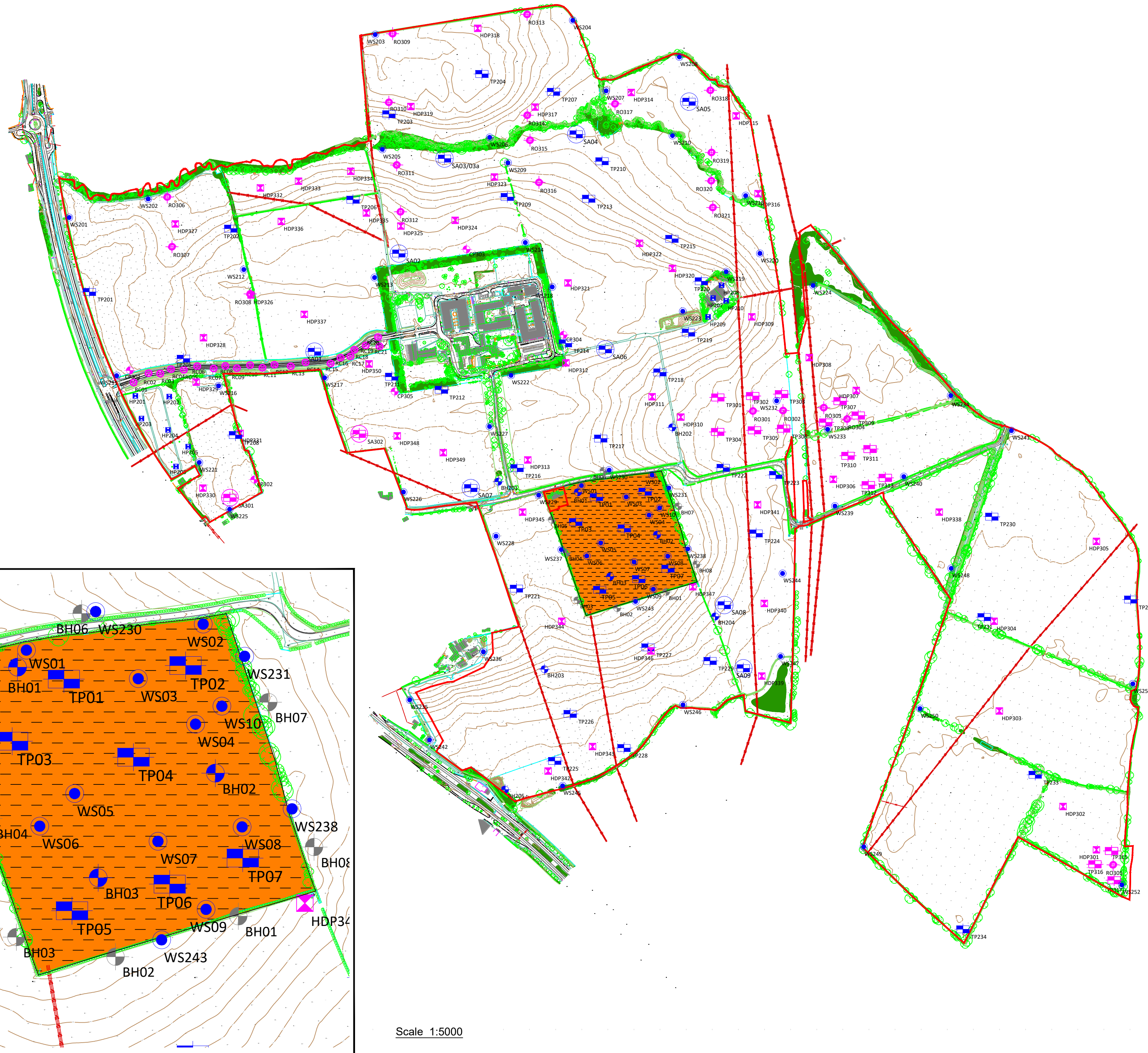
CLIENT  
Oxford University Development Ltd

PROJECT  
Begbroke, Oxfordshire

TITLE  
Foundation Zonation Plan

HYDROCK PROJECT NO. 19114 GMNO	SCALE @ A2 1:5000
PURPOSE OF ISSUE SUITABLE FOR INFORMATION	STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 19114-HYD-XX-ZZ-DR-GE-01026	REVISION PO2





**KEY**

**Hydrock January/February 2023**

- CP## Cable Percussion Borehole
- RO## Rotary Borehole
- SA## Soakaway Pit
- TP## Trial Pit
- RC## Road Core Location
- HDP## Hand Dug Pit

**Initial Site Investigation (September 2022)**

- SAXXX Hydrock Soil Infiltration Rate Test Pit
- WSXX Hydrock Dynamic Sampler Borehole
- TPXX Hydrock Trial Pit
- HPXX Hydrock Hand Dug Pit

**JUBB Site Investigation (December 2019)**

- BH07 Borehole

**NOTES**

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**LEGEND**

- Site Boundary
- CS2 Gas protection measures only if developed with buildings
- Remainder of site CS1

P02	SITE BOUNDARY ADDED					
	SD	12/04/23	NT	12/04/23	CD	12/04/23
P01	FIRST ISSUE					
	SD	28/03/23	NT	28/03/23	AB	28/03/23
REV.	REVISION NOTES/COMMENTS					
	DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE

**Hydrock**

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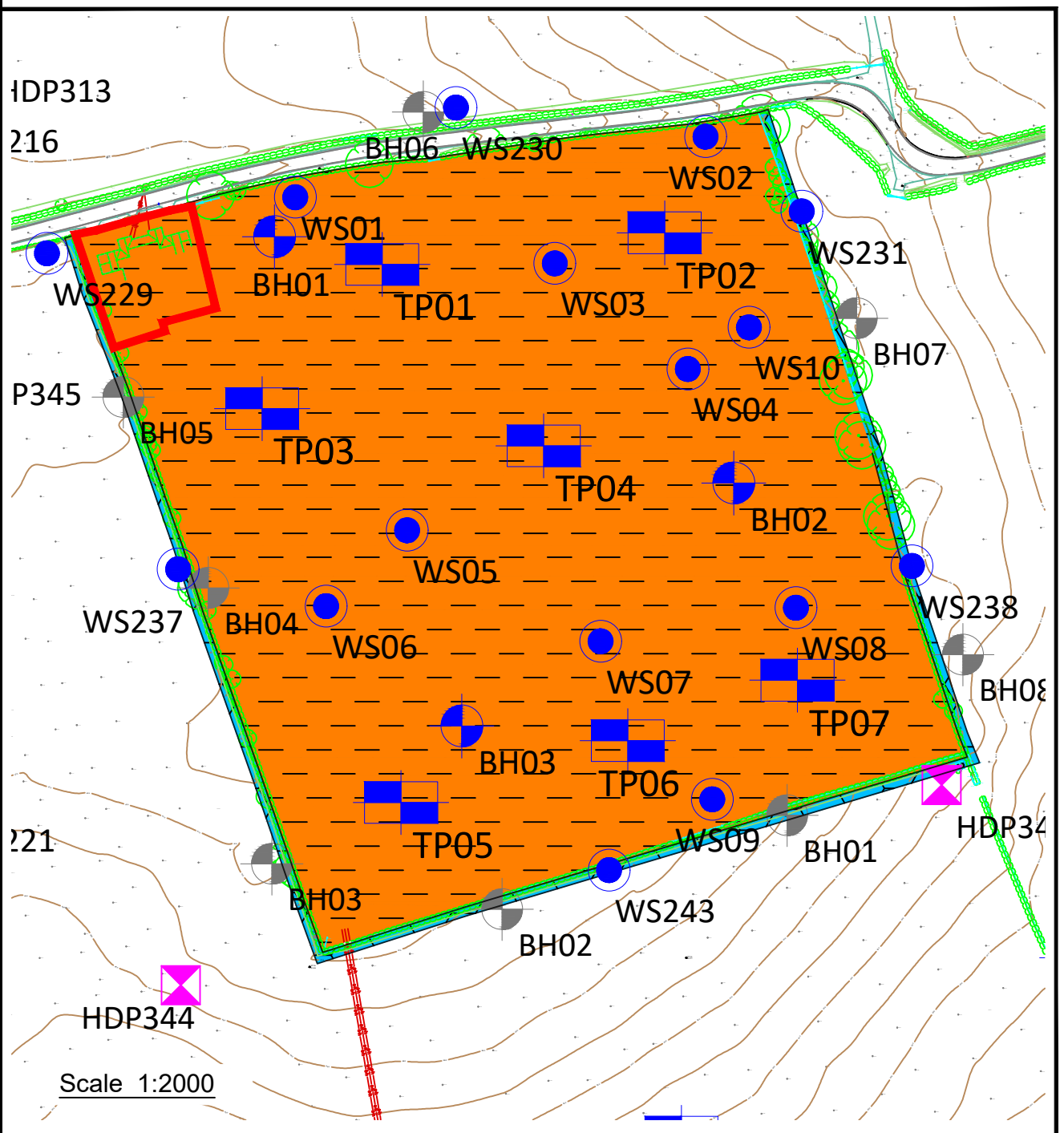
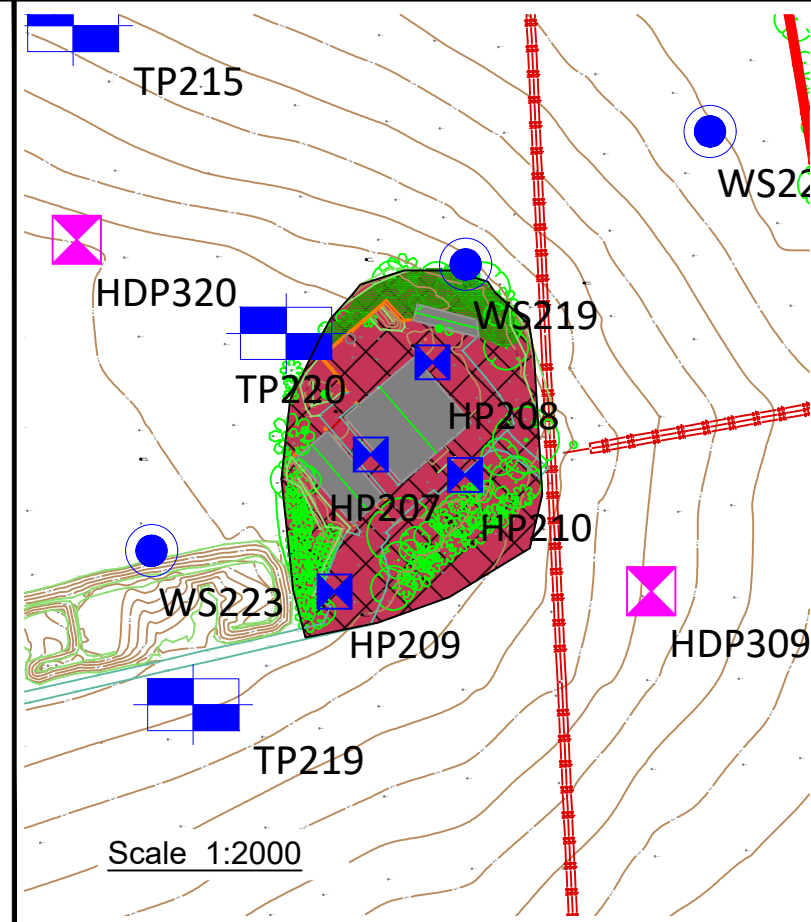
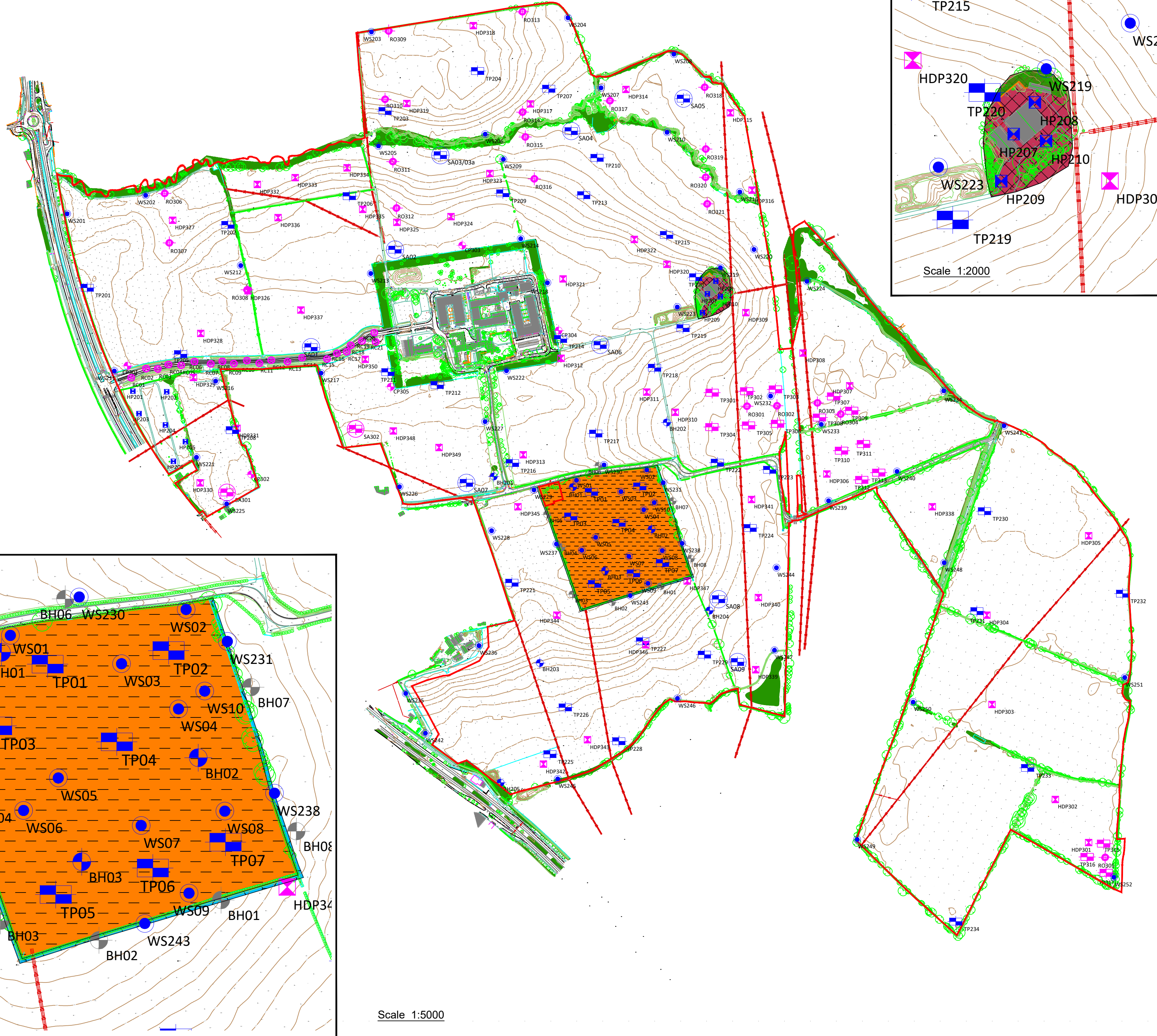
CLIENT  
Oxford University Development Ltd

PROJECT  
Begbroke, Oxfordshire

TITLE  
Gas Protection Zonation Plan

HYDROCK PROJECT NO. 19114 GMNO	SCALE @ A2 As shown
PURPOSE OF ISSUE SUITABLE FOR INFORMATION	STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 19114-HYD-XX-ZZ-DR-GE-01027	REVISION P02





Scale 1:5000

Scale 1:2000

**KEY**

	Cable Percussion Borehole		Trial Pit
	Rotary Borehole		Road Core Location
	Soakaway Pit		Hand Dug Pit

**Initial Site Investigation (September 2022)**

	Hydrock Soil Infiltration Rate Test Pit		Hydrock Dynamic Sampler Borehole
	Hydrock Trial Pit		Hydrock Borehole
	Hydrock Hand Dug Pit		

**JUBB Site Investigation (December 2019)**

	Borehole
--	----------

**NOTES**

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**LEGEND**

	Site Boundary
	Removal of shallow Made Ground and validation to be carried out
	Public Open Space end use Engineered cover system (450mm) - imprinted growing medium and bonded geogrid.

P02	SITE BOUNDARY ADDED					
	SD	12/04/23	NT	12/04/23	CD	12/04/23
P01	FIRST ISSUE					
	SD	28/03/23	NT	28/03/23	AB	28/03/23
REV.	REVISION NOTES/COMMENTS					
	DRAWN BY	DATE	CHECKED BY	DATE	APPROVED BY	DATE

**Hydrock**

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TEL: 01604 842 888  
E-Mail: northampton@hydrock.com  
or visit www.hydrock.com

CLIENT  
Oxford University Development Ltd

PROJECT  
Begbroke, Oxfordshire

TITLE  
Remediation Zonation Plan

HYDROCK PROJECT NO. 19114 GMNO	SCALE @ A2 As shown
PURPOSE OF ISSUE SUITABLE FOR INFORMATION	STATUS S2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 19114-HYD-XX-ZZ-DR-GE-01028	REVISION P02



Drawing Number  
5060-RBG-177052-SL-DR-CV-00001



- GENERAL NOTES:**
- DO NOT SCALE FROM DRAWING.
  - ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

**PRINT IN COLOUR**

Rev	Date	Description of Revisions	Drawn	Chkd	Appr	Status
P01	31/01/23	DRAFT ISSUE FOR IDC	BH	BH	GH	
						APPROVAL IN PRINCIPLE
						S3

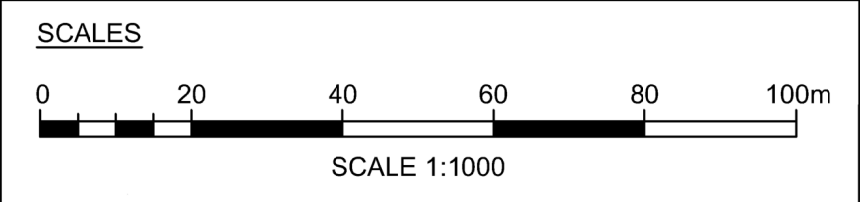


**OXFORD CORRIDOR PHASE 2A  
LEVEL CROSSINGS**

**SANDY LANE FOOTBRIDGE  
LOCATION PLAN**

Designed	F. HUSEIN	Signed	<i>[Signature]</i>	Date	31/01/23
Drawn	B. HUGHES	Signed	<i>[Signature]</i> p.p.	Date	31/01/23
Checked	B. HODGES	Signed	<i>[Signature]</i>	Date	31/01/23
Approved	G. HUNT	Signed	<i>[Signature]</i>	Date	31/01/23

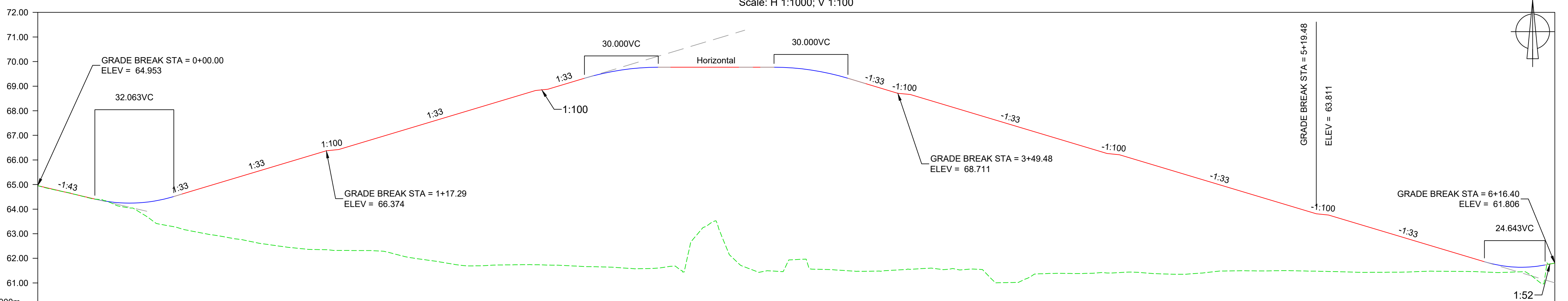
APPROX RED LINE SITE  
BOUNDARY TOTAL AREA:  
25696m<sup>2</sup>



**PLAN VIEW**  
SCALE 1:1000

Scale(s)	1:250	ELR & Mileage	DCL 67M 78CH
Alternative Reference		Sheet	1 of 1
Drawing Number	5060-RBG-177052-SL-DR-CV-00001	Revision	P01





PROPOSED LEVELS	EXISTING LEVELS	CHAINAGE
64.95	64.95	00.00
64.72	64.72	10.00
64.48	64.48	20.00
64.29	64.24	30.00
64.25	63.96	40.00
64.38	63.38	50.00
64.66	63.16	60.00
64.96	62.97	70.00
65.26	62.80	80.00
65.56	62.61	90.00
65.86	62.47	100.00
66.16	62.36	110.00
66.40	62.32	120.00
66.66	62.31	130.00
66.96	62.29	140.00
67.26	62.05	150.00
67.56	61.91	160.00
67.86	61.74	170.00
68.16	61.70	180.00
68.46	61.73	190.00
68.76	61.74	200.00
68.96	61.72	210.00
69.26	61.68	220.00
69.52	61.65	230.00
69.70	61.59	240.00
69.77	61.59	250.00
69.77	61.61	260.00
69.77	61.62	270.00
69.77	61.59	280.00
69.77	61.54	290.00
69.77	61.47	300.00
69.71	61.96	310.00
69.55	61.55	320.00
69.30	61.49	330.00
69.00	61.48	340.00
68.71	61.53	350.00
68.50	61.59	360.00
68.20	61.55	370.00
67.90	61.56	380.00
67.60	61.00	390.00
67.30	61.10	400.00
67.00	61.38	410.00
66.70	61.38	420.00
66.40	61.04	430.00
66.20	61.42	440.00
65.90	61.41	450.00
65.60	61.36	460.00
65.30	61.38	470.00
65.00	61.48	480.00
64.70	61.49	490.00
64.40	61.49	500.00
64.10	61.50	510.00
63.81	61.48	520.00
63.60	61.45	530.00
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63.00	61.43	550.00
62.70	61.45	560.00
62.40	61.47	570.00
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61.80	61.43	590.00
61.64	61.44	600.00
61.69	61.05	610.00
61.61	61.61	616.40

- LEGEND**
- DENOTES PROPOSED FLY-OVER
  - - - DENOTES EXISTING GROUND
  - DENOTES APPROXIMATE EXTENT OF DIG AND REPLACE TO 1.2m DEPTH BELOW EXISTING GROUND LEVEL
  - ▨ DENOTES PROPOSED DITCH DIVERSION
  - ▤ DENOTES PROPOSED FENCE LINE
  - ▥ DENOTES EXISTING FENCE LINE
  - ▧ DENOTES PROPOSED MAJOR CONTOUR
  - ▨ DENOTES PROPOSED MINOR CONTOUR
  - DENOTES BUILD UP 01

- STANDARD ABBREVIATIONS**
- AWS AUTOMATIC WARNING SYSTEM
  - AC AXLE COUNTER
  - B BOX
  - CB CONCRETE BASE
  - P POST
  - h HEIGHT OF ELEMENT
  - S SPREAD
  - T TREE
  - TPWS TRAIN PROTECTION WARNING SYSTEM
  - UTP UNDER TRACK PIPE

- GENERAL NOTES**
- DO NOT SCALE FROM DRAWING
  - ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
  - ALL LEVELS AND CHAINAGES ARE IN METRES UNLESS NOTED OTHERWISE. ALL LEVELS ARE ABOVE ORDNANCE SURVEY - NEWLYN DATUM DERIVED BY MULTIPLE NETWORK RTK GPS OBSERVATIONS.
  - THIS DRAWING IS BASED ON TOPOGRAPHICAL SURVEY W1129C-TTH-MOD-ESU-412002 REV P03 DATED 14/08/2018.
  - PAVEMENT BUILDSUPS ARE BASED ON AN ASSUMED SUBGRADE CBR OF 15%. THIS IS TO BE VERIFIED BY THE CONTRACTOR BY MEANS ON INSITU CBR TESTING PRIOR TO CONSTRUCTION.

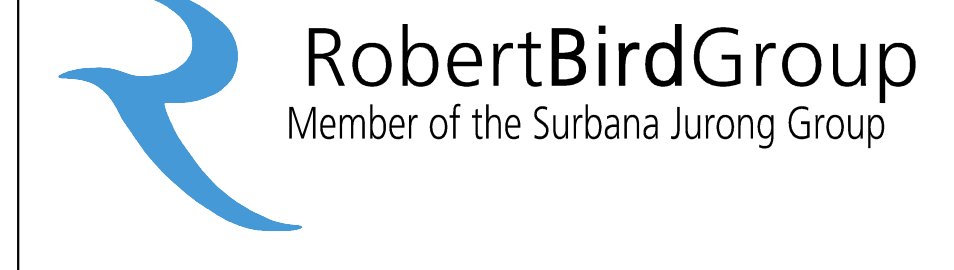
**PRINT IN COLOUR**

P01	30/01/23	DRAFT FOR IDC	BS	NQ	JG
Rev	Date	Description of Revisions	Drawn	Chkd	Appr
Status	FIT FOR INFORMATION				S2



Authorised: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor(s): \_\_\_\_\_



Region: \_\_\_\_\_

Contract No. **177052**

Contract Title **OXFORD PHASE 2A**

Drawing Title **SANDY LANE GENERAL ARRANGEMENTS**

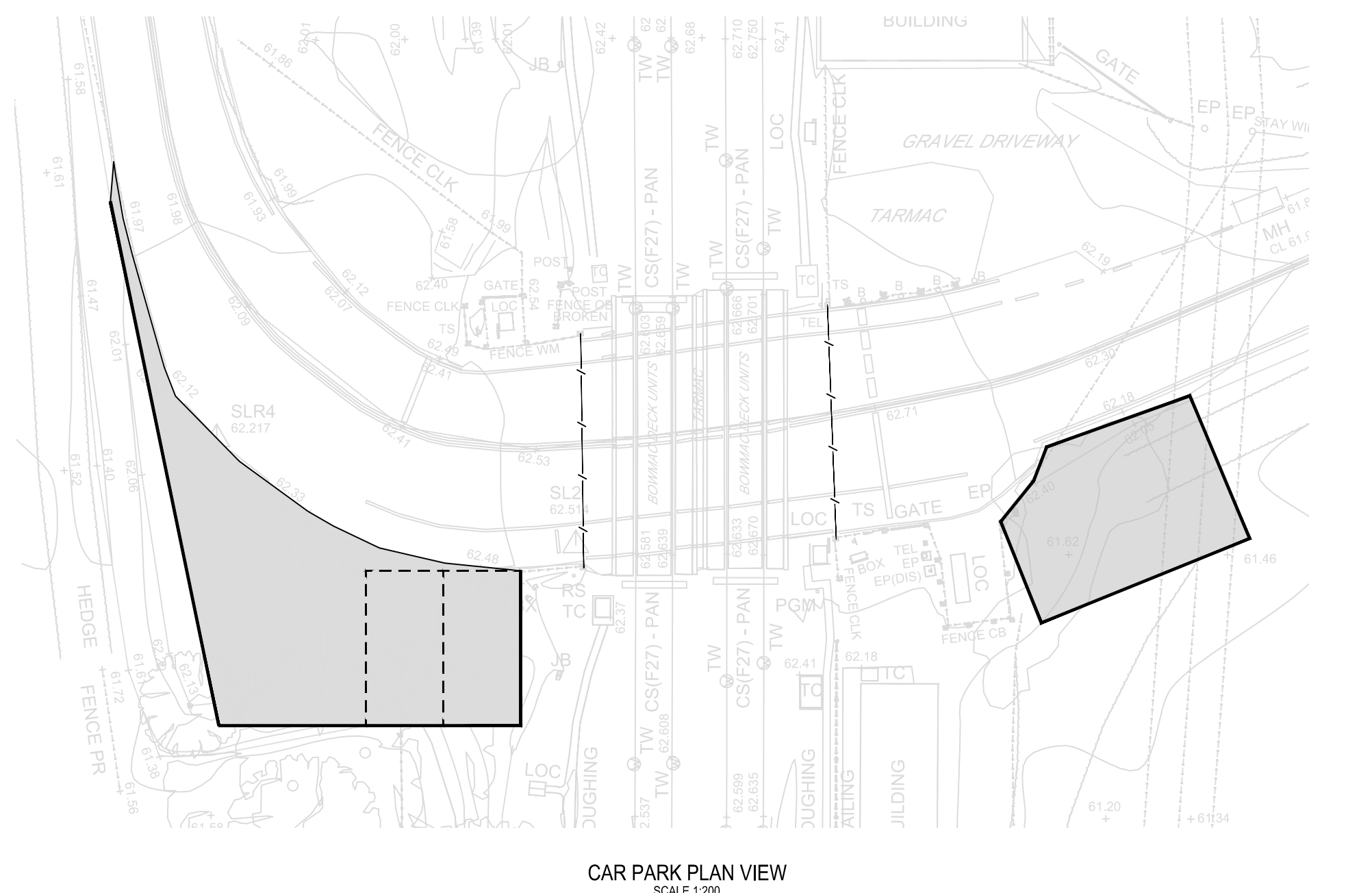
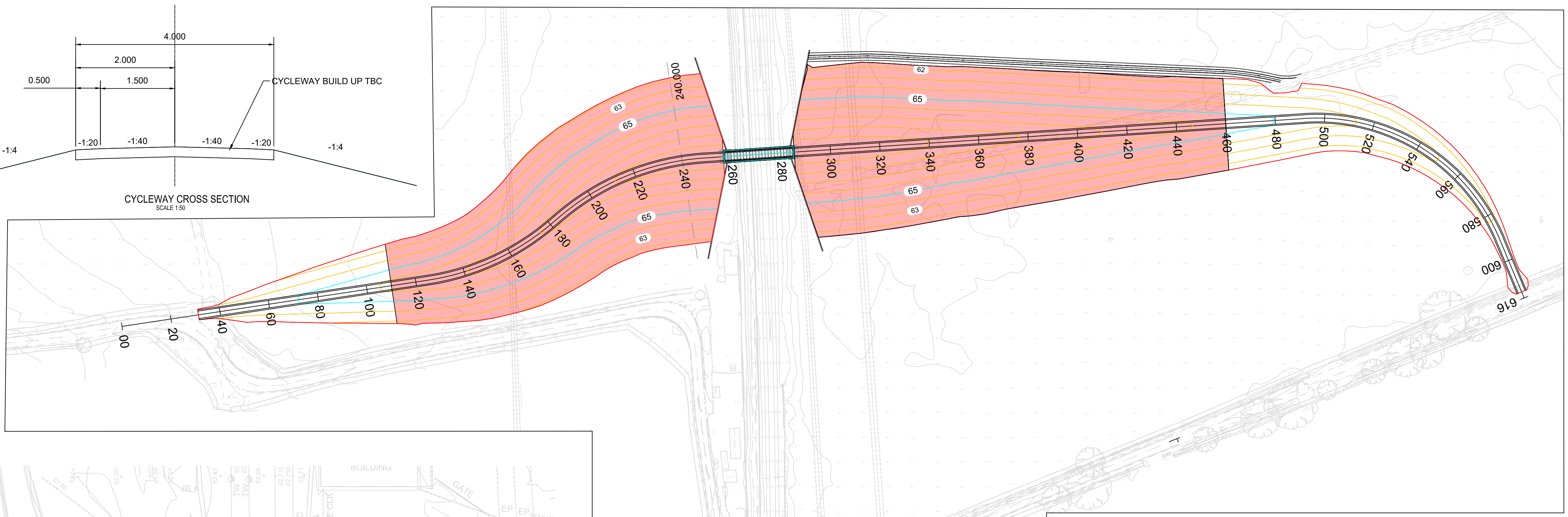
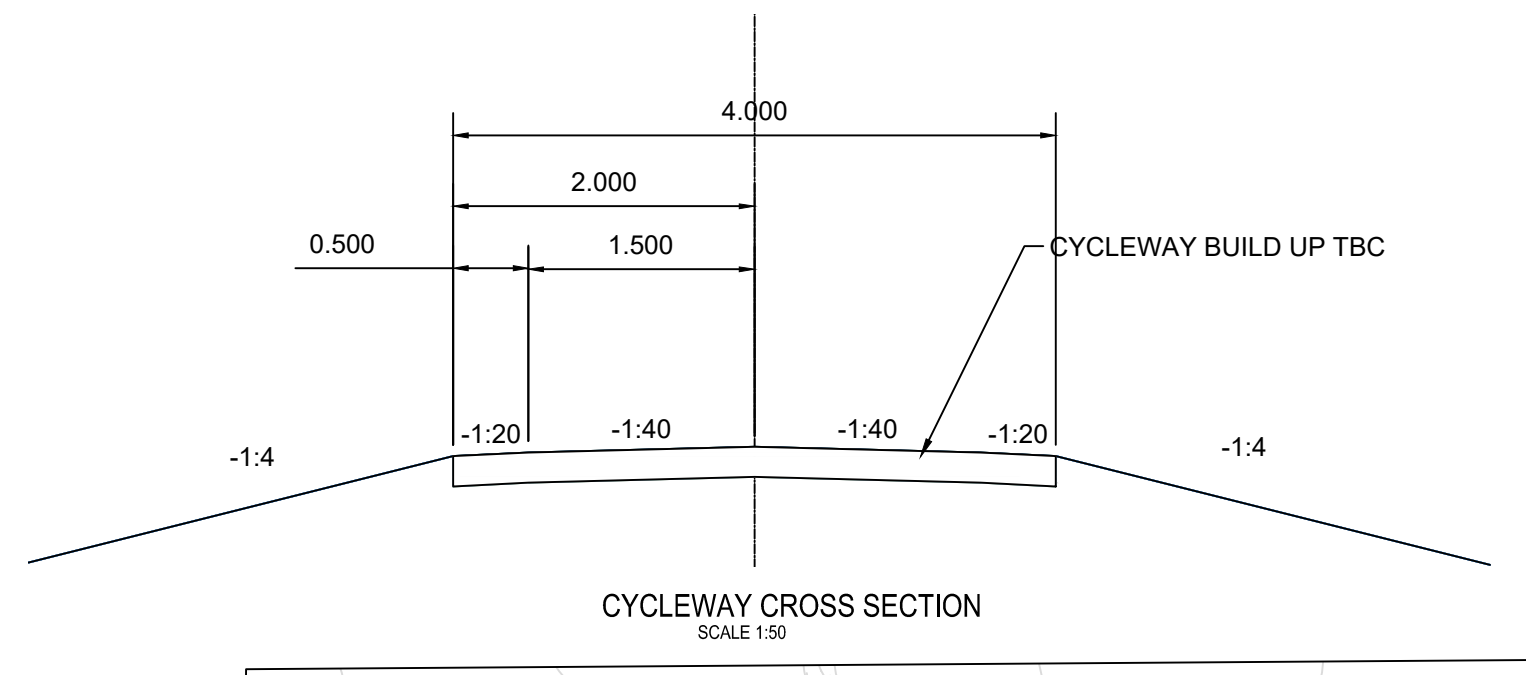
**SHEET 1 OF 1**

Designed	N. QUINN	Signed	_____	Date	_____
Drawn	B. SMITH	Signed	_____	Date	_____
Checked	J. GOLD	Signed	_____	Date	_____
Approved	G. HUNT	Signed	_____	Date	_____

Scale(s) **AS SHOWN** ELR & Mileage **DCL 67m 68c**

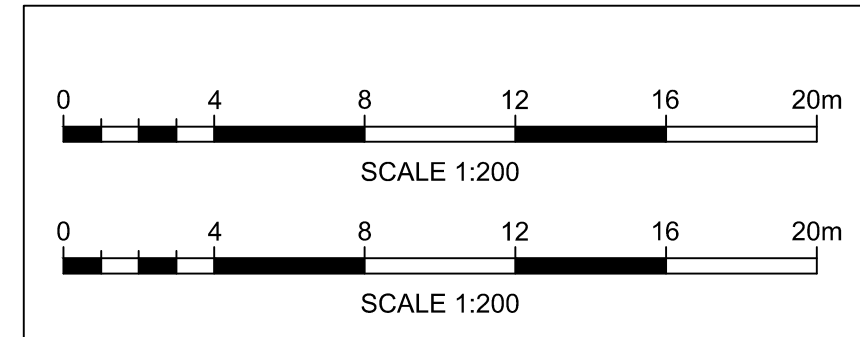
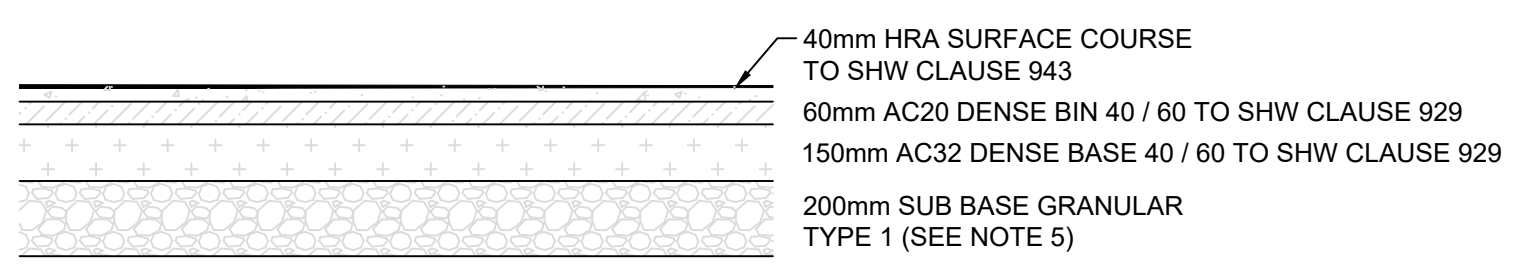
Alternative Reference \_\_\_\_\_ Sheet **1** of **1** Revision \_\_\_\_\_

Drawing Number **5060-RBG-177052-SL-DR-CV-83101** P01



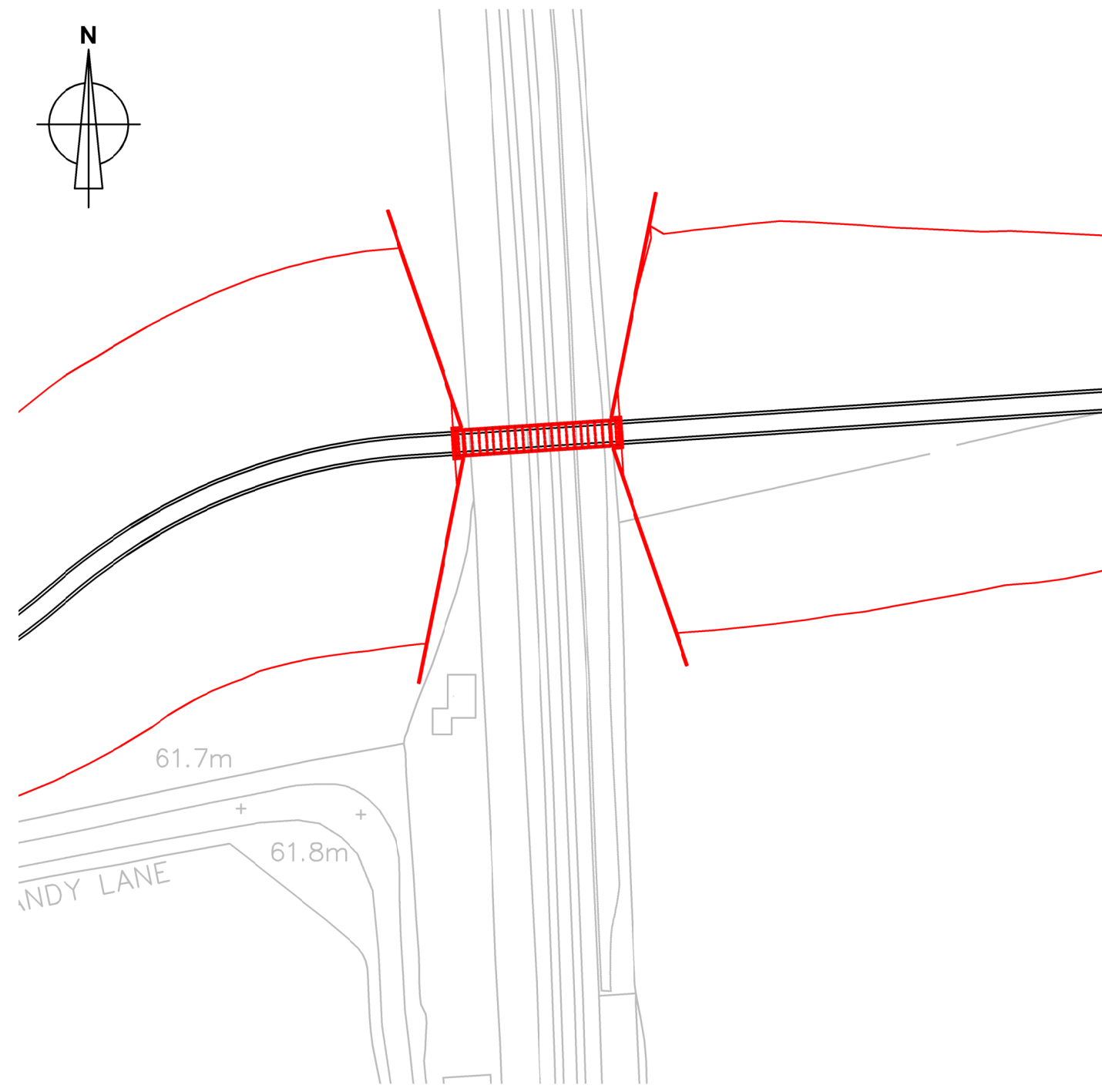
**CUT/FILL SUMMARY**

	2D AREA (m²)	CUT (m³)	FILL (m³)	NET (m³)
ENG FILL ABOVE EX GROUND LEVEL	21581	2	68628	68628
ENG FILL BELOW EX GROUND LEVEL	17117	20541	20541	20541
<b>TOTAL</b>	<b>38698</b>	<b>20543</b>	<b>89169</b>	<b>89167</b>

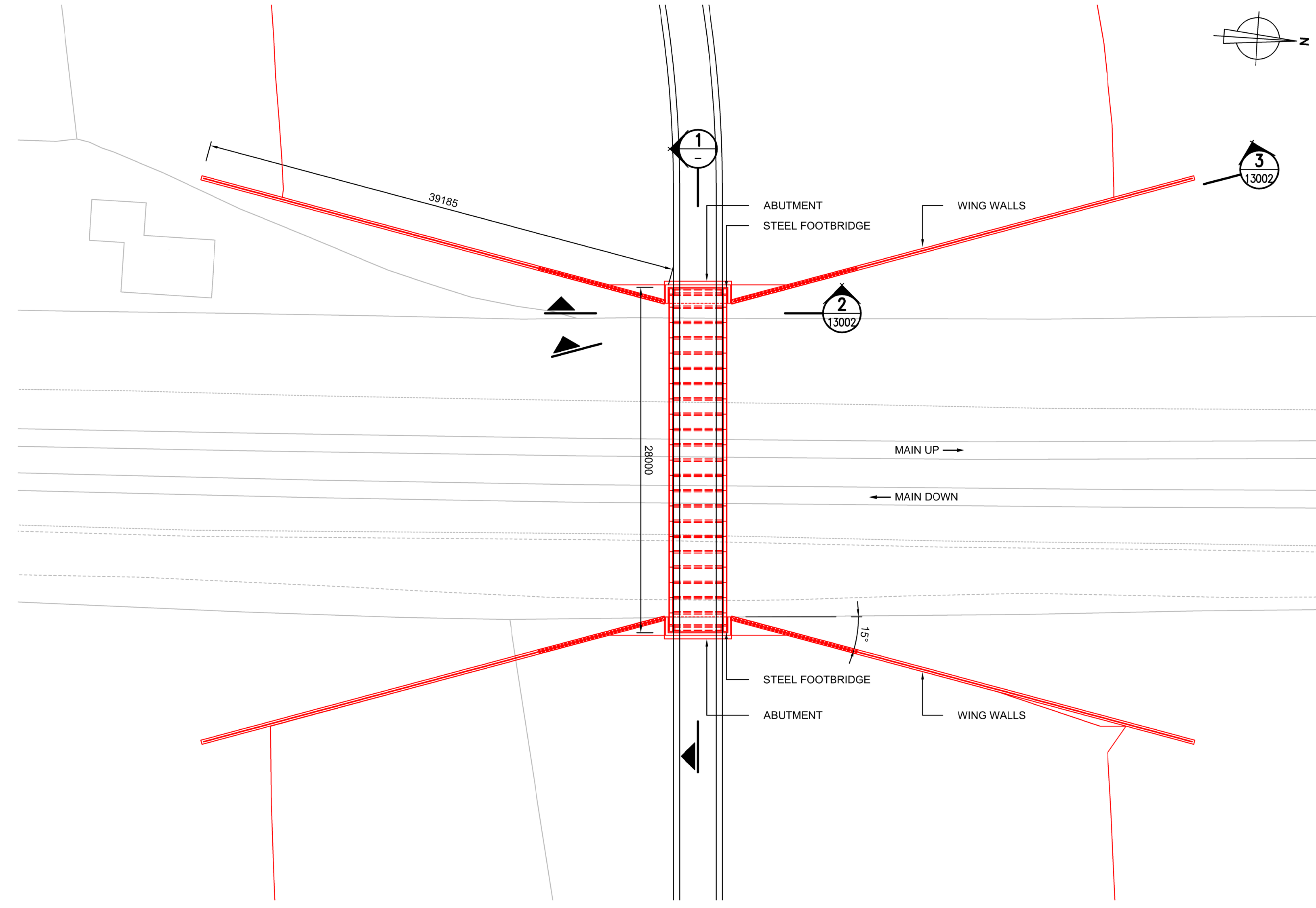


- KEY TO HEALTH AND SAFETY SYMBOLS**
- ⚠ - INDICATES A RESIDUAL RISK REQUIRING A COMPULSORY ACTION
  - 🚫 - INDICATES A RESIDUAL RISK REQUIRING A PROHIBITIVE ACTION
  - ⚠ - INDICATES A RESIDUAL RISK AS A WARNING
  - ℹ - INDICATES A RESIDUAL RISK FOR INFORMATION
- NUMBERS CORRESPOND TO DESIGN RISK ASSESSMENT REFERENCE (DRA). SEE DRAWING NOTES AND DRA 5060-RBG-177052-SL-RA-0001 FOR DETAILS

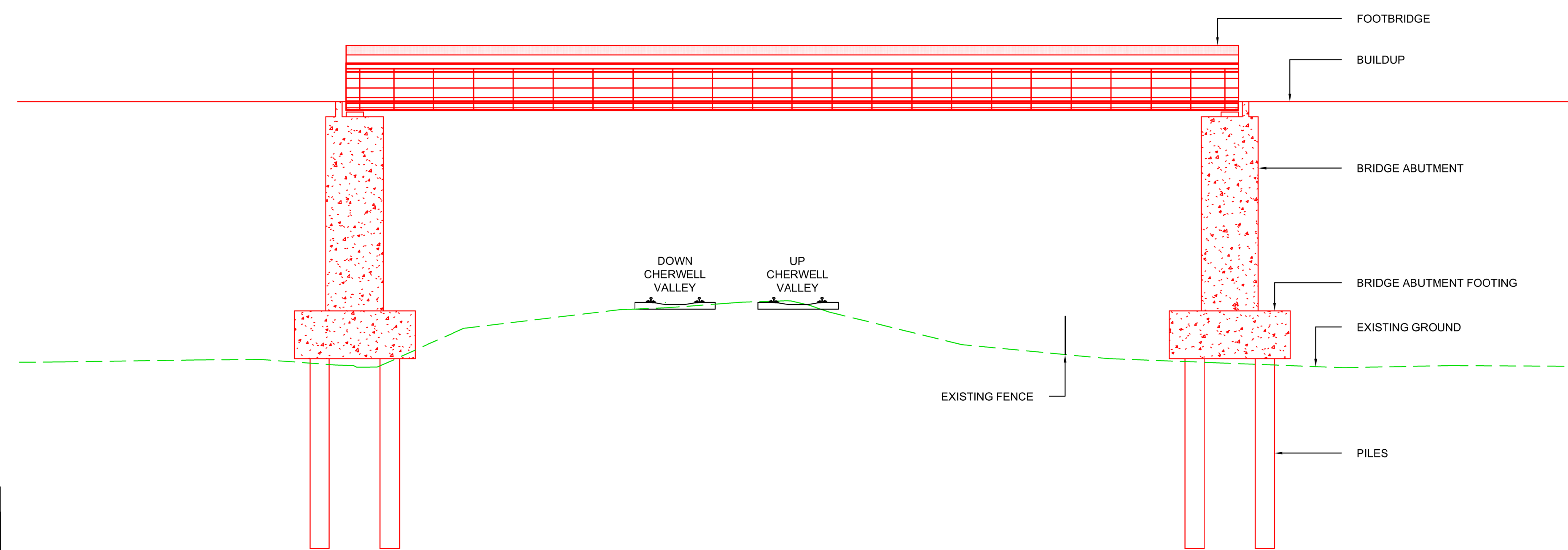




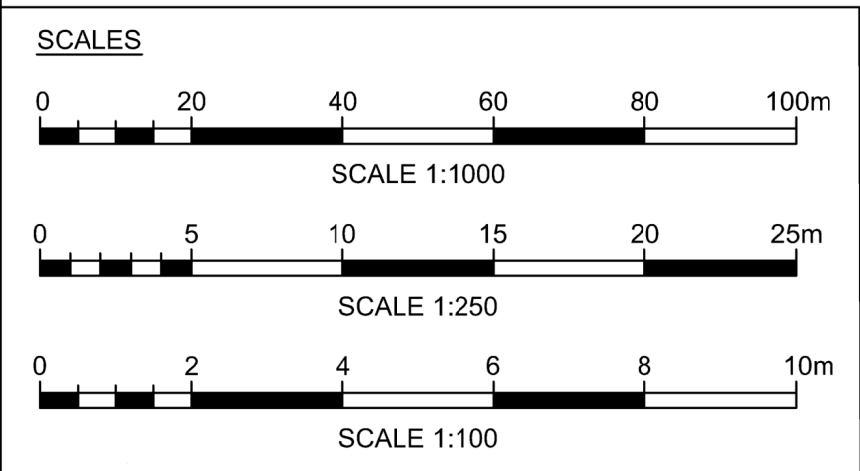
PLAN VIEW: SITE PLAN  
SCALE 1:1000



PLAN VIEW: PROPOSED FOOTBRIDGE  
SCALE 1:250



1  
FOOTBRIDGE SECTION  
SCALE 1:100



**KEY TO HEALTH AND SAFETY SYMBOLS**

- INDICATES A RESIDUAL RISK REQUIRING A COMPULSORY ACTION
- INDICATES A RESIDUAL RISK REQUIRING A PROHIBITIVE ACTION
- INDICATES A RESIDUAL RISK AS A WARNING
- INDICATES A RESIDUAL RISK FOR INFORMATION

NUMBERS CORRESPOND TO DESIGN RISK ASSESSMENT REFERENCE (DRA). SEE DRAWING NOTES AND DRA 5060-CDM-HW-001 FOR DETAILS

- GENERAL NOTES:**
1. DO NOT SCALE FROM DRAWING.
  2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
  3. DESIGN BASED OFF NETWORK RAIL 4500 SERIES 'FRAME OPEN' FOOTBRIDGE.
  4. FOUNDATION DESIGN BASED ON LIMITED GROUND DATA. DESIGN TO BE REASSESSED UPON FURTHER GROUND INVESTIGATION.
- COLOUR KEY ON PLAN:**
- BLACK INDICATES EXISTING OR UNCHANGED ASSETS.
  - GREEN INDICATES EXISTING ASSETS TO BE REMOVED OR ABANDONED.
  - RED INDICATES PROPOSED ASSETS.
  - BLUE INDICATES ASSETS TO BE MODIFIED OR TO BE MOVED.
  - PURPLE INDICATES PASSIVE PROVISION.

PRINT IN COLOUR

P01	31/01/23	DRAFT ISSUE FOR IDC	BH	BH	GH
Rev	Date	Description of Revisions	Drawn	Chkd	Appr
Status					Subsibility
APPROVAL IN PRINCIPLE					S3



Region  
OXFORD CORRIDOR PHASE 2A  
LEVEL CROSSINGS

Drawing Title  
SANDY LANE FOOTBRIDGE  
PROPOSED FOOTBRIDGE  
GENERAL ARRANGEMENT

Designed	F. HUSEIN	Signed		Date	31/01/23
Drawn	B. HUGHES	Signed		Date	31/01/23
Checked	B. HODGES	Signed		Date	31/01/23
Approved	G. HUNT	Signed		Date	31/01/23
Scale(s)	1:250	ELR & Mileage	DCL 67M 78CH		
Alternative Reference					Sheet
Drawing Number	5060-RBG-177052-SL-DR-ST-13001	Revision	1 of 1		
				P01	











## Appendix B Desk Study Research Information

<b>Desk Study Photograph 1</b>
<b>Date:</b> 02/06/2021
<b>Direction Photograph Taken:</b> West
<b>Description:</b> Road Entrance to Begbroke Science Park




<b>Desk Study Photograph 2</b>
<b>Date:</b> 02/06/2021
<b>Direction Photograph Taken:</b> North
<b>Description:</b> Entrance to Field 3





<p><b>Desk Study Photograph 3</b></p>	
<p><b>Date:</b> 02/06/2021</p>	
<p><b>Direction Photograph Taken:</b> East</p>	
<p><b>Description:</b>  Entrance to field 17.</p>	

<p><b>Desk Study Photograph 4</b></p>	
<p><b>Date:</b> 02/06/2021</p>	
<p><b>Direction Photograph Taken:</b> North</p>	
<p><b>Description:</b>  Entrance to field 1.</p>	



<p><b>Desk Study Photograph 5</b></p>	
<p><b>Date:</b> 02/06/2021</p>	
<p><b>Direction Photograph Taken:</b></p> <p>South</p>	
<p><b>Description:</b></p> <p>Entrance to field 18</p>	

<p><b>Desk Study Photograph 6</b></p>	
<p><b>Date:</b> 02/06/2021</p>	
<p><b>Direction Photograph Taken:</b></p> <p>South</p>	
<p><b>Description:</b></p> <p>Overview of Field 18</p>	



<p><b>Desk Study Photograph 7</b></p>	
<p><b>Date:</b> 02/06/2021</p>	
<p><b>Direction Photograph Taken:</b> East</p>	
<p><b>Description:</b>  Field 4 southern boundary along Begbroke Science Park.</p>	

<p><b>Desk Study Photograph 8</b></p>	
<p><b>Date:</b> 02/06/2021</p>	
<p><b>Direction Photograph Taken:</b> North</p>	
<p><b>Description:</b>  Overhead Cables and track separating Field 4/5 and 2/3.</p>	



<p><b>Desk Study Photograph 9</b></p>	
<p><b>Date:</b> 02/06/2021</p>	
<p><b>Direction Photograph Taken:</b> West</p>	
<p><b>Description:</b>  Field 2</p>	

<p><b>Desk Study Photograph 10</b></p>	
<p><b>Date:</b> 02/06/2021</p>	
<p><b>Direction Photograph Taken:</b> East</p>	
<p><b>Description:</b>  Field 5</p>	



<p><b>Desk Study Photograph 11</b></p>	
<p><b>Date:</b> 02/06/2021</p>	
<p><b>Direction Photograph Taken:</b> North</p>	
<p><b>Description:</b>  Entrance to Figure 6</p>	

<p><b>Desk Study Photograph 12</b></p>	
<p><b>Date:</b> 02/06/2021</p>	
<p><b>Direction Photograph Taken:</b> East</p>	
<p><b>Description:</b>  Overview of Field 6</p>	



<p><b>Desk Study Photograph 13</b></p>	
<p><b>Date:</b> 02/06/2021</p>	
<p><b>Direction Photograph Taken:</b> North</p>	
<p><b>Description:</b> Manhole cover associated with underground sewer</p>	

<p><b>Desk Study Photograph 14</b></p>	
<p><b>Date:</b> 02/06/2021</p>	
<p><b>Direction Photograph Taken:</b> North-west</p>	
<p><b>Description:</b> General overview of Field 6.</p>	



<p><b>Desk Study Photograph 15</b></p>	
<p><b>Date:</b> 02/06/2021</p>	
<p><b>Direction Photograph Taken:</b> East</p>	
<p><b>Description:</b>  Overview of field 7.</p>	

<p><b>Desk Study Photograph 16</b></p>	
<p><b>Date:</b> 02/06/2021</p>	
<p><b>Direction Photograph Taken:</b> South</p>	
<p><b>Description:</b>  Field boundary over Rowel Brook between field 7 and 8.</p>	



<p><b>Desk Study Photograph 17</b></p>	
<p><b>Date:</b> 02/06/21</p>	
<p><b>Direction Photograph Taken:</b> East</p>	
<p><b>Description:</b> Field 8 (north)</p>	

<p><b>Desk Study Photograph 18</b></p>	
<p><b>Date:</b> 02/06/21</p>	
<p><b>Direction Photograph Taken:</b> East</p>	
<p><b>Description:</b> Field 8 (north)</p>	



<p><b>Desk Study Photograph 19</b></p>	
<p><b>Date:</b> 02/06/21</p>	
<p><b>Direction Photograph Taken:</b> South</p>	
<p><b>Description:</b>  Field 8.</p>	

<p><b>Desk Study Photograph 20</b></p>	
<p><b>Date:</b> 02/06/21</p>	
<p><b>Direction Photograph Taken:</b> South</p>	
<p><b>Description:</b>  Field 7 Overview</p>	



<p><b>Desk Study Photograph 21</b></p>	
<p><b>Date:</b> 02/06/21</p>	
<p><b>Direction Photograph Taken:</b> East</p>	
<p><b>Description:</b>  Looking east to Parkers Farm from Field 8.</p>	

<p><b>Desk Study Photograph 22</b></p>	
<p><b>Date:</b> 02/06/21</p>	
<p><b>Direction Photograph Taken:</b> South-west</p>	
<p><b>Description:</b>  Overview of Field 9</p>	



<p><b>Desk Study Photograph 23</b></p>	
<p><b>Date:</b> 02/06/21</p>	
<p><b>Direction Photograph Taken:</b> East</p>	
<p><b>Description:</b> East towards Parkers Farm and railway line.</p>	

<p><b>Desk Study Photograph 24</b></p>	
<p><b>Date:</b> 02/06/21</p>	
<p><b>Direction Photograph Taken:</b> South-west</p>	
<p><b>Description:</b> Overview of field 17</p>	



<p><b>Desk Study Photograph 25</b></p>	
<p><b>Date:</b> 02/06/21</p>	
<p><b>Direction Photograph Taken:</b> South</p>	
<p><b>Description:</b>  Overview of Field 11.</p>	


<p><b>Desk Study Photograph 26</b></p>	
<p><b>Date:</b> 02/06/21</p>	
<p><b>Direction Photograph Taken:</b> South</p>	
<p><b>Description:</b>  Overview of field 12 / 13</p>	



<p><b>Desk Study Photograph 27</b></p>	
<p><b>Date:</b> 19/08/21</p>	
<p><b>Direction Photograph Taken:</b> Looking south from the site entrance</p>	
<p><b>Description:</b> Site from the entrance, large boulder in foreground.  (Landfill)</p>	

<p><b>Desk Study Photograph 28</b></p>	
<p><b>Date:</b> 19/08/21</p>	
<p><b>Direction Photograph Taken:</b> Looking north from southern site boundary.</p>	
<p><b>Description:</b> Site from the southern boundary.  (Landfill)</p>	



<p><b>Desk Study Photograph 29</b></p>	
<p><b>Date:</b> 19/08/21</p>	
<p><b>Direction Photograph Taken:</b> Looking east from western site boundary.</p>	
<p><b>Description:</b> Site from the western site boundary. Trees on eastern boundary.  (Landfill)</p>	

<p><b>Desk Study Photograph 30</b></p>	
<p><b>Date:</b> 19/08/21</p>	
<p><b>Direction Photograph Taken:</b> Looking south.</p>	
<p><b>Description:</b> Showing the south western corner of site and overhead lines on the western boundary.  (Landfill)</p>	



<p><b>Desk Study Photograph 31</b></p>	
<p><b>Date:</b> 19/08/21</p>	
<p><b>Direction Photograph Taken:</b> Looking north east.</p>	
<p><b>Description:</b> Showing the north eastern corner of the site.  (Landfill)</p>	

<p><b>Desk Study Photograph 32</b></p>	
<p><b>Date:</b> 19/08/21</p>	
<p><b>Direction Photograph Taken:</b> Looking south.</p>	
<p><b>Description:</b> Showing the southern site boundary.  (Landfill)</p>	

*Zetica UXB Risk Maps*



# UNEXPLODED BOMB RISK MAP



## SITE LOCATION

Map Centre: 448145,213158



## LEGEND

- High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- Low:** Areas indicated as having 15 bombs per 1000acre or less.

- military
- industry
- UXO find
- transport
- dock
- Luftwaffe targets
- utilities
- Bombing decoy
- other

### How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment\* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment\* is necessary.

### What do I do if my site is in a moderate or high risk area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites in a moderate or high UXB risk area.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

**Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.**

### If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

### If I have any questions, who do I contact?

tel: **+44 (0) 1993 886682**

email: **uxo@zetica.com**

web: **www.zeticauxo.com**

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: (<https://zeticauxo.com/downloads-and-resources/risk-maps/>)

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgment. The copyright remains with Zetica Ltd.

It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

\*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.

*Radon Reports*

Kate Hayward  
Hydrock  
Over Court Barns  
Over Lane  
Almondsbury  
Bristol  
BS32 4DF

## Radon Report

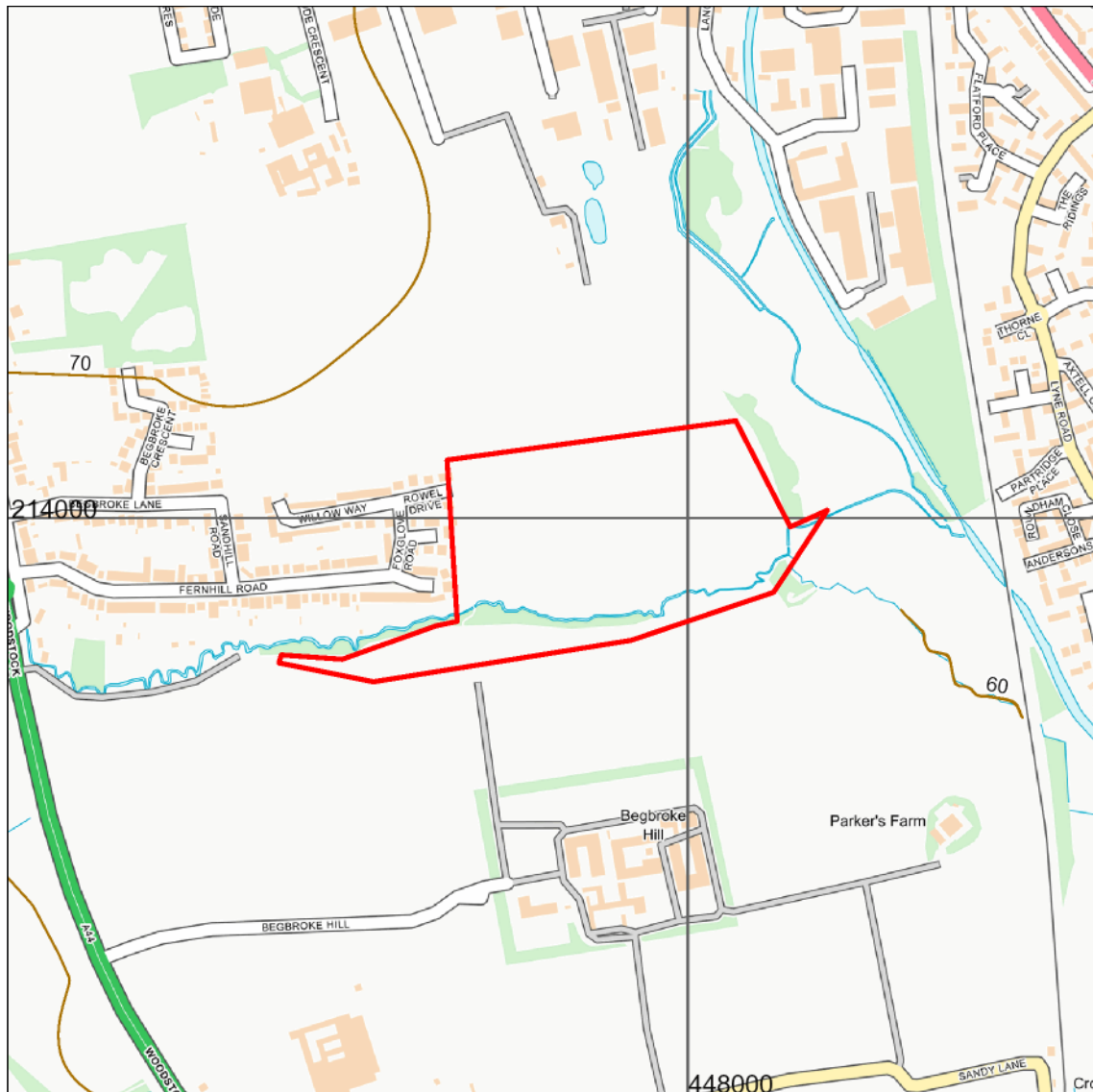
Advisory report on the requirement for radon protective measures in new buildings, conversions and extensions to existing buildings. The report also indicates whether a site is located within a radon Affected Area

Report Id: *BGS\_331991/43780*

Client reference: **Begbroke**



## Search location



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**Search location indicated in red**

*This report describes a site located at National Grid Reference 447815, 213954. Note that for sites of irregular shape, this point may lie outside the site boundary. Where the client has submitted a site plan the assessment will be based on the area given.*

## Radon Report: UK

When extensions are made to existing buildings in high radon areas, or new buildings are constructed in these areas, the Building Regulations for England, Wales, Scotland and Northern Ireland require that protective measures are taken against radon entering the building.

This report provides information on whether radon protective measures are required. Depending on the probability of buildings having high radon levels, the Regulations may require either:

1. No protective measures
2. Basic protective measures
3. Full protective measures

This is an advisory report on the requirement for radon protective measures in new buildings, conversions and extensions. The report also indicates whether a site is located within a radon Affected Area

### Requirement for radon protective measures

The determination below follows advice in *BR211 Radon: Guidance on protective measures for new buildings (2015 edition)*, which also provides guidance on what to do if the result indicates that protective measures are required.

**Is the property in an area where radon protective measures are required for new buildings or extensions to existing ones as described in publication BR211 (2015 edition) Radon: Guidance on protective measures for new buildings?**

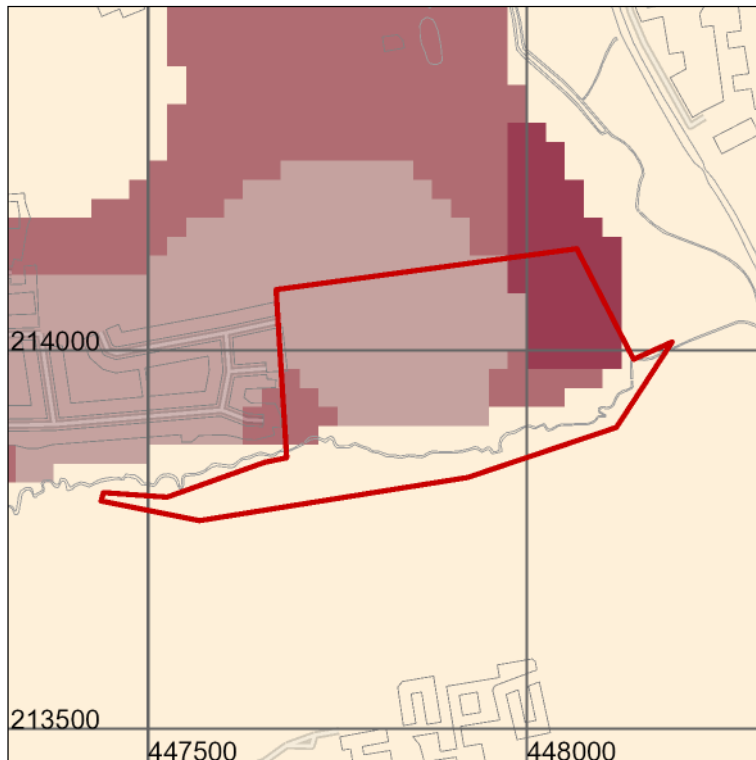
**FULL RADON PROTECTIVE MEASURES ARE REQUIRED FOR THE REPORT AREA.**

More details of the protective measures required are available in *BR211 Radon: Guidance on protective measures for new buildings (2015 Edition)*. Additional information and guidance is available from the Building Research Establishment website (<http://www.bre.co.uk/radon/>).

Whether or not the radon level in a building is above or below the radon Action Level can only be established by having the building tested. The UKHSA provides a radon testing service which can be accessed at [www.ukradon.org](http://www.ukradon.org) or by telephone (01235 822622).

If you require further information or guidance, you should contact your local authority building control officer or approved inspector.

## Radon Affected Area



% Homes estimated to be at or above the action level
0-1%
1-3%
3-5%
5-10%
10-30%
30-100%

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 Scale: 1:10 000 (1cm = 100 m)  
 Search area indicated in red

**Is the property in a radon Affected Area as defined by the UK Health Security Agency (UKHSA) and if so what percentage of homes are estimated to be at or above the Action Level? YES**

### Additional Information

**THE PROPERTY IS IN A RADON AFFECTED AREA WHERE 10 TO 30% OF HOMES ARE ESTIMATED TO BE AT OR ABOVE THE ACTION LEVEL.**

The UKHSA recommends a radon 'Action Level' of 200 Becquerels per cubic metre of air ( $\text{Bq m}^{-3}$ ) for the annual average of the radon gas concentration in a home. Where 1% or more of homes are estimated to be at or above the Action Level the area should be regarded as a radon Affected Area.

This report informs you whether the property is in a radon Affected Area and the percentage of homes that are estimated to be at or above the radon Action Level at this location. Being in an Affected Area does not necessarily mean there is a high radon level within the property; the only way to determine the radon level is to carry out a radon measurement.



The UKHSA advises that radon gas should be measured in all properties within radon Affected Areas and that homes with radon levels at or above the Action Level (200 Bq m<sup>-3</sup>) should be remediated. Householders with levels between the Target Level (100 Bq m<sup>-3</sup>) and Action Level should seriously consider reducing their radon level, especially if they are at greater risk, such as if they are current or ex smokers. Whether or not a home is in fact above or below the Action Level or Target Level can only be established by having the building tested. The UKHSA provides a validated radon testing service which can be accessed at [www.ukradon.org](http://www.ukradon.org).

The information in this report provides an answer to one of the standard legal enquiries on house purchase in England and Wales, known as Law Society CON29 Enquiries of the Local Authority (2016); 3.14 Radon Gas: Do records indicate that the property is in a “Radon Affected Area” as identified by the UKHSA. The data can also be used to advise house buyers and sellers in Scotland and Northern Ireland.

If you are buying a new build property in a Radon Affected Area, you should ask the builder whether radon protective measures were incorporated in the construction of the property.

If you are buying a currently occupied property in a radon Affected Area, you should ask the present owner whether radon levels have been measured in the property. If they have, ask whether the results were at or above the radon Action Level and if so, whether remedial measures were installed, radon levels were re-tested, and if the results of re-testing confirmed the effectiveness of the measures.

Further information on radon is available from the UKHSA at [www.ukradon.org](http://www.ukradon.org).

## What is radon?

Radon is a naturally occurring radioactive gas, which is produced by the radioactive decay of radium which, in turn, is derived from the radioactive decay of uranium. Uranium is found in small quantities in all soils and rocks, although the amount varies from place to place. Radon released from rocks and soils is quickly diluted in the atmosphere. Concentrations in the open air are normally very low and do not present a hazard. Radon that enters enclosed spaces such as some buildings (particularly basements), caves, mines, and tunnels may reach high concentrations in some circumstances. The construction method and degree of ventilation will influence radon levels in individual buildings. A person's exposure to radon will also vary according to how particular buildings and spaces are used.

Inhalation of the radioactive decay products of radon gas increases the chance of developing lung cancer. If individuals are exposed to high concentrations for significant periods of time, there may be cause for concern. In order to limit the risk to individuals, the Government has adopted an Action Level for radon in homes of 200 becquerels per cubic metre ( $\text{Bq m}^{-3}$ ). The Government advises householders that, where the radon level is at or above the Action Level, measures should be taken to reduce the concentration.

## Radon in workplaces

The Ionising Radiation Regulations 2017 require employers to take action when radon is present above a defined level in the workplace. Advice may be obtained from your local Health and Safety Executive Area Office or the Environmental Health Department of your local authority. The BRE publishes a guide (BR293): **Radon in the workplace**. BRE publications may be obtained from the BRE Bookshop, Tel: 01923 664262, email: [bookshop@bre.co.uk](mailto:bookshop@bre.co.uk) website: [www.brebookshop.com](http://www.brebookshop.com)

## Contact Details

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### ***Edinburgh Office***

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## Terms and Conditions

### General Terms & Conditions

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- Geological observations and interpretations are made according to the prevailing understanding of the subject at the time. The quality of such observations and interpretations may be affected by the availability of new data, by subsequent advances in knowledge, improved methods of interpretation, and better access to sampling locations.
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- The topography shown on any map extracts is based on the latest OS mapping and is not necessarily the same as that used in the original compilation of the BGS geological map, and to which the geological linework available at that time was fitted.
- Note that for some sites, the latest available records may be historical in nature, and while every effort is made to place the analysis in a modern geological context, it is possible in some cases that the detailed geology at a site may differ from that described.

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Report issued by  
**BGS Enquiry Service**

Kate Hayward  
Hydrock  
Over Court Barns  
Over Lane  
Almondsbury  
Bristol  
BS32 4DF

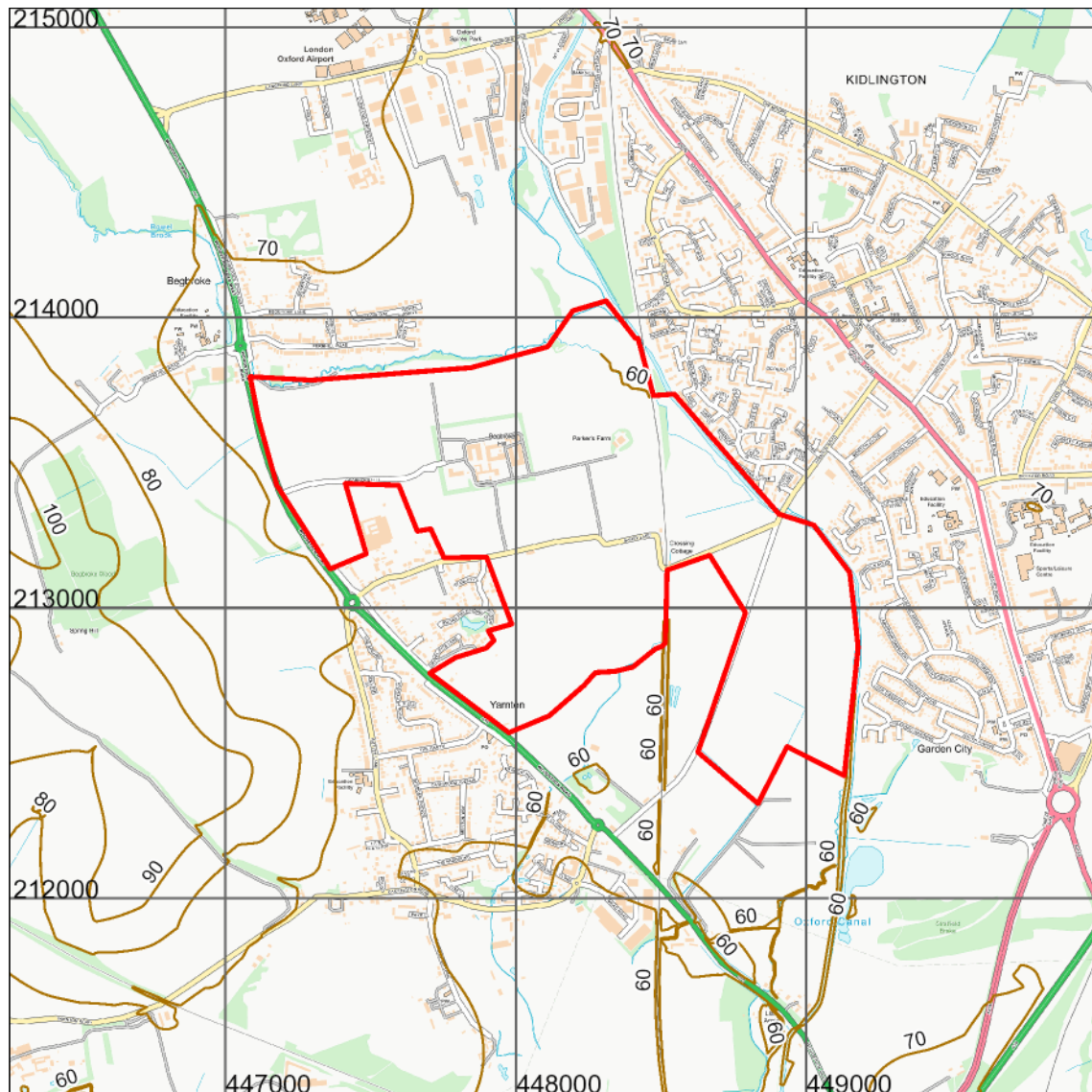
## Radon Report

Advisory report on the requirement for radon protective measures in new buildings, conversions and extensions to existing buildings. The report also indicates whether a site is located within a radon Affected Area

Report Id: *BGS\_331991/43779*

Client reference: **Begbroke**

## Search location



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**Search location indicated in red**

*This report describes a site located at National Grid Reference 448132, 213192.  
Note that for sites of irregular shape, this point may lie outside the site boundary.  
Where the client has submitted a site plan the assessment will be based on the area given.*



## Radon Report: UK

When extensions are made to existing buildings in high radon areas, or new buildings are constructed in these areas, the Building Regulations for England, Wales, Scotland and Northern Ireland require that protective measures are taken against radon entering the building.

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2. Basic protective measures
3. Full protective measures

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The determination below follows advice in *BR211 Radon: Guidance on protective measures for new buildings (2015 edition)*, which also provides guidance on what to do if the result indicates that protective measures are required.

**Is the property in an area where radon protective measures are required for new buildings or extensions to existing ones as described in publication BR211 (2015 edition) Radon: Guidance on protective measures for new buildings?**

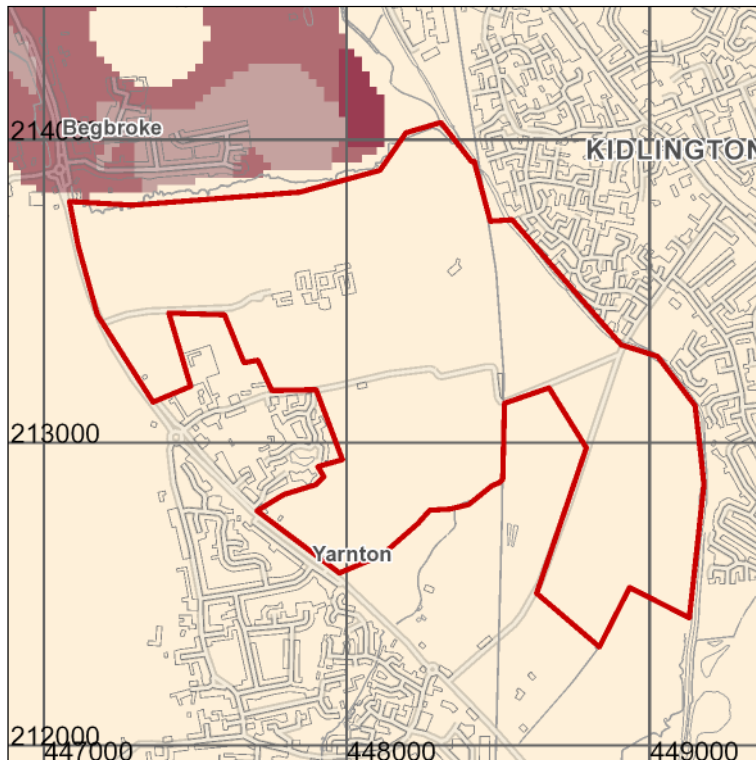
**NO RADON PROTECTIVE MEASURES ARE REQUIRED FOR THE REPORT AREA.**

More details of the protective measures required are available in *BR211 Radon: Guidance on protective measures for new buildings (2015 Edition)*. Additional information and guidance is available from the Building Research Establishment website (<http://www.bre.co.uk/radon/>).

Whether or not the radon level in a building is above or below the radon Action Level can only be established by having the building tested. The UKHSA provides a radon testing service which can be accessed at [www.ukradon.org](http://www.ukradon.org) or by telephone (01235 822622).

If you require further information or guidance, you should contact your local authority building control officer or approved inspector.

## Radon Affected Area



% Homes estimated to be at or above the action level
0-1%
1-3%
3-5%
5-10%
10-30%
30-100%

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 Scale: 1:25 000 (1cm = 250 m)  
 Search area indicated in red

**Is the property in a radon Affected Area as defined by the UK Health Security Agency (UKHSA) and if so what percentage of homes are estimated to be at or above the Action Level? **NO****

### Additional Information

**THE PROPERTY IS IN AN AREA WHERE LESS THAN 1% OF HOMES ARE ESTIMATED TO BE AT OR ABOVE THE ACTION LEVEL. THE PROPERTY IS NOT IN A RADON AFFECTED AREA.**

The UKHSA recommends a radon 'Action Level' of 200 Becquerels per cubic metre of air ( $\text{Bq m}^{-3}$ ) for the annual average of the radon gas concentration in a home. Where 1% or more of homes are estimated to be at or above the Action Level the area should be regarded as a radon Affected Area.

This report informs you whether the property is in a radon Affected Area and the percentage of homes that are estimated to be at or above the radon Action Level at this location. Being in an Affected Area does not necessarily mean there is a high radon level within the property; the only way to determine the radon level is to carry out a radon measurement.

The UKHSA advises that radon gas should be measured in all properties within radon Affected Areas and that homes with radon levels at or above the Action Level (200 Bq m<sup>-3</sup>) should be remediated. Householders with levels between the Target Level (100 Bq m<sup>-3</sup>) and Action Level should seriously consider reducing their radon level, especially if they are at greater risk, such as if they are current or ex smokers. Whether or not a home is in fact above or below the Action Level or Target Level can only be established by having the building tested. The UKHSA provides a validated radon testing service which can be accessed at [www.ukradon.org](http://www.ukradon.org).

The information in this report provides an answer to one of the standard legal enquiries on house purchase in England and Wales, known as Law Society CON29 Enquiries of the Local Authority (2016); 3.14 Radon Gas: Do records indicate that the property is in a “Radon Affected Area” as identified by the UKHSA. The data can also be used to advise house buyers and sellers in Scotland and Northern Ireland.

If you are buying a new build property in a Radon Affected Area, you should ask the builder whether radon protective measures were incorporated in the construction of the property.

If you are buying a currently occupied property in a radon Affected Area, you should ask the present owner whether radon levels have been measured in the property. If they have, ask whether the results were at or above the radon Action Level and if so, whether remedial measures were installed, radon levels were re-tested, and if the results of re-testing confirmed the effectiveness of the measures.

Further information on radon is available from the UKHSA at [www.ukradon.org](http://www.ukradon.org).



## What is radon?

Radon is a naturally occurring radioactive gas, which is produced by the radioactive decay of radium which, in turn, is derived from the radioactive decay of uranium. Uranium is found in small quantities in all soils and rocks, although the amount varies from place to place. Radon released from rocks and soils is quickly diluted in the atmosphere. Concentrations in the open air are normally very low and do not present a hazard. Radon that enters enclosed spaces such as some buildings (particularly basements), caves, mines, and tunnels may reach high concentrations in some circumstances. The construction method and degree of ventilation will influence radon levels in individual buildings. A person's exposure to radon will also vary according to how particular buildings and spaces are used.

Inhalation of the radioactive decay products of radon gas increases the chance of developing lung cancer. If individuals are exposed to high concentrations for significant periods of time, there may be cause for concern. In order to limit the risk to individuals, the Government has adopted an Action Level for radon in homes of 200 becquerels per cubic metre ( $\text{Bq m}^{-3}$ ). The Government advises householders that, where the radon level is at or above the Action Level, measures should be taken to reduce the concentration.

## Radon in workplaces

The Ionising Radiation Regulations 2017 require employers to take action when radon is present above a defined level in the workplace. Advice may be obtained from your local Health and Safety Executive Area Office or the Environmental Health Department of your local authority. The BRE publishes a guide (BR293): **Radon in the workplace**. BRE publications may be obtained from the BRE Bookshop, Tel: 01923 664262, email: [bookshop@bre.co.uk](mailto:bookshop@bre.co.uk) website: [www.brebookshop.com](http://www.brebookshop.com)

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## *Reports prepared by others*

*White Young Green Limited February 2018. 'Rushy Meadows SSSI-Hydrological & Hydrogeological Desk Top Study (DTS)'. Ref: A106710, undertaken for Cherwell District Council.*

*Jubb Consulting Engineers Limited December 2019. 'Land at Begbroke, Begbroke. Ground Conditions Assessment Report', Ref: 18182-DTS-011, undertaken for Begbroke Tripartite, Oxfordshire*

*Jubb Consulting Engineers Limited December 2019. 'Land at Begbroke, Begbroke. Ground Conditions Assessment Report', Ref: 18182-GCA-1 undertaken for Begbroke Tripartite, Oxfordshire.*

The above documents are not included to reduce the file size but available on request.

*White Young Green Limited February 2018. 'Rushy Meadows SSSI-  
Hydrological & Hydrogeological Desk Top Study (DTS)'. Ref: A106710*



Cherwell District Council

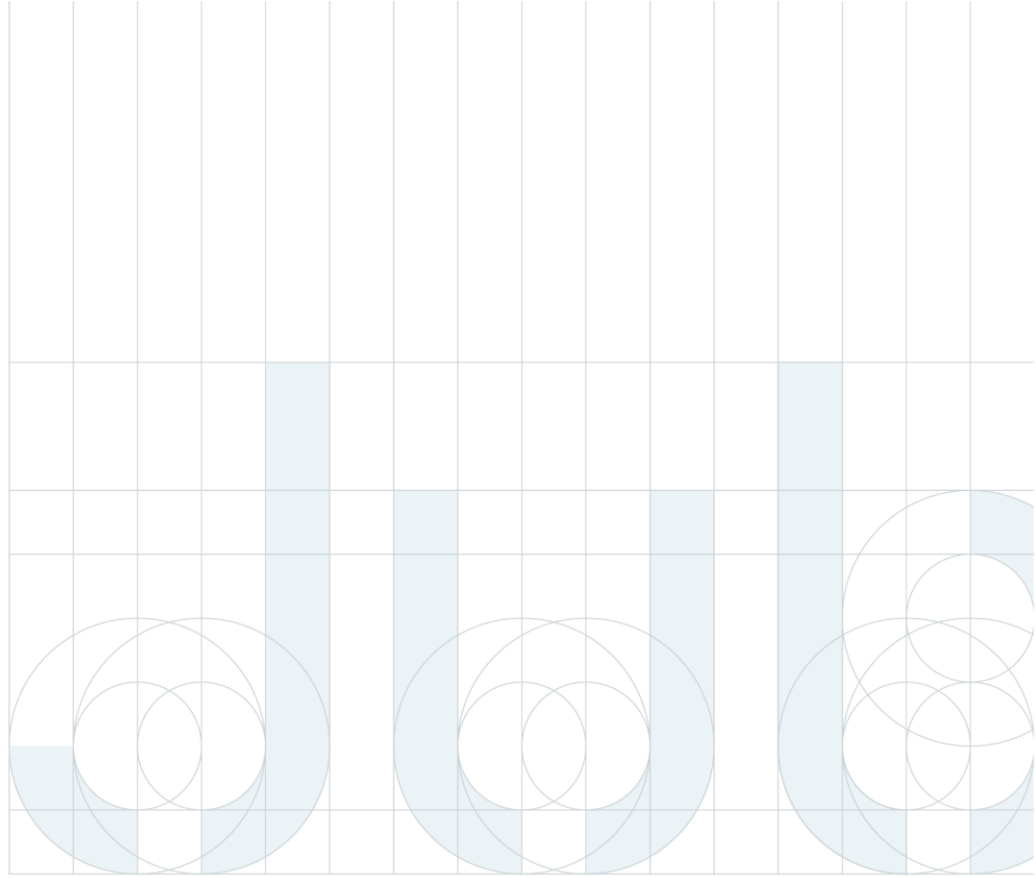
**Rushy Meadows SSSI – Hydrological & Hydrogeological Desk Top Study (DTS)**

February 2018





Jubb Consulting Engineers Limited December 2019. 'Land at Begbroke, Begbroke. Ground Conditions Assessment Report', Ref: 18182-DTS-011.



# Land at Begbroke, Oxfordshire



*Jubb Consulting Engineers Limited December 2019. 'Land at Begbroke, Begbroke. Ground Conditions Assessment Report', Ref: 18182-GCA-1.*





# Begbroke Tripartite, Oxfordshire



# Appendix C Exploratory Hole Logs and Photographs

*Exploratory Hole Logs*





Method: Cable Percussion	Date(s): 18/08/2021	Logged By: MA	Drilled By: PJ Drilling
Client: Oxford University Development	Co-ords: 448092.91, 213195.88	Checked By: NT	Flush:
Hydrock Project No: C-19114-C	Ground Level: 67.66m OD		Scale: 1:50

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Depth (m)	Type	Results							
0.50	B			Dark brown silty slightly gravelly SAND with high root content. Gravel is sub-angular to sub-rounded fine and medium flint and sandstone. (TOPSOIL - MADE GROUND)	0.30	(0.30)	67.36		
0.50	ES			Firm yellowish greyish brown slightly sandy CLAY with rare gravels of sub-angular fine coal. (MADE GROUND - GENERAL)	0.60	(0.30)	67.06		
1.00	D			Greyish brown silty gravelly SAND. Gravel sized fragments of medium and coarse angular concrete and brick with frequent plastic bottles, glass bottles, plastic wrappers and scrap metal. (LANDFILL - MADE GROUND)	1				
1.50	ES								
2.00	D				2	(2.70)			
2.50	ES								
3.00	D				3				
3.50	B		☒	Yellowish brown sandy sub-angular to sub-rounded fine to coarse GRAVEL of flint and sandstone. (RIVER TERRACE DEPOSITS)	3.30		64.36		
3.50	ES					(0.70)			
4.00	B				4		63.66		
4.00	D			Firm very thinly laminated grey sandy CLAY with rare lithorelics of sub-rounded fine mudstone. (OXFORD CLAY FORMATION)					
4.00	ES								
5.00	D				5	(2.20)			
6.00	D				6				
6.20					6.20		61.46		
7.00	D			Firm very thinly laminated grey sandy CLAY with rare lithorelics of sub-rounded fine mudstone. (KELLAWAYS SAND MEMBER)  ... Between 7.00m and 7.50m bgl: Soft.	7	(1.30)			
7.50					7.50		60.16		
8.00	D			Firm very thinly laminated grey sandy CLAY with rare lithorelics of sub-rounded fine mudstone. (KELLAWAYS CLAY MEMBER)	8				
9.00	D				9	(2.50)			
10.00	D				10		57.66		

Progress and Observations								Chiselling			General Remarks:	
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)		Duration (HH:MM)
	18/08	0000	3.30	3.30	200							1) Inspection pit hand dug to 1.20m bgl. 2) For clean sampling the borehole was drilled with 8 inch casing to the base of the landfill at 3.30m. Backfilled with 1m of bentonite pellets and left to prove for 1 hour before continuing drilling with 6 inch to 10.00m depth. 4) Gas and groundwater monitoring well installed to 10.00m bgl with response zone between 4.00m and 10.00m. 5) Landfill deposits have a putrid odour throughout.
	18/08	1200	10.00	4.00	150							



Method: Cable Percussion	Date(s): 19/08/2021	Logged By: MA	Drilled By: PJ Drilling
Client: Oxford University Development	Co-ords: 448244.40, 213114.66	Checked By: NT	Flush:
Hydrock Project No: C-19114-C	Ground Level: 66.47m OD		Scale: 1:50

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Depth (m)	Type	Results							
0.50	B			Orangish brown silty gravelly SAND. Gravel is angular to sub-rounded fine to coarse flint and sandstone. With gravel sized fragments of angular fine to coarse brick and concrete and frequent fabric, rags and pottery. (TOPSOIL - MADE GROUND)	0.40	(0.40)	66.07		
0.50	ES			Dark reddish brown slightly clayey gravelly SAND. Gravel sized fragments of angular fine to coarse brick and concrete with frequent glass, timber, rubber tyres and plastic with putrid odour. (LANDFILL - MADE GROUND)					
1.00	D				1				
1.50	ES					(2.60)			
2.00	D				2				
2.50	ES								
3.00	D				3		63.47		
3.00	ES			MADE GROUND consisting of black plastic wrapping, timber and glass with strong putrid odour. (LANDFILL - MADE GROUND)	3.10	(0.10)	63.37		
3.10	B								
3.50	ES			Yellowish brown sandy sub-angular to sub-rounded fine to coarse GRAVEL of flint and sandstone. (RIVER TERRACE DEPOSITS)		(0.90)			
4.00	B				4		62.47		
4.00	D			Firm thinly laminated greyish brown CLAY with rare gravels. Gravel is sub-rounded fine and medium mudstone. (OXFORD CLAY FORMATION)	4.10	(0.10)	62.37		
4.00	ES			Firm very thinly laminated sandy CLAY. (OXFORD CLAY FORMATION)					
5.00	D				5	(2.10)			
6.00	D				6				
7.00	D			Firm very thinly laminated sandy CLAY. (KELLAWAYS SAND MEMBER)	6.20		60.27		
7.00	D			... Between 7.00m and 7.50m bgl: Soft with rare lithorelics of sub-rounded fine mudstone.	7	(1.30)			
8.00	D			Firm very thinly laminated sandy CLAY. (KELLAWAYS CLAY MEMBER)	7.50		58.97		
9.00	D				9	(2.50)			
10.00	D				10		56.47		

Progress and Observations								Chiselling			General Remarks:	
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)		Duration (HH:MM)
	19/08	0000	3.10	3.10	200							1) Inspection pit dug to 1.20m bgl. 2) For clean sampling the borehole was drilled with 8 inch casing to the base of the landfill at 3.10m. Backfilled with 1m of bentonite pellets and left to prove for 1 hour before continuing drilling with 6 inch to 10.00m depth. 4) Gas and groundwater monitoring well installed to 10.00m bgl with response zone between 4.00m and 10.00m. 5) Landfill deposits have a putrid odour throughout.
	19/08	1200	10.00	4.00	150							



Project: Begbroke

Borehole No  
**BH03**  
Page No. 1 of 1

Method: Cable Percussion	Date(s): 18/08/2021	Logged By: MA	Drilled By: PJ Drilling
Client: Oxford University Development	Co-ords: 448154.72, 213034.49	Checked By: NT	Flush:
Hydrock Project No: C-19114-C	Ground Level: 67.09m OD		Scale: 1:50

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Depth (m)	Type	Results							
0.50	B			Orangish brown silty gravelly SAND. Gravel is angular to sub-rounded fine to coarse flint and sandstone. With gravel sized fragments of angular medium and coarse brick and concrete and frequent fabric, rags and pottery. (TOPSOIL - MADE GROUND)	0.50	(0.50)	66.59		
1.00 1.00	D ES			Dark reddish brown slightly clayey gravelly SAND. Gravel sized fragments of angular fine to coarse brick and concrete with frequent glass, timber, rubber tyres and plastic with putrid odour. (LANDFILL - MADE GROUND)	1				
2.00 2.00	D ES				2	(3.40)			
2.60	B								
3.00 3.00	D ES				3				
4.00 4.00	D ES			Yellowish brown sandy sub-angular to sub-rounded fine to coarse GRAVEL of flint and sandstone. (RIVER TERRACE DEPOSITS)	4	(1.00)			
5.00 5.00	B D			Firm thinly laminated greyish brown CLAY with rare gravels. Gravel is sub-rounded fine and medium mudstone. (OXFORD CLAY FORMATION) Firm very thinly laminated sandy CLAY. (OXFORD CLAY FORMATION)	5	(0.10)	62.09		
6.00	D				6	(2.00)			
7.00	D			Firm very thinly laminated sandy CLAY. (KELLAWAYS SAND MEMBER)	7		60.09		
8.00	D			... From 8.00m to 10.00m bgl: Becoming very soft with rare fine lithorelics of sub-rounded fine mudstone.	8	(1.40)			
9.00	D			Firm very thinly laminated sandy CLAY. (KELLAWAYS CLAY MEMBER)	9		58.69		
10.00	D			End of Borehole at 10.00m	10		57.09		

Progress and Observations								Chiselling			General Remarks:	
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)		Duration (HH:MM)
	18/08 18/08	1330 1700	3.90 10.00	3.90 5.00	200 150							1) Inspection pit hand dug to 1.20m bgl. 2) For clean sampling the borehole was drilled with 8 inch casing to the base of the landfill at 3.90m. Backfilled with 1m of bentonite pellets and left to prove for 1 hour before continuing drilling with 6 inch to 10.00m depth. 4) Gas and groundwater monitoring well installed to 10.00m bgl with response zone between 5.00m and 10.00m. 5) Landfill deposits have a putrid odour throughout.





Method: Cable Percussion	Date(s): 30/08/2022	Logged By: NT	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447940.36, 213216.23	Checked By: CV	Flush: N/A
Hydrock Project No: C-19114-C	Ground Level: 68.06m OD		Scale: 1:50

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Depth (m)	Type	Results							
0.10 - 1.00	B			Brown slightly gravelly SAND with frequent rootlets. Gravel is subangular to subrounded fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.35	(0.35)	67.71		
0.20	ES				Loose brown gravelly SAND. Gravel is subangular to subrounded, fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)		(0.95)		
0.60	ES				1				
1.20	SPT	N=4 (1,1,1,1,1,1)			1.30		66.76		
1.20	D			Very dense orange brown gravelly slightly clayey SAND. Gravel is subangular to rounded, fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)		(0.90)			
1.20 - 1.70	B					2			
2.00	SPT	50/235mm (5,5,12,13,18,7)			2.20		65.86		
2.00	D			Very dense orange brown gravelly slightly clayey SAND. Gravel is subangular to rounded, fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)		(1.80)			
2.20 - 3.00	B					3			
3.00	SPT	50/135mm (15,10,35,15)			3				
3.00	D			Dense to very dense brown sandy slightly clayey subangular to rounded, fine to coarse flint and limestone GRAVEL. (RIVER TERRACE DEPOSITS)		(1.90)			
3.00 - 3.30	B					4		64.06	
4.00	SPT	N=43 (10,12,11,9,9,14)			4				
4.00	D			Firm light grey mottled orange and grey sandy CLAY. (KELLAWAYS SAND MEMBER)		(0.90)			
4.00 - 4.45	B					5			
5.00	SPT	50/235mm (11,14,10,12,14,14)			5				
5.00	D			Stiff grey sandy CLAY. (KELLAWAYS SAND MEMBER)		(0.20)	61.26		
5.00 - 5.45	B					6		62.16	
6.00	D			Very stiff grey thinly laminated CLAY with rare shell fragments. (KELLAWAYS CLAY MEMBER)		(0.20)	61.06		
6.50	SPT	60/235mm (7,11,14,14,16,16)				6.80			
6.50 - 6.88	D			Stiff grey sandy CLAY. (KELLAWAYS SAND MEMBER)		(3.10)			
7.00 - 8.00	B					7			
8.00	SPT	N=34 (5,5,7,7,9,11)			8				
8.00 - 8.45	D				9				
9.00	D				9				
9.50 - 9.95	U				10				

Progress and Observations										Chiselling			General Remarks: 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater strikes masked by water added within gravels. 3) Borehole completed at 10.10m bgl. 4) Gas and groundwater monitoring pipe installed to 5.00m bgl. Response zone between 1.00m bgl and 5.00m bgl.
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)		
Dando 2000	30/08	1000	10.10	7.00	150		N/A	N/A					



Project: Begbroke

Borehole No

BH201

Page No. 2 of 2

Method: Cable Percussion	Date(s): 30/08/2022	Logged By: NT	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447940.36, 213216.23	Checked By: CV	Flush: N/A
Hydrock Project No: C-19114-C	Ground Level: 68.06m OD		Scale: 1:50

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Depth (m)	Type	Results							
10.10	D			Very stiff grey thinly laminated CLAY with rare shell fragments. (KELLAWAYS CLAY MEMBER) End of Borehole at 10.10m	10.10		57.96		
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

Progress and Observations									Chiselling			General Remarks: 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater strikes masked by water added within gravels. 3) Borehole completed at 10.10m bgl. 4) Gas and groundwater monitoring pipe installed to 5.00m bgl. Response zone between 1.00m bgl and 5.00m bgl.
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)	







Method: Cable Percussion	Date(s): 02/09/2022	Logged By: NT	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448029.01, 212856.90	Checked By: CV	Flush: N/A
Hydrock Project No: C-19114-C	Ground Level: 63.35m OD		Scale: 1:50

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Depth (m)	Type	Results							
0.00 - 1.20	B			Light brown slightly gravelly slightly clayey SAND with frequent rootlets. Gravel is subangular to angular fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	63.05		
0.10	ES								
0.50	ES			Light brown slightly gravelly slightly clayey SAND. Gravel is subangular to subrounded, fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)		(0.70)			
1.20	SPT	N=10 (2,1,2,2,3,3)		Firm orange brown mottled iron stained slightly gravelly sandy CLAY. Gravel is subangular to subrounded, fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	1.00		62.35		
1.20 - 1.65	D					(1.00)			
2.00	SPT	N=5 (1,1,1,1,2,1)		Soft orange sandy CLAY with rare subrounded to angular, fine to coarse flint GRAVEL. (RIVER TERRACE DEPOSITS)	2.00		61.35		
2.00 - 2.45	D								
3.00	SPT	N=5 (1,1,0,1,1,3)							
3.00 - 3.45	D								
3.00 - 4.00	B								
4.00	SPT	N=7 (2,0,1,1,1,4)		Orange slightly gravelly slightly clayey SAND. Gravel is subrounded to rounded, fine to coarse of flint. (RIVER TERRACE DEPOSITS)	4.00		59.35		
4.00 - 4.45	D			Orange sandy slightly clayey subangular to subrounded, fine to coarse, flint and limestone GRAVEL. (RIVER TERRACE DEPOSITS)	4.20	(0.20)	59.15		
4.30 - 5.00	B								
5.00	SPT	50/180mm (3,6,17,23,10)							
5.00	D								
5.30 - 6.50	B			Bluish grey fine clayey SAND. (KELLAWAYS SAND MEMBER)	5.30		58.05		
6.00	D					(1.40)			
6.50	SPT	N=24 (3,3,3,6,7,8)		Stiff bluish grey CLAY with occasional shell fragments. (KELLAWAYS CLAY MEMBER)	6.70		56.65		
6.50 - 6.95	D								
6.70 - 8.00	B								
8.00	D			Very stiff grey CLAY with occasional shell fragments. (KELLAWAYS CLAY MEMBER)	8.00		55.35		
8.00 - 8.45	U								
8.60	D								
9.00	D								
						(2.45)			

Progress and Observations								Chiselling			General Remarks:	
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)		Duration (HH:MM)
Dando 2000	02/09	1000	8.20	6.00	150		N/A	N/A				1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater strikes masked by water added within gravels. 3) Borehole completed at 10.45m bgl. 4) Gas and groundwater monitoring pipe installed to 5.00m bgl. Response zone between 1.00m bgl and 5.00m bgl.



Project: Begbroke

Borehole No

BH203

Page No. 2 of 2

Method: Cable Percussion	Date(s): 02/09/2022	Logged By: NT	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448029.01, 212856.90	Checked By: CV	Flush: N/A
Hydrock Project No: C-19114-C	Ground Level: 63.35m OD		Scale: 1:50

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Depth (m)	Type	Results							
10.00	SPT	N=31 (5,5,5,7,9,10)		Very stiff grey CLAY with occasional shell fragments. (KELLAWAYS CLAY MEMBER)					
10.00 - 10.45	D				End of Borehole at 10.45m	10.45		52.90	
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

Progress and Observations									Chiselling			General Remarks: 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater strikes masked by water added within gravels. 3) Borehole completed at 10.45m bgl. 4) Gas and groundwater monitoring pipe installed to 5.00m bgl. Response zone between 1.00m bgl and 5.00m bgl.
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)	



Method: Cable Percussion	Date(s): 03/08/2022	Logged By: NT	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448355.95, 212958.07	Checked By: CV	Flush: N/A
Hydrock Project No: C-19114-C	Ground Level: 62.31m OD		Scale: 1:50

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Depth (m)	Type	Results							
0.00 - 1.00	B			Light brown slightly gravelly slightly clayey SAND with frequent rootlets. Gravel is subangular to angular fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	62.01		
0.20	ES				Firm light brown slightly sandy slightly gravelly CLAY. Gravel is subrounded to subangular, fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)				
1.20	SPT	N=7 (3,1,1,2,2,2)		Firm orange brown and iron stained sandy CLAY with rare subrounded, fine to coarse flint gravel. (RIVER TERRACE DEPOSITS)	1.20		61.11		
1.20	D								
1.40 - 2.00	B			Soft orange with grey partitions sandy CLAY. (RIVER TERRACE DEPOSITS)	2.00		60.31		
2.00	SPT	N=9 (0,1,1,2,3,3)							
2.00 - 2.45	D			Soft orange slightly gravelly sandy CLAY. Gravel is subrounded to subangular, fine to coarse of flint. (RIVER TERRACE DEPOSITS)	2.30		60.01		
2.30 - 3.20	B								
3.00	SPT	N=5 (0,1,1,1,1,2)		Light brown sandy rounded to subangular, fine to coarse, limestone, sandstone, flint and quartz GRAVEL. (RIVER TERRACE DEPOSITS)	3.20		59.11		
3.00	D								
3.20 - 4.00	B			Soft bluish grey sandy CLAY with black specks and mild organic odour. (RIVER TERRACE DEPOSITS)	4.70		57.61		
4.00	SPT	N=11 (6,5,6,2,1,2)							
4.00	D			Light grey very weak SILTSTONE. (KELLAWAYS SAND MEMBER)	4.90		57.41		
4.00 - 4.45	B								
4.70 - 4.90	D			End of Borehole at 5.50m	5.50		56.81		
5.00	SPT	50/30mm (19,6,50)							
5.00 - 5.12	D								
5.20	SPT	50/225mm (25,18,13,19)							
5.20 - 5.50	D								

Progress and Observations								Chiselling			General Remarks: 1) Inspection pit dug to 1.20m bgl. 2) Groundwater strikes masked by water added within gravels. 3) Borehole terminated at 5.50m bgl on 2nd SPT refusal after 30 minutes of chiselling. 4) Gas and groundwater monitoring well installed to 5.00m bgl. Response zone between 1.00m bgl and 5.00m bgl.
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	
Dando 2000	31/08	0000	5.20	4.70	150		N/A	N/A	5.00	5.20	00:30





Method: Cable Percussion	Date(s): 01/09/2022	Logged By: NT	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447953.42, 212626.30	Checked By: CV	Flush: N/A
Hydrock Project No: C-19114-C	Ground Level: 60.78m OD		Scale: 1:50

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Depth (m)	Type	Results							
0.00 - 0.30	B			Firm dark brown slightly gravelly sandy CLAY with frequent roots. Gravel is fine to subangular to subrounded, fine to coarse of flint, limestone and rare brick. (AGRICULTURALLY DISTURBED TOPSOIL) Soft light orange brown mottled grey slightly gravelly sandy CLAY with rare purple oraganic material. Gravel is subrounded to angular, fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	0.25	(0.25)	60.53		
0.10	ES								
0.30 - 1.20	B								
0.40	ES								
1.20	SPT	N=3 (0,0,1,0,1,1)							
1.20 - 1.65	D								
2.00	SPT	N=19 (3,5,5,4,5,5)							
2.00	D								
2.00 - 2.45	B								
3.00	SPT	N=26 (2,1,3,4,7,12)			... From 3.00m bgl: Very sandy. Bluish grey slightly clayey SAND. (KELLAWAYS SAND MEMBER)	3.10		57.68	
3.00	D								
3.10 - 4.00	B								
4.00	SPT	N=22 (5,6,6,6,5,5)		4.50		56.28			
4.00 - 4.45	D								
4.50 - 5.00	B								
5.00	SPT	N=21 (3,4,4,5,5,7)		8.00		52.78			
5.00 - 5.45	D								
6.00	D								
6.50 - 6.95	U								
7.10	D								
8.00	SPT	50/10mm (25,50)	Light grey very weak LIMESTONE (CORNBRAsh LIMESTONE FORMATION) End of Borehole at 8.20m	8.20	(0.20)	52.58			
8.00 - 8.08	D								
8.20	SPT	50/0mm ( )							

Progress and Observations								Chiselling			General Remarks: 1) Inspection pit dug to 1.20m bgl. 2) Groundwater strikes masked by water added within gravels. 3) Borehole terminated at 8.20m bgl on 2nd SPT refusal after 30 minutes of chiselling. 4) Gas and groundwater monitoring well installed to 4.00m bgl. Response zone between 1.00m bgl and 4.00m bgl.
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	
Dando 2000	01/09	1000	8.20	5.00	150		N/A	N/A	8.00	8.20	00:30



Project: Begbroke

Borehole No

CP301

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Method: Cable Percussion	Date(s): 01/02/2023	Logged By: CR	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447234.97, 213429.37	Checked By: MA	Flush: N/A
Hydrock Project No: C-19114-C	Ground Level: 67.69m OD		Scale: 1:50

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Depth (m)	Type	Results							
				Brown slightly clayey SAND with rare rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	67.39		
				Orangish brown slightly gravelly clayey SAND. Gravel is sub-angular to rounded fine to medium of flint and ironstone. (RIVER TERRACE DEPOSITS)					
				Orangish brown SAND and GRAVEL. Gravel is sub-angular to rounded fine to coarse of flint limestone and occasional ironstone. (RIVER TERRACE DEPOSITS) ... From 3.50m bgl: Medium to coarse gravel sized fragments of limestone.	3.50		64.19		
				Grey medium strong LIMESTONE (CORNBURASH LIMESTONE FORMATION) ... at 4.60m bgl grey coarse gravel sized fragments of siltstone. End of Borehole at 4.80m	4.60	(0.20)	63.09		
					4.80		62.89		

Progress and Observations								Chiselling			General Remarks:	
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)		Duration (HH:MM)
Dando 2000	01/02	0900	4.80	1.00	150		N/A	N/A	4.70	4.80	00:30	1) Inspection pit hand dug to 1.20m bgl. 2) Water added at 1.20m bgl to assist drilling granular materials. 3) Hit rock at 4.60m and chiseled for 20 minutes to 4.80m bgl. 4) Gas and groundwater monitoring well installed to 4.60m bgl with response zone between 1.60m to 4.60m bgl.



Project: Begbroke

Borehole No

CP302

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Method: Cable Percussion	Date(s): 02/02/2023	Logged By: CR	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447473.19, 213220.26	Checked By: MA	Flush: N/A
Hydrock Project No: C-19114-C	Ground Level: 66.74m OD		Scale: 1:50

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Depth (m)	Type	Results							
				Brown slightly clayey SAND with occasional rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	66.34		
				Firm orangish brown sandy CLAY. (RIVER TERRACE DEPOSITS)	1	(1.10)			
				Yellowish brown SAND and GRAVEL. Gravel is sub-angular to rounded fine to medium of limestone ironstone and flint. (RIVER TERRACE DEPOSITS)	1.50		65.24		
				... From 3.20 m bgl: Occasional pockets of yellowish brown sandy gravelly CLAY.	3	(2.60)			
				Firm to stiff blue grey CLAY. (KELLAWAYS CLAY MEMBER)	4		62.64		
				End of Borehole at 5.00m	5		61.74		
					6				
					7				
					8				
					9				
					10				

Progress and Observations									Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)	
Dando 2000	01/02	1400	5.00	1.00	150		N/A	N/A				1) Inspection pit hand dug to 1.20m bgl. 2) Water added at 1.20m bgl to assist drilling in granular materials. 3) Gas and groundwater monitoring well installed to 4.00m bgl with response zone between 1.50m to 4.00m bgl.





Project: Begbroke

Borehole No

CP303

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Method: Cable Percussion	Date(s): 31/01/2023	Logged By: CR	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447879.54, 213661.41	Checked By: MA	Flush: N/A
Hydrock Project No: C-19114-C	Ground Level: 68.15m OD		Scale: 1:50

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Depth (m)	Type	Results							
				Brown slightly clayey SAND with occasional rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)	0.70	(0.70)	67.45		
				Yellowish brown SAND and GRAVEL. Gravel is sub-angular to rounded fine to medium of limestone and flint. (RIVER TERRACE DEPOSITS)	1				
				... From 3.00m bgl: Coarse gravel sized fragments of limestone.	3				
				Firm blue grey CLAY. (KELLAWAYS CLAY MEMBER)	4		64.15		
				End of Borehole at 5.00m	5.00		63.15		
					6				
					7				
					8				
					9				
					10				

Progress and Observations									Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)	
Dando 2000	31/01	0730	5.00	1.00	150		N/A	N/A				1) Inspection pit hand dug to 1.20m bgl. 2) Water added to assist drilling granular material at 1.20m bgl. 3) Gas and groundwater monitoring well installed to 4.00m bgl with response zone between 1.00m and 4.00m bgl.



Project: Begbroke

Borehole No

CP304

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Method: Cable Percussion	Date(s): 31/01/2023	Logged By: CR	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448065.30, 213497.54	Checked By: MA	Flush: N/A
Hydrock Project No: C-19114-C	Ground Level: 68.02m OD		Scale: 1:50

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Depth (m)	Type	Results							
				Brown slightly clayey SAND with occasional rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	67.72		
				Yellowish brown fine to coarse SAND and GRAVEL. Gravel is sub-angular to sub-rounded fine to medium of flint. (RIVER TERRACE DEPOSITS)					
				... From 3.60m bgl: Coarse gravel sized fragments of limestone.					
				Firm blueish grey slightly sandy CLAY. (KELLAWAYS CLAY MEMBER)	4.10		63.92		
				End of Borehole at 5.00m	5.00		63.02		

Progress and Observations									Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)	
Dando 2000	31/01	1400	5.00	1.00	150		N/A	N/A				1) Inspection pit hand dug to 1.20m bgl. 2) Water added to assist drilling gravels at 1.20m bgl. 3) Gas and groundwater monitoring well installed to 4.00m bgl with response zone between 1.00m to 4.00m bgl.



Project: Begbroke

Borehole No

CP305

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Method: Cable Percussion	Date(s): 01/02/2023	Logged By: CR	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447741.93, 213389.04	Checked By: MA	Flush: N/A
Hydrock Project No: C-19114-C	Ground Level: 67.78m OD		Scale: 1:50

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Depth (m)	Type	Results							
				Brown slightly clayey SAND, with occasional rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	67.48		
				Orangish brown slightly gravelly clayey SAND. Gravel is sub-angular to sub-rounded fine of flint. (RIVER TERRACE DEPOSITS)	1	(1.30)			
				Yellowish brown SAND and GRAVEL. Gravel is sub-angular to sub-rounded fine to medium of flint and limestone. (RIVER TERRACE DEPOSITS)	1.60		66.18		
				... From 4.00m bgl: Coarse gravel sized fragments of limestone.	4				
				Stiff blue grey thinly laminated CLAY. (KELLAWAYS CLAY MEMBER)	4.60		63.18		
				End of Borehole at 5.60m	5.60		62.18		

Progress and Observations									Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)	
Dando 2000	01/02	1630	5.00	1.00	150		N/A	N/A				1) Inspection pit hand dug to 1.20m bgl. 2) Water added at 1.20m bgl to assist with drilling in granular material. 3) Gas and groundwater monitoring well installed to 4.60m bgl with response zone between 1.60m to 4.60m bgl.




Method: Hand-dug Pit	Date(s): 06/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 449086.00, 212511.00	remained vertical throughout digging tools	Dimensions: 0.15m <input type="text"/> 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 60.12m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown clayey SAND with many rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)	0.10	(0.10)	60.02	
0.10 - 0.20	D			Brown mottled orange clayey SAND with many rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.20 - 0.30	D					(0.20)		
----- Base of Excavation at 0.30m					0.30		59.82	
1								
2								


**General Remarks:**  
 1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 06/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 449022.00, 212594.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 60.23m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown clayey SAND with many rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
					0.30		59.93	
					Base of Excavation at 0.30m			
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.


Method: Hand-dug Pit	Date(s): 06/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448900.00, 212777.00	remained vertical throughout digging tools	Dimensions: 0.15m x 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 60.46m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly clayey SAND with many rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
				Base of Excavation at 0.30m	0.30		60.16	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.




Method: Hand-dug Pit	Date(s): 06/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448890.00, 212949.00	remained vertical throughout digging tools	Dimensions: 0.15m x 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 60.74m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth mbgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly clayey SAND with many rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
				----- Base of Excavation at 0.30m	0.30		60.44	
					1			
					2			


**General Remarks:**  
 1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 06/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 449086.00, 213102.00	remained vertical throughout digging tools	Dimensions: 0.15m x 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 60.90m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly clayey SAND with many rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		60.60	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.


Method: Hand-dug Pit	Date(s): 06/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448582.00, 213221.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 61.34m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly clayey SAND with many rootlets. Rare reddish decayed rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D							
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30	(0.30)	61.04	
					1			
					2			

**General Remarks:**  
 1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Method: Hand-dug Pit	Date(s): 06/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448626.00, 213391.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 61.47m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly clayey SAND with many rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		61.17	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Project: Begbroke

Trialpit No  
**HDP308**  
Page No. 1 of 1

Method: Hand-dug Pit	Date(s): 06/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448536.00, 213454.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 61.48m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly clayey SAND with many rootlets and rare subangular fine to medium gravel of flint. (AGRICULTURALLY DISTURBED TOPSOIL)		(0.30)		
0.10 - 0.20	D							
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		61.18	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Project: Begbroke

Trialpit No  
**HDP309**  
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Method: Hand-dug Pit  
Client: Oxford University Development  
Hydrock Project No: C-19114-C

Date(s): 06/02/2023  
Co-ords: 448426.00, 213532.00  
Ground Level: 64.40m OD

Logged By: SM  
Stability: Sides  
remained vertical  
throughout digging  
tools


Checked By: NT  
Dimensions: 0.15m  
Scale: 1:10

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly clayey SAND with many rootlets and rare subangular fine to medium gravel of flint. (AGRICULTURALLY DISTURBED TOPSOIL)		(0.30)		
0.10 - 0.20	D							
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		64.10	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Method: Hand-dug Pit	Date(s): 06/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448290.00, 213340.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 63.39m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly clayey SAND with many rootlets and rare subangular fine to medium gravel of flint. (AGRICULTURALLY DISTURBED TOPSOIL)		(0.30)		
0.10 - 0.20	D							
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		63.09	
					1			
					2			


**General Remarks:**  
 1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 06/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448235.00, 213379.00	remained vertical throughout digging tools	Dimensions: 0.15m x 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 64.71m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth mbgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly clayey SAND with many rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
				Base of Excavation at 0.30m	0.30		64.41	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 06/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448070.00, 213444.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 68.08m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly clayey slightly gravelly SAND with many rootlets. Occasional subangular to subrounded fine to medium gravel of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		67.78	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.





Project: Begbroke

Trialpit No  
**HDP313**  
Page No. 1 of 1

Method: Hand-dug Pit

Date(s): 06/02/2023

Logged By: SM

Checked By: NT

Client: Oxford University Development

Co-ords: 447997.00, 213258.00

Stability: Sides  
remained vertical

Dimensions: Scale:  
0.15m  1:10

Hydrock Project No: C-19114-C

Ground Level: 72.00m OD


Plan: Hand digging  
tools

0.15m  0.15m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Reddish brown slightly clayey slightly gravelly SAND with many rootlets. Occasional subangular to subrounded fine to medium gravel of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		71.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448195.00, 213962.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 68.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown mottled grey clayey SAND with many rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
					0.30		67.70	
					Base of Excavation at 0.30m			
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Project: Begbroke

Trialpit No  
**HDP315**  
Page No. 1 of 1

Method: Hand-dug Pit

Date(s): 07/02/2021

Logged By: SM  
Stability: Sides

Checked By: NT

Client: Oxford University Development

Co-ords: 448396.00, 213917.00

remained vertical  
throughout digging  
tools

Dimensions: 0.15m  
Scale: 1:10

Hydrock Project No: C-19114-C

Ground Level: 69.00m OD

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown mottled grey slightly clayey slightly gravelly SAND with many rootlets and occasional rare subrounded fine gravel of quartz. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		68.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Method: Hand-dug Pit	Date(s): 07/02/2021	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448438.00, 213768.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 70.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth mbgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown occasionally mottled grey slightly clayey SAND with many rootlets and occasional rare subangular to subrounded fine gravel of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		69.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Project: Begbroke


Trialpit No  
**HDP317**  
Page No. 1 of 1

Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448011.00, 213934.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 71.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets and fine to medium subangular to subrounded gravel of flint limestone and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)		(0.30)		
0.10 - 0.20	D							
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		70.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.


Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447901.00, 214085.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 73.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets and fine to medium subangular to subrounded gravel of flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)		(0.30)		
0.10 - 0.20	D							
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		72.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447773.00, 213935.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 71.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				Brown slightly gravelly slightly clayey SAND with many rootlets and subangular to subrounded fine to medium gravel of flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL). (AGRICULTURALLY DISTURBED TOPSOIL)		(0.30)	70.70	
				----- Base of Excavation at 0.30m				
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Project: Begbroke


Trialpit No  
**HDP320**  
Page No. 1 of 1

Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448274.00, 213625.00	remained vertical throughout digging tools	Dimensions: 0.15m x 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 70.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly clayey SAND with many rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		69.70	
					1			
					2			


General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448074.00, 213597.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 71.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subrounded fine to medium quartz. (AGRICULTURALLY DISTURBED TOPSOIL)		(0.30)		
0.10 - 0.20	D							
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		70.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.


Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448211.00, 213673.00	remained vertical throughout digging tools	Dimensions: 0.15m <input type="text"/> 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 71.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subrounded fine to medium quartz. (AGRICULTURALLY DISTURBED TOPSOIL)		(0.30)		
0.10 - 0.20	D							
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		70.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447933.00, 213800.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 68.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subrounded fine to medium quartz. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
				----- Base of Excavation at 0.30m	0.30		67.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Project: Begbroke

Trialpit No  
**HDP324**  
 Page No. 1 of 1

Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447858.00, 213717.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 73.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subrounded fine to medium of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)		(0.30)		
0.10 - 0.20	D							
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		72.70	
					1			
					2			

General Remarks:  
 1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Project: Begbroke

Trialpit No  
**HDP325**  
 Page No. 1 of 1

Method: Hand-dug Pit

Date(s): 07/02/2023

Logged By: SM

Checked By: NT

Client: Oxford University Development

Co-ords: 447754.00, 213706.00

Stability: Sides  
 remained vertical

Dimensions:  
 Scale:

Hydrock Project No: C-19114-C

Ground Level: 72.00m OD


Hand digging  
 through tools

0.15m  0.15m  
 1:10

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subrounded fine to medium of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		71.70	
					1			
					2			

General Remarks:  
 1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.


Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447467.00, 213574.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 71.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey with many rootlets. Gravel is subrounded fine to medium of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
					0.30	70.70	Base of Excavation at 0.30m	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447322.00, 213710.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 69.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subrounded fine to medium of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)		(0.30)		
0.10 - 0.20	D							
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		68.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Project: Begbroke

Trialpit No  
**HDP328**  
Page No. 1 of 1

Method: Hand-dug Pit  
Client: Oxford University Development  
Hydrock Project No: C-19114-C

Date(s): 07/02/2023  
Co-ords: 447376.00, 213492.00  
Ground Level: 70.00m OD


Logged By: SM  
Stability: Sides  
remained vertical  
throughout digging  
tools

Checked By: NT  
Dimensions: 0.15m  
Scale: 1:10

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subrounded fine to medium of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		69.70	
					1			
					2			


General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447362.00, 213407.00	remained vertical throughout digging tools	Dimensions: 0.15m x 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 69.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subrounded fine to medium of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)		(0.30)		
0.10 - 0.20	D							
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		68.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447375.00, 213204.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 71.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subrounded fine to medium of quartz flint and limestone. (AGRICULTURALLY DISTURBED TOPSOIL)		(0.30)		
0.10 - 0.20	D							
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		70.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.





Project: Begbroke

Trialpit No  
**HDP331**  
Page No. 1 of 1

Method: Hand-dug Pit

Date(s): 07/02/2023

Logged By: SM

Checked By: NT

Client: Oxford University Development

Co-ords: 447446.00, 213309.00

Stability: Sides  
remained vertical

Dimensions: Scale:

Hydrock Project No: C-19114-C

Ground Level: 73.00m OD


Hand digging  
throughout  
tools

0.15m  0.15m 1:10

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subrounded fine to medium quartz flint and limestone. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		72.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447485.00, 213779.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 72.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Reddish brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subangular to subrounded fine to medium of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		71.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Project: Begbroke

Trialpit No  
**HDP333**  
Page No. 1 of 1

Method: Hand-dug Pit  
Client: Oxford University Development  
Hydrock Project No: C-19114-C

Date(s): 07/02/2023  
Co-ords: 447558.00, 213792.00  
Ground Level: 67.00m OD


Logged By: SM  
Stability: Sides  
remained vertical  
throughout digging  
tools

Checked By: NT  
Dimensions: 0.15m x 0.15m  
Scale: 1:10

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Reddish brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subangular to subrounded fine to medium gravel of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		66.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.


Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447658.00, 213811.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 69.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Reddish brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subangular to subrounded fine to medium gravel of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D				(0.30)			
0.20 - 0.30	D							
				Base of Excavation at 0.30m	0.30		68.70	
								

General Remarks:  
 1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Method: Hand-dug Pit	Date(s): 07/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447688.00, 213731.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 71.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Reddish brown slightly gravelly clayey SAND with many rootlets. Gravel is subangular to subrounded fine to medium gravel of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)		(0.30)		
0.10 - 0.20	D							
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		70.70	
					1			
					2			

**General Remarks:**  
 1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Project: Begbroke

Trialpit No  
**HDP336**  
Page No. 1 of 1

Method: Hand-dug Pit

Date(s): 07/03/2023

Logged By: SM

Checked By: NT

Client: Oxford University Development

Co-ords: 447525.00, 213715.00

Stability: Sides  
remained vertical

Dimensions: Scale:  
0.15m 0.15m 1:10

Hydrock Project No: C-19114-C

Ground Level: 69.00m OD

Plan: Hand digging  
tools

0.15m 0.15m 1:10

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Reddish brown slightly gravelly clayey SAND with many rootlets. Gravel is subangular to subrounded fine to medium gravel of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		68.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Project: Begbroke

Trialpit No  
**HDP337**  
Page No. 1 of 1

Method: Hand-dug Pit  
Client: Oxford University Development  
Hydrock Project No: C-19114-C

Date(s): 08/03/2023  
Co-ords: 447569.00, 213537.00  
Ground Level: 68.00m OD

Logged By: SM  
Stability: Sides  
remained vertical  
throughout digging  
tools

Checked By: NT  
Dimensions: 0.15m  
Scale: 1:10

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Reddish brown slightly gravelly clayey SAND with many rootlets. Gravel is subangular to subrounded fine to medium gravel of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D				(0.30)			
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		67.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Project: Begbroke

Trialpit No  
**HDP338**  
Page No. 1 of 1


Method: Hand-dug Pit	Date(s): 08/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448785.00, 213158.00	remained vertical throughout digging tools	Dimensions: 0.15m x 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 59.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly clayey SAND with many rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		58.70	
					1			
					2			

**General Remarks:**  
 1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Method: Hand-dug Pit	Date(s): 08/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448445.00, 212844.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 65.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown occasionally mottled orange brown clayey SAND with many rootlets. Rare find subangular gravel of brick and coal. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D				(0.30)			
0.20 - 0.30	D							
				----- Base of Excavation at 0.30m	0.30		64.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Project: Begbroke

Trialpit No  
**HDP340**


Page No. 1 of 1

Method: Hand-dug Pit	Date(s): 08/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448450.00, 212983.00	remained vertical throughout digging tools	Dimensions: 0.15m x 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 65.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown occasionally mottled orange brown clayey SAND with many rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		64.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 08/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448437.00, 213172.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 65.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly clayey SAND with many rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D				(0.30)			
0.20 - 0.30	D							
				Base of Excavation at 0.30m	0.30		64.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.




Method: Hand-dug Pit	Date(s): 08/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448036.00, 212662.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 66.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth mbgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown occasionally mottled orange brown slightly gravelly clayey SAND with many rootlets. Gravel is subrounded fine to medium of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D				(0.30)			
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		65.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.




Method: Hand-dug Pit	Date(s): 08/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448121.00, 212709.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 62.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown occasionally mottled orange brown slightly gravelly clayey SAND with many rootlets. Gravel is subrounded fine to medium of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
				----- Base of Excavation at 0.30m	0.30		61.70	
					1			
					2			


General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 08/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448062.00, 212949.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 71.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth mbgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown occasionally mottled orange brown slightly gravelly clayey SAND with many rootlets. Gravel is subrounded fine to medium of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
				----- Base of Excavation at 0.30m	0.30		70.70	
					1			
					2			


General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 08/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447987.00, 213158.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 70.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth mbgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown occasionally mottled orange brown slightly gravelly clayey SAND with many rootlets. Gravel is subrounded fine to medium of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		69.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 08/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 448233.00, 212892.00	remained vertical throughout digging tools	Dimensions: 0.15m <input type="text"/> 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 68.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth mbgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown clayey SAND with many rootlets. Occasional subrounded fine to medium quartz and flint gravel. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
				----- Base of Excavation at 0.30m	0.30		67.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.





Project: Begbroke

Trialpit No  
**HDP347**  
Page No. 1 of 1

Method: Hand-dug Pit

Date(s): 08/02/2023

Logged By: SM  
Stability: Sides

Checked By: NT

Client: Oxford University Development

Co-ords: 448313.00, 213015.00

remained vertical  
throughout digging  
tools

Dimensions: 0.15m  
Scale: 1:10

Hydrock Project No: C-19114-C

Ground Level: 67.00m OD

0.15m  1:10

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown clayey SAND with many rootlets. Occasional subrounded fine to medium quartz and flint gravel. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		66.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Project: Begbroke

Trialpit No  
**HDP348**


Page No. 1 of 1

Method: Hand-dug Pit	Date(s): 08/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447747.00, 213304.00	remained vertical throughout digging tools	Dimensions: 0.15m <input type="text"/> 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 71.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subrounded fine to medium of quartz flint and limestone. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		70.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 08/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447835.00, 213272.00	remained vertical throughout digging tools	Dimensions: 0.15m x 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 72.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subrounded fine to medium of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)		(0.30)		
0.10 - 0.20	D							
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		71.70	
					1			
					2			

**General Remarks:**  
 1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.



Method: Hand-dug Pit	Date(s): 08/02/2023	Logged By: SM Stability: Sides	Checked By: NT
Client: Oxford University Development	Co-ords: 447693.00, 213442.00	remained vertical throughout digging tools	Dimensions: 0.15m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 73.00m OD		

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.00 - 0.10	D			Brown slightly gravelly slightly clayey SAND with many rootlets. Gravel is subrounded fine to medium of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)				
0.10 - 0.20	D					(0.30)		
0.20 - 0.30	D							
----- Base of Excavation at 0.30m					0.30		72.70	
					1			
					2			

General Remarks:  
1) Hand pit to 0.30m bgl with hand tools. 2) 3 samples taken for organic analysis 3) Backfilled with arisings.





Project: Begbroke

Trialpit No  
HP201

Page No. 1 of 1

Method: Hand-dug Pit	Date(s): 14/09/2022	Logged By: NT	Checked By: CV
Client: Oxford University Development	Co-ords: 447245.43, 213380.63	Stability: Stable	Dimensions: 0.30m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 68.11m OD	Plant: Hand Tools	

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	ES			Soft brown sandy CLAY with rare subangular to subrounded, fine to coarse flint and quartz gravel. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	67.81	
0.40	ES			Firm orange sandy CLAY with rare subangular to subrounded, fine to coarse flint gravel. (RIVER TERRACE DEPOSITS)	1.00	(0.70)	67.11	
----- Base of Excavation at 1.00m -----								
2								

General Remarks:  
1) Excavation completed at 1.00m bgl. 2) No groundwater encountered. 3) Backfilled with arisings.



Method: Hand-dug Pit	Date(s): 14/09/2022	Logged By: NT	Checked By: CV
Client: Oxford University Development	Co-ords: 447310.49, 213379.39	Stability: Stable	Dimensions: 0.30m <input type="text"/> Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 67.70m OD	Plant: Hand Tools	

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	ES			Dark brown sandy slightly gravelly CLAY. Gravel is subangular to subrounded, fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.25	(0.25)	67.45	
0.40	ES			Firm orange brown sandy CLAY with rare subangular to subrounded, fine to coarse flint gravel. (RIVER TERRACE DEPOSITS)	1.00	(0.75)	66.70	
----- Base of Excavation at 1.00m -----								
2								

General Remarks:  
1) Excavation completed at 1.00m bgl. 2) No groundwater encountered. 3) Backfilled with arisings.



Method: Hand-dug Pit	Date(s): 14/09/2022	Logged By: NT	Checked By: CV
Client: Oxford University Development	Co-ords: 447257.22, 213337.26	Stability: Stable	Dimensions: 0.30m <input type="text"/> 0.30m
Hydrock Project No: C-19114-C	Ground Level: 68.18m OD	Plant: Hand Tools	Scale: 1:10

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	ES			Soft dark brown sandy CLAY with rare subangular to subrounded, fine to coarse of flint and quartz gravel. (AGRICULTURALLY DISTURBED TOPSOIL)	0.20	(0.20)	67.98	
0.40	ES			Firm orange brown slightly sandy CLAY with rare subangular to angular fine to medium flint gravel. (RIVER TERRACE DEPOSITS)	1.00	(0.80)	67.18	
----- Base of Excavation at 1.00m -----								

General Remarks:  
 1) Excavation completed at 1.00m bgl. 2) No groundwater encountered. 3) Backfilled with arisings.



Method: Hand-dug Pit	Date(s): 14/09/2022	Logged By: NT	Checked By: CV
Client: Oxford University Development	Co-ords: 447308.02, 213315.45	Stability: Stable	Dimensions: 0.30m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 67.84m OD	Plant: Hand Tools	

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	ES			Light brown slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.25	(0.25)	67.59	
0.30	ES			Orange brown slightly clayey sandy subrounded to rounded, fine to coarse of flint GRAVEL. (RIVER TERRACE DEPOSITS)	0.55	(0.30)	67.29	
				Base of Excavation at 0.55m				

General Remarks:  
 1) Excavation completed at 0.55m bgl. 2) No groundwater encountered. 3) Backfilled with arisings.





Project: Begbroke

Trialpit No  
HP205


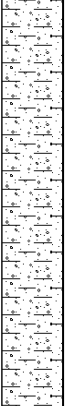
Page No. 1 of 1

Method: Hand-dug Pit	Date(s): 14/09/2022	Logged By: NT	Checked By: CV
Client: Oxford University Development	Co-ords: 447346.55, 213283.40	Stability: Stable	Dimensions: 0.30m Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 67.78m OD	Plant: Hand Tools	

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	ES			Soft light brown sandy slightly gravelly CLAY. Gravel is subangular to rounded, fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	67.48	
0.50	ES			Firm orange slightly sandy CLAY. Gravel is subrounded to rounded, fine to coarse of flint. (RIVER TERRACE DEPOSITS)	1.00	(0.70)	66.78	
----- Base of Excavation at 1.00m -----								
2								

General Remarks:  
1) Excavation completed at 1.00m bgl. 2) No groundwater encountered. 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 14/09/2022	Logged By: NT	Checked By: CV
Client: Oxford University Development	Co-ords: 447323.43, 213245.43	Stability: Stable	Dimensions: 0.30m <input type="text"/> Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 68.15m OD	Plant: Hand Tools	

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	ES			Soft light brown sandy gravelly CLAY. Gravel is subangular to subrounded, fine to coarse fo flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.25	(0.25)	67.90	
0.40	ES			Firm orange slightly sandy gravelly CLAY. Gravel is subrounded to subangular, fine to coarse fo flint. (RIVER TERRACE DEPOSITS)	0.80	(0.55)	67.35	
Base of Excavation at 0.80m								
					1			
					2			

General Remarks:  
1) Excavation completed at 0.80m bgl. 2) No groundwater encountered. 3) Backfilled with arisings.



Method: Hand-dug Pit	Date(s): 25/08/2022	Logged By: NT	Checked By: CV
Client: Oxford University Development	Co-ords: 448351.81, 213568.22	Stability: Stable	Dimensions: 0.30m <input type="text"/> Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 66.48m OD	Plant: Hand Tools	



Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				Yellow slightly sandy subangular to angular fine to coarse limestone COBBLES. (MADE GROUND)		(0.60)	65.88	
0.70	ES			Orange brown slightly gravelly SAND. Gravel is subrounded to subangular fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)		(0.40)	65.48	
----- Base of Excavation at 1.00m -----					1.00			

General Remarks:  
 1) Suspected asbestos cement fragments on surface in vicinity of excavation. 2) Excavation completed at 1.00m bgl. 3) No groundwater encountered. 4) Backfilled with arisings.







Method: Hand-dug Pit	Date(s): 25/08/2022	Logged By: NT	Checked By: CV
Client: Oxford University Development	Co-ords: 448342.21, 213531.91	Stability: Stable	Dimensions: 0.30m <input type="text"/> Scale: 1:10
Hydrock Project No: C-19114-C	Ground Level: 66.76m OD	Plant: Hand Tools	

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				CONCRETE. (MADE GROUND)	0.10	(0.10)	66.66	
0.30	ES			Orange brown slightly gravelly SAND. Gravel is subrounded to subangular fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)		(0.80)		
				Base of Excavation at 0.90m	0.90		65.86	
					1			
					2			

General Remarks:  
1) Excavation completed at 0.90m bgl. 2) No groundwater encountered. 3) Backfilled with arisings.

Method: Hand-dug Pit	Date(s): 25/08/2022	Logged By: NT	Checked By: CV
Client: Oxford University Development	Co-ords: 448376.79, 213562.77	Stability: Stable	Dimensions: 0.30m <input type="text"/> 0.30m
Hydrock Project No: C-19114-C	Ground Level: 66.34m OD	Plant: Hand Tools	Scale: 1:10

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Light grey gravelly SAND. Gravel is sub angular to sub rounded fine to coarse of flint and rare brick, concrete, limestone and clinker. (MADE GROUND)		(0.65)	65.69	
0.80	ES			Orange brown gravelly slightly clayey SAND. Gravel is subangular to angular fine to coarse of limestone and flint. (RIVER TERRACE DEPOSITS)		(0.25)	65.44	
				Base of Excavation at 0.90m				

General Remarks:  
1) Excavation completed at 0.90m bgl. 2) No groundwater encountered. 3) Backfilled with arisings.



Method: Rotary Cored	Date(s): 07/02/2023 - 09/02/2023	Logged By: JM	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448428.05, 213351.63	Checked By: CV	Flush: Water
Hydrock Project No: C-19114-C	Ground Level: 61.81m OD		Scale: 1:50

Sample/Core Run (m)	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min Mean Max							
0.10 - 1.50	0.10	ES							<p>Soft dark brown slightly gravelly slightly sandy CLAY with occasional rootlets. Gravel is sub-angular fine of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)</p> <p>Very soft orangish brown slightly gravelly sandy CLAY with occasional rootlets and a slight organic odour. Gravel is sub-angular to sub-rounded fine to coarse of medium grained orangish brown sandstone. (ALLUVIUM)</p> <p>... Below 0.70m: Becoming orangish brown mottled light grey.</p> <p>Orangish brown slightly gravelly very silty medium grained SAND. Gravel is sub-angular to sub-rounded fine to coarse of tabular light grey medium grained shelly limestone, rounded dark orangish brown iron rich medium grained sandstone, flint and quartzite. (RIVER TERRACE DEPOSITS)</p> <p>Orangish brown sandy slightly clayey GRAVEL. Gravel is sub-angular to sub-rounded fine to coarse of tabular light grey medium grained shelly limestone, rounded dark orangish brown iron rich medium grained sandstone, flint and quartzite. (RIVER TERRACE DEPOSITS)</p> <p>Medium dense orangish brown GRAVEL. Gravel is sub-angular to sub-rounded coarse of tabular light grey medium grained oolitic shelly limestone, flint and quartzite. (RIVER TERRACE DEPOSITS)</p> <p>Orangish brown sandy slightly clayey GRAVEL. Gravel is sub-angular to sub-rounded fine to coarse of tabular light grey medium grained shelly limestone, rounded dark orangish brown iron rich medium grained sandstone, flint and quartzite. (RIVER TERRACE DEPOSITS)</p>	0.30	(0.30)	61.51		
	0.30 - 0.70	B								1.00	(0.70)	60.81		
	0.70 - 1.20	B								2.00	(1.00)	59.81		
	1.20 - 1.50	U								2.50	(0.50)	59.31		
1.50 - 2.50 98% rec	2.50	SPT	N=22 (3,5,5,5,6,6)						<p>Orangish brown sandy slightly clayey GRAVEL. Gravel is sub-angular to sub-rounded fine to coarse of tabular light grey medium grained shelly limestone, rounded dark orangish brown iron rich medium grained sandstone, flint and quartzite. (RIVER TERRACE DEPOSITS)</p> <p>Medium dense orangish brown GRAVEL. Gravel is sub-angular to sub-rounded coarse of tabular light grey medium grained oolitic shelly limestone, flint and quartzite. (RIVER TERRACE DEPOSITS)</p> <p>Orangish brown sandy slightly clayey GRAVEL. Gravel is sub-angular to sub-rounded fine to coarse of tabular light grey medium grained shelly limestone, rounded dark orangish brown iron rich medium grained sandstone, flint and quartzite. (RIVER TERRACE DEPOSITS)</p>	2.50	(0.40)	58.91		
	2.50	D						3.50		(1.10)	57.81			
	3.50	SPT	N=4 (3,2,1,3,0,0)							4.00	(1.00)	56.81		
	3.50	D						5.00		(2.60)	54.21			
2.50 - 3.50 70% rec	4.00 - 4.50	U							<p>Stiff thickly laminated grey silty micaceous CLAY with frequent bivalve fragments. Bedding fissures are extremely closely spaced horizontal. (KELLAWAYS CLAY MEMBER)</p> <p>Very strong thinly to thickly bedded grey crystalline coarse grained LIMESTONE with frequent spheroidal weathering, fine to coarse gravel sized bivalve fossils and occasional veins/inclusions of calcareous clay and veins of white calcite. Beds are dark grey sandy and calcareous of thickly laminated clay and very thinly bedded mudstone. Fractures are horizontal to sub-horizontal medium to very closely spaced, rough, stepped and undulating, moderately wide to wide with clay infill. Sub-vertical fracture 80 degrees from 5.86m to 6.00m, stepped, clean. (CORNBRAsh LIMESTONE FORMATION)</p>	4.50	(1.00)	56.81		
	4.50 - 5.00	SPT	50/10mm (7,18,50)							7.60	(0.55)	53.66		
	5.00	D								8.15	(2.02)			
	5.00	D								9.00	(2.02)			
4.50 - 5.00 100% rec 4.50 - 6.00	5.00	SPT	50/10mm (7,18,50)	100	87	72	35 100 400		<p>Very stiff thinly laminated with white silt greenish grey silty CLAY. Bedding fissures are extremely closely spaced horizontal. (FOREST MARBLE FORMATION)</p> <p>Extremely weak thinly laminated greenish grey silty partially weathered MUDSTONE. Laminae are thinly laminated extremely closely spaced of undulating white siltstone, thickly laminated medium spaced bands of undulating grey fine grained sandstone and thinly bedded grey oolitic shelly limestone. (FOREST MARBLE FORMATION)</p>	6.00	(2.60)	54.21		
	6.00 - 7.50	D								7.60	(0.55)	53.66		
	7.50 - 9.00	D								8.15	(2.02)			
	8.00	D								9.00	(2.02)			
6.00 - 7.50	7.50 - 8.00	U							<p>... From 7.52 to 7.56m: Dark grey band of calcareous mudstone with frequent bivalve fossils.</p> <p>Very stiff thinly laminated with white silt greenish grey silty CLAY. Bedding fissures are extremely closely spaced horizontal. (FOREST MARBLE FORMATION)</p> <p>Extremely weak thinly laminated greenish grey silty partially weathered MUDSTONE. Laminae are thinly laminated extremely closely spaced of undulating white siltstone, thickly laminated medium spaced bands of undulating grey fine grained sandstone and thinly bedded grey oolitic shelly limestone. (FOREST MARBLE FORMATION)</p>	7.60	(0.55)	53.66		
	7.60 - 8.15	D								8.15	(2.02)			
	8.15 - 8.60	D								9.00	(2.02)			
	8.60 - 9.00	D								10.00	(2.02)			
7.50 - 9.00	8.00	D							<p>... From 7.52 to 7.56m: Dark grey band of calcareous mudstone with frequent bivalve fossils.</p> <p>Very stiff thinly laminated with white silt greenish grey silty CLAY. Bedding fissures are extremely closely spaced horizontal. (FOREST MARBLE FORMATION)</p> <p>Extremely weak thinly laminated greenish grey silty partially weathered MUDSTONE. Laminae are thinly laminated extremely closely spaced of undulating white siltstone, thickly laminated medium spaced bands of undulating grey fine grained sandstone and thinly bedded grey oolitic shelly limestone. (FOREST MARBLE FORMATION)</p>	8.15	(0.55)	53.66		
	8.15 - 8.60	D								8.60	(2.02)			
	8.60 - 9.00	D								9.00	(2.02)			
	9.00 - 10.50	D								10.00	(2.02)			
9.00 - 10.50	9.00	SPT	50/15mm (25,50)	77	70	57			<p>Continued on Next Sheet</p>	9.00	(2.02)			
	9.00 - 10.00	D								10.00	(2.02)			
	10.00 - 10.50	D								10.00	(2.02)			
	10.50	D								10.00	(2.02)			

Progress and Observations									Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)	
Commachio 300	07/02	0000	3.50	2.50		1.20	Water	orangish brown				<p>1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 5.00m, then rotary cored from 5.00m to 20.00m. 3) Gas and groundwater monitoring well installed to 7.60m bgl, with response zone between 5.50m and 7.60m bgl. 4) Hydrock dipped borehole at 7.60m after installation.</p>



Method: Rotary Cored	Date(s): 07/02/2023 - 09/02/2023	Logged By: JM	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448428.05, 213351.63	Checked By: CV	Flush: Water
Hydrock Project No: C-19114-C	Ground Level: 61.81m OD		Scale: 1:50

Sample/Core Run (m)	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill	
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If: Mean Max								
10.50 - 12.00	11.90	D		100	98	69	40	Extremely weak thinly laminated greenish grey silty partially weathered MUDSTONE. Laminae are thinly laminated extremely closely spaced of undulating white siltstone, thickly laminated medium spaced bands of undulating grey fine grained sandstone and thinly bedded grey oolitic shelly limestone. (FOREST MARBLE FORMATION) ... From 10.00m to 10.17m: Band of strong grey micritic, oolitic and shelly limestone with occasional shell fragments and possible fossilised plants.	10.17	(1.58)	51.64				
							50		Strong thickly laminated dark grey crystalline coarse grained LIMESTONE. Laminae are light greenish grey undulating (ripple marks) of firm clay. (FOREST MARBLE FORMATION) Very stiff thickly laminated greenish grey SILT with thin laminations of white and dark grey fine to medium grained sandstone. Sandstone laminae are very closely spaced. Bedding fissures are extremely closely spaced horizontal. (FOREST MARBLE FORMATION)					11	
							140							11.75	50.06
							130							12.50	49.31
12.00 - 13.50				91	59	56	130	Very strong medium bedded grey muddy, ooidal and shelly LIMESTONE with frequent bivalve fossils. Beds are strong dark grey medium spaced of sandy, muddy limestone with frequent shell fragments and possible fish scales and teeth fossils. (FOREST MARBLE FORMATION) ... From 12.50m to 12.70m: Flame/load structure from clay into limestone. ... From 13.00m to 13.30m: Band of dark grey sandy limestone with possible fine to coarse sized fish scales and teeth fossils.	12						
13.50 - 15.00				100	100	100	500	... From 15.00m to 16.20m: Thinly to very thinly cross-bedded with light grey muddy ooidal limestone with frequent shell fossils.	13						
15.00 - 16.50				100	100	90	1500	... At 16.50m: Void infilled with 10-15mm sized calcite crystals (40mm wide, 40mm thick and 20mm deep).	14						
16.50 - 18.00				100	98	95	70	Very strong grey muddy LIMESTONE with abundant fine to coarse gravel sized bivalve (oyster) fossils, frequent dark grey striated inclusions (possible plant fossils) and occasional veins of white calcite. (FOREST MARBLE FORMATION) ... From 17.90m to 17.95m: Band of very stiff dark grey clay with abundant bivalve (oyster) shells and shell fragments.	15						
18.00 - 19.00				100	90	90	400	Strong very thinly bedded light grey muddy LIMESTONE with rare dark green staining and inclusions (possible chlorite or glauconite). Beds are very closely spaced of light greyish green ripple marked undulating siltstone, with limestone lenses in-between. (WHITE LIMESTONE FORMATION) ... From 18.60m to 19.26m: Frequent medium gravel sized gastropod fossils.	16						
19.00 - 20.00				100	100	100	1030	Strong light grey muddy LIMESTONE with frequent medium to coarse gravel sized bivalve and gastropod fossils and occasional veins and vugs of white calcite. (WHITE LIMESTONE FORMATION) ... From 19.50m to 19.55m: Band of dark grey sandy	17						
									18						
									19						
									20						

Continued on Next Sheet

Progress and Observations									Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)	
												1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 5.00m, then rotary cored from 5.00m to 20.00m. 3) Gas and groundwater monitoring well installed to 7.60m bgl, with response zone between 5.50m and 7.60m bgl. 4) Hydrock dipped borehole at 7.60m after installation.





Project: Begbroke

Borehole No  
**RO301**  
 Page No. 3 of 3

Method: Rotary Cored	Date(s): 07/02/2023 - 09/02/2023	Logged By: JM	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448428.05, 213351.63	Checked By: CV	Flush: Water
Hydrock Project No: C-19114-C	Ground Level: 61.81m OD		Scale: 1:50

Sample/Core Run (m)	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min Mean Max							
									Strong light grey muddy LIMESTONE with frequent medium to coarse gravel sized bivalve and gastropod fossils and occasional veins and vugs of white calcite. (WHITE LIMESTONE FORMATION) ... From 19.50m to 19.55m: Band of dark grey sandy mudstone. End of Borehole at 20.00m	21				
										22				
										23				
										24				
										25				
										26				
										27				
										28				
										29				
										30				

Progress and Observations									Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)	
												1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 5.00m, then rotary cored from 5.00m to 20.00m. 3) Gas and groundwater monitoring well installed to 7.60m bgl, with response zone between 5.50m and 7.60m bgl. 4) Hydrock dipped borehole at 7.60m after installation.





Method: Rotary Cored	Date(s): 03/02/2023 - 07/02/2023	Logged By: JM	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448485.73, 213352.47	Checked By: CV	Flush: Air mist
Hydrock Project No: C-19114-C	Ground Level: 61.57m OD		Scale: 1:50

Sample/Core Run (m)	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min Mean Max							
10.00 - 11.50	10.00	SPT	50/150mm (8,17,30,20)						Very stiff thinly laminated greenish grey silty CLAY. Laminae are extremely closely spaced, thinly laminated white silt and dark grey mudstone, and very closely spaced thick laminations and lenses of dark grey shelly limestone. (FOREST MARBLE FORMATION)		(4.50)			
	10.00	D												
	10.00	D												
	10.60	D		58	0	0								
11.50 - 12.50									... From 11.50m to 11.76m: Non-intact. Band of strong light grey biomicritic oolitic and shelly partially weathered LIMESTONE with occasional coarse gravel sized scallop looking bivalve fossils and coal.					
				30	10	0	10 15 50							
12.50 - 14.00									Very strong thinly bedded light grey muddy, oolitic and shelly coarse grained LIMESTONE with occasional coarse gravel sized bivalve (scallop) fossils, white calcite veins, petrified (carbonised) wood and plant fossils, inclusions of crystalline grey limestone, calcite crystals (10mm by 10mm average) and rare coal. Beds are closely to widely spaced dark grey slightly sandy clay and greyish green sandy limestone. Fractures are horizontal to sub-horizontal, widely spaced, rough and undulating, open with clay infill. (FOREST MARBLE FORMATION)					
				100	98	88	100 600 1340							
14.00 - 15.50									... From 12.55m to 12.69m: Band of stiff grey slightly sandy calcareous clay. ... From 13.50m to 13.60m: Band of stiff grey slightly sandy calcareous clay. ... From 13.90m to 14.00m: Band of grey sandy limestone. ... From 14.50m to 16.00m: Spheroidal surface weathering.					
				100	64	64	20 150 350							
15.50 - 17.00									... From 15.80m to 15.85m: Band of siltstone with (5-7mm spaced) and (2mm to 15mm thick) partings of coal.					
				93	80	80	20 250 450							
17.00 - 18.50									Extremely weak greenish grey partially weathered calcareous SILTSTONE with fine gravel sized fragments of limestone and shell fragments. (FOREST MARBLE FORMATION) Extremely weak thinly laminated greenish grey partially weathered calcareous MUDSTONE. (FOREST MARBLE FORMATION)					
							100 500 1230							
18.50 - 20.00									Strong light grey muddy LIMESTONE with frequent bivalve (oyster) shells, veins and infilled shells and voids (max 40mm wide, 40mm thick and 50mm deep) of white and transparent calcite crystals. Fractures are sub-horizontal, sub-vertical and vertical, closely to widely spaced, rough, open to moderately wide with clay and dark grey striated infill. (WHITE LIMESTONE FORMATION) ... At 17.70m: Void infilled with 10-15mm sized calcite crystals (40mm wide, 40mm thick and 50mm deep).					
				100	98	98								

Continued on Next Sheet

Progress and Observations										Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)		
												1) Inspection pit hand dug to 1.10m bgl, terminated hand digging due to water ingress. 2) Borehole dynamic sampled to 5.00m, then rotary cored from 5.00m to 21.00m. 3) Gas and groundwater monitoring well installed to 3.15m bgl, with response zone between 1.00m and 3.15m bgl. 4) Hydrock dipped hole at 3.15m after installation.	





Method: Rotary Cored	Date(s): 23/01/2023 - 25/01/2023	Logged By: JM/MA	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448563.79, 213358.02	Checked By: CV	Flush: Air mist
Hydrock Project No: C-19114-C	Ground Level: 61.47m OD		Scale: 1:50

Sample/Core Run (m)	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If: Mean Max							
1.20 - 2.00 80% rec	0.30	ES							Soft dark brown slightly gravelly slightly sandy CLAY with frequent rootlets. Gravel is sub-angular fine of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL) Very soft (wet) light yellowish brown mottled light grey slightly gravelly slightly sandy CLAY with rare rootlets. Gravel is sub-angular to rounded fine to coarse of flint, quartzite and mudstone. (ALLUVIUM) ... From 1.00m to 1.10m: Band of dark orangish brown very gravelly silty medium grained SAND from 1.0 to 1.10m. Gravel is angular to sub-angular fine to coarse of light grey coarse grained ooidal limestone and flint. ... Below 1.20m bgl: Becoming soft.	0.30	(0.30)	61.17		
	1.20	SPT	N=7 (0,1,1,2,2,2)							1	(1.70)			
	1.20	D								2	2.00			
	1.50	D								2.00	59.47			
2.00 - 3.00 100% rec	2.00	SPT	N=16 (2,3,3,3,5,5)						Dark orangish brown very gravelly silty coarse grained SAND. Gravel is sub-angular to rounded fine to coarse of tabular light grey medium grained shelly limestone, rounded dark orangish brown iron rich medium grained sandstone, flint and quartzite. (RIVER TERRACE DEPOSITS) ... From 2.00m to 2.10m: Band of dark orangish brown very gravelly silty medium grained SAND from 2.0 to 2.10m. Gravel is angular to sub-angular fine to coarse of light grey coarse grained ooidal limestone and flint.	2.00	(0.40)	59.07		
	2.00	D								2.40	59.07			
	2.40	B								3	(0.90)			
	2.40	B								3.30	58.17			
3.00 - 4.00 70% rec	3.00	SPT	N=40 (7,10,10,10,10,10)						Dark orangish brown very sandy silty GRAVEL. Gravel is sub-angular to rounded fine to coarse of tabular light grey medium grained shelly limestone, rounded dark orangish brown iron rich medium grained sandstone, flint and quartzite. (RIVER TERRACE DEPOSITS) ... From 3.00m: Becoming sandy.	3.00	(0.60)	57.57		
	3.00	D								3.90	57.57			
	3.45	D								4	(0.50)			
	3.45	B								4.40	57.07			
5.00 - 6.00	4.00	SPT	N=12 (3,3,3,3,3,3)						Dark orangish brown sandy GRAVEL. Gravel is sub-angular to rounded fine to coarse of tabular light grey medium grained shelly limestone, rounded dark orangish brown iron rich medium grained sandstone, flint and quartzite. (RIVER TERRACE DEPOSITS)	4.00	(0.60)	56.47		
	4.00	D								5	5.00			
	4.45	D		80	59	50								
	4.45	D												
6.00 - 7.50	4.70	D							Dark orangish brown GRAVEL. Gravel is sub-angular to rounded coarse of tabular light grey medium grained shelly limestone, rounded dark orangish brown iron rich medium grained sandstone, flint and quartzite. (RIVER TERRACE DEPOSITS) ... From 3.90m to 4.00m: Becoming very clayey. ... At 4.20m: 6cm x 2cm Belemnite fossil.	4.70	(0.50)			
	4.70	HSV	122kPa											
	4.70	D												
	5.00	SPT	50/0mm (25)											
7.50 - 9.00	5.00	SPT	50/0mm (15,10)						Stiff thinly laminated light bluish grey slightly gravelly silty CLAY with occasional fine gravel sized shell fossils and rare pockets (max 5cm) of brown medium grained sand. Bedding fissures are extremely closely spaced horizontal. Gravel is sub-angular fine to medium of mudstone. (KELLAWAYS CLAY MEMBER) Very strong grey shelly fine grained LIMESTONE. Fractures are horizontal to sub-horizontal medium to very closely spaced, rough stepped and undulating, open to moderately wide, clean and clay infill. (CORNBURASH LIMESTONE FORMATION) ... From 5.00m to 5.25m: Non-intact. ... From 6.50m to 6.70m: One sub-vertical fracture, partially open, undulated. ... Between 6.50m and 6.85m: Partially weathered with spheroidal weathering. ... From 7.50m to 7.55m: Non-intact.	6	(3.40)			
	6.00	SPT												
	7.50	SPT	50/0mm (25)											
	7.50	SPT		100	100	124								
9.00 - 10.50	8.40	SPT							Weak grey thinly laminated partially weathered carbonaceous MUDSTONE with occasional extremely closely spaced siltstone. Fractures are horizontal medium to closely spaced, stepped and undulating, open to moderately wide, clay infill. (FOREST MARBLE FORMATION) ... From 9.80m to 9.85m: Band of strong grey	8.40		53.07		
	8.40	SPT												
	8.40	SPT												
	9.00	SPT	50/255mm (7,10,10,15,18,7)											

Continued on Next Sheet

Progress and Observations									Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)	
Commachio 300	23/01	0545	0.00	0.00								1) Inspection pit hand dug to 0.80m bgl, terminated hand digging due to water ingress. 2) Borehole dynamic sampled to 5.00m, then rotary cored from 5.00m to 21.00m. 3) Gas and groundwater monitoring well installed to 4.00m bgl, with response zone between 2.00m and 4.00m bgl.
	23/01	1645	2.45			0.40						
	24/01	0715	2.45			0.20						
	24/01	1645	12.02	5.30	127	11.60	Air mist					
	25/01	0715	12.02	5.30	127	0.00	Air mist					
	25/01	1650	21.00	5.50	127	0.90	Air mist					



Method: Rotary Cored	Date(s): 23/01/2023 - 25/01/2023	Logged By: JM/MA	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448563.79, 213358.02	Checked By: CV	Flush: Air mist
Hydrock Project No: C-19114-C	Ground Level: 61.47m OD		Scale: 1:50

Sample/Core Run (m)	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If.							
10.50 - 12.00	10.50	SPT	60/130mm (10,15,25,35)	100	84	75			Weak grey thinly laminated partially weathered carbonaceous MUDSTONE with occasional extremely closely spaced siltstone. Fractures are horizontal medium to closely spaced, stepped and undulating, open to moderately wide, clay infill. (FOREST MARBLE FORMATION) ... From 9.80m to 9.85m: Band of strong grey crystalline limestone.	11				
12.00 - 13.50	12.00	SPT	50/0mm (25)	95	90	18	0		Strong grey shelly fine grained LIMESTONE. (FOREST MARBLE FORMATION)	11.60		49.87		
							0		Weak grey thinly laminated MUDSTONE. (FOREST MARBLE FORMATION)	11.70	(0.10)	49.77		
13.50 - 15.00	13.50						0		Strong grey shelly fine grained LIMESTONE. (FOREST MARBLE FORMATION)	11.80	(0.10)	49.67		
							0		Interbedded extremely weak bluish grey extremely thinly laminated to thinly bedded silty MUDSTONE and weak dark grey SILTSTONE and very strong grey shelly LIMESTONE. (FOREST MARBLE FORMATION) ... From 12.05m to 12.15m: Limestone band in interbedded ... From 13.15m to 13.25m: Limestone band in interbedded	12		49.47		
15.00 - 16.50	15.00						0		Very strong grey oolitic LIMESTONE with occasional shells. Fractures are horizontal, medium to closely spaced, undulating, clean. (FOREST MARBLE FORMATION)	12.00	(0.20)	49.47		
							0		Weak dark grey SILTSTONE. (FOREST MARBLE FORMATION)	12.20				
16.50 - 18.00	16.50						0		Very strong grey oolitic LIMESTONE with occasional shells. Fractures are horizontal, medium to closely spaced, undulating, partly open. (FOREST MARBLE FORMATION)	13	(1.30)			
							0		Weak dark grey oolitic shelly LIMESTONE. Fracture is horizontal, open and undulating. (FOREST MARBLE FORMATION)	13.30		48.17		
18.00 - 19.50	18.00						150		Very strong light grey oolitic LIMESTONE with occasional shells. One fracture, horizontal, open and stepped. (FOREST MARBLE FORMATION)	14	(0.95)			
							20		Moderately strong dark grey silty sandy LIMESTONE with occasional shell fragments. (FOREST MARBLE FORMATION)	14.25		47.22		
19.50 - 21.00	19.50						450		Very strong light grey LIMESTONE with occasional shells. Fractures are horizontal to sub-horizontal, medium spaced, open, wavy to rough. (WHITE LIMESTONE FORMATION)	14.35	(0.10)	47.12		
							150		Weak greenish grey SILTSTONE. (WHITE LIMESTONE FORMATION) ... At 19.10m: 6cm x 2cm lens of shells.	14.90		46.57		
							250		Strong to very strong light grey with occasional green staining LIMESTONE. Fractures are horizontal to sub-horizontal, closely to medium spaced, open to closed, wavy and undulating.	15	(0.70)			
							300			15.60		45.87		
							250			15.80	(0.20)	45.67		
							450			16.10	(0.30)	45.37		
							0			16.20	(0.10)	45.27		
							0			16.50	(0.30)	44.97		
							0			17	(0.65)			
							160			17.15		44.32		
							220			18	(1.90)			
							460			19		42.42		
							0			19.05		42.42		
							180			19.25	(0.20)	42.22		
							50			20				
							300							

Continued on Next Sheet

Progress and Observations										Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)		
													1) Inspection pit hand dug to 0.80m bgl, terminated hand digging due to water ingress. 2) Borehole dynamic sampled to 5.00m, then rotary cored from 5.00m to 21.00m. 3) Gas and groundwater monitoring well installed to 4.00m bgl, with response zone between 2.00m and 4.00m bgl.



Method: Rotary Cored	Date(s): 26/01/2023 - 30/01/2023	Logged By: JM/MA	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448597.30, 213336.32	Checked By: CV	Flush: Air mist
Hydrock Project No: C-19114-C	Ground Level: 61.47m OD		Scale: 1:50

Sample/Core Run (m)	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill	
	Depth (m)	Type	Results	TCR	SCR	RQD	lf. Min Mean Max								
1.20 - 2.00 100% rec	0.40	D	N=8 (1,1,1,3,2,2)						Soft dark brown slightly gravelly slightly sandy CLAY with frequent rootlets. Gravel is sub-angular fine of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.20	(0.20)	61.27			
	0.40	D							Very soft (wet) light yellowish brown slightly gravelly slightly sandy CLAY. Gravel is sub-angular to rounded fine to coarse of flint and quartzite. (ALLUVIUM)	0.50	(0.30)	60.97			
2.00 - 3.00 20% rec	1.20	SPT	N=15 (2,4,4,3,4,4)						Orangish brown gravelly coarse grained SAND. Gravel is sub-angular to rounded fine and medium of dark brown iron rich medium grained sandstone, flint and quartzite. (ALLUVIUM)	1.30	(0.80)	60.17			
	1.20 - 1.65	D							Soft orangish brown slightly gravelly sandy CLAY with rare decomposed roots. Gravel is sub-rounded to rounded fine to coarse of sandstone and quartzite. (ALLUVIUM)	1.65	(0.70)				
	1.20 - 1.65	D													
	1.65	D													
3.00 - 4.00 100% rec	1.50	D	N=16 (1,2,3,3,5,5)						Dark orangish brown sandy GRAVEL. Gravel is sub-angular to rounded fine to coarse of tabular light grey medium grained shelly limestone, rounded dark orangish brown iron rich medium grained sandstone, flint and quartzite. (RIVER TERRACE DEPOSITS)	2.00		59.47			
	1.50	D													
	2.00	SPT													
	2.00 - 2.45	D													
4.00 - 5.00 80% rec	2.00 - 2.45	D	N=15 (1,2,4,3,4,4)						Firm bluish grey thinly fissured, thinly laminated silty CLAY. Fissures are extremely closely spaced and randomly oriented. (KELLAWAYS CLAY MEMBER)	3.30		58.17			
	2.45	D													
	3.00	SPT													
	3.00 - 3.45	D													
5.00 - 6.00	3.00 - 3.45	D	N=15 (1,2,4,3,4,4)							4.00	(2.10)				
	4.00	SPT													
	4.00 - 4.45	D													
	4.45	D													
6.00 - 7.50	5.00	SPT	N=15 (1,2,4,3,4,4)						Very strong grey shelly LIMESTONE. Fractures are horizontal to sub-horizontal, open to closed, wavy with shelly laminated clay infill. (CORNBRAsh LIMESTONE FORMATION)	5.40		56.07			
	5.00 - 5.45	D													
	5.45	D													
	5.45	D													
7.50 - 9.00	6.00	SPT	N=15 (1,2,4,3,4,4)						Very strong grey crystalline LIMESTONE with occasional shell fragments. (CORNBRAsh LIMESTONE FORMATION)	6.95		54.52			
	6.00 - 6.95	D													
	6.95	D													
	6.95	D													
9.00 - 10.50	7.50	SPT	50/220mm (2,2,3,5,42)						Soft dark grey slightly gravelly CLAY. gravel is Sub rounded to rounded of limestone. (CORNBRAsh LIMESTONE FORMATION)	7.50	(0.10)	53.97			
	7.50 - 7.60	D													
	7.60	D													
	7.60	D													
9.00 - 10.50	8.70	SPT	50/220mm (2,2,3,5,42)						Very strong grey sandy LIMESTONE with occasional shell fragments. Fractures are horizontal to sub-vertical, open, very close to medium spaced, with occasional clay infill. (CORNBRAsh LIMESTONE FORMATION)	8.70		52.77			
	8.70	D													
9.00 - 10.50	9.00	SPT	50/220mm (2,2,3,5,42)						Weak grey thinly laminated carbonaceous MUDSTONE with occasional thin bands (2mm) of siltstone. Fractures are horizontal medium to closely spaced, stepped and undulating, open to moderately wide, clay infill. (FOREST MARBLE FORMATION)	9.00					
	9.00	D													
										Continued on Next Sheet					

Progress and Observations										Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)		
Comma chio 300	26/01	0715	0.00									1) Inspection pit hand dug to 1.20m bgl, terminated hand digging due to water ingress. 2) Borehole dynamic sampled to 5.00m, then rotary cored from 5.00m to 21.00m. 3) Gas and groundwater monitoring well installed to 8.35m bgl, with response zone between 6.00m and 8.35m bgl. 4) Hydrock dipped borehole at 8.35m bgl after installation.	
	26/01	1745	5.37	4.00	127								
	27/01	0715	5.37	4.00	127	0.20							
	27/01	1645	15.00	4.50	127	0.60	Air mist						
Comma chio 300	30/01	0000	15.00	6.00	127	0.10	Air mist	grey					





Method: Rotary Cored	Date(s): 26/01/2023 - 30/01/2023	Logged By: JM/MA	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448597.30, 213336.32	Checked By: CV	Flush: Air mist
Hydrock Project No: C-19114-C	Ground Level: 61.47m OD		Scale: 1:50

Sample/Core Run (m)	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min Mean Max							
10.50 - 12.00	10.50	SPT	50/135mm (8,17,23,27)	100	100	100			Weak grey thinly laminated carbonaceous MUDSTONE with occasional thin bands (2mm) of siltstone. Fractures are horizontal medium to closely spaced, stepped and undulating, open to moderately wide, clay infill. (FOREST MARBLE FORMATION)	11	(2.90)			
12.00 - 13.50							0 0 0		Interbedded extremely weak bluish grey extremely thinly laminated to thinly bedded silty MUDSTONE and weak dark grey SILTSTONE and very strong grey shelly LIMESTONE. (FOREST MARBLE FORMATION) ... From 12.05m to 12.20m: Limestone band in interbedded  ... From 13.00m to 13.50m: Limestone band in interbedded	12 13	(1.70)			
13.50 - 15.00							100 400 750		Very strong medium bedded grey ooidal, shelly fine to medium grained LIMESTONE with frequent medium to coarse gravel sized shell fossils and occasional white veins of calcite. Beds are dark grey of strong medium spaced partially weathered muddy limestone, extremely weak partially weathered highly calcareous mudstone and siltstone and clay. Fractures are horizontal to sub-horizontal, medium spaced, rough and undulating, open to moderately wide with clay infill. Sub vertical fracture from 16.70m to 17.00m, stepped, open with clean infill. (FOREST MARBLE FORMATION)	14				
15.00 - 16.50	15.10	HSV	50kPa						... From 15.00m to 15.20m: Band of soft grey clay.	15				
16.50 - 18.00	16.55	HSV	22kPa						... Below 16m: The occurrence of shell fossils becoming occasional and becoming more crystalline. ... From 16.25m to 16.35m: Band of Extremely weak dark grey partially weathered calcareous mudstone with frequent fine sand sized shell fragments. ... From 16.50m to 16.60m: Band of soft grey clay.	16 17	(4.70)			
18.00 - 19.50	18.10	HSV	40kPa				300 300 480		... From 17.50m to 17.90m: Band of strong dark grey partially weathered calcareous mudstone with occasional fine to coarse sand sized shell fragments (oysters maybe). Fine to coarse gravel sized fragments of carbonised plant fossils.	18				
19.50 - 21.00									Very strong to strong light greenish grey fine to medium grained LIMESTONE with occasional fine to coarse gravel sized shell fossils. Fractures are horizontal, sub-horizontal and sub-vertical, medium spaced, rough and undulating, open to moderately wide, with clean, striated grey stained mineral infill. Sub vertical fracture from 17.70m to 18.00m, stepped, open with clean infill. Sub-vertical fracture from 18.64m to 18.76m stepped, moderately wide with clean infill. Sub-vertical fracture from 19.25m to 19.46m stepped, moderately wide with clean infill. (WHITE LIMESTONE FORMATION) ... From 18.00m to 18.17m: Band of firm grey clay with occasional fine sand sized shell fragments. ... At 19.00m: Striated fracture.	19 20	(2.00)			

Continued on Next Sheet

Progress and Observations									Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)	
												1) Inspection pit hand dug to 1.20m bgl, terminated hand digging due to water ingress. 2) Borehole dynamic sampled to 5.00m, then rotary cored from 5.00m to 21.00m. 3) Gas and groundwater monitoring well installed to 8.35m bgl, with response zone between 6.00m and 8.35m bgl. 4) Hydrock dipped borehole at 8.35m bgl after installation.



Method: Rotary Cored	Date(s): 26/01/2023 - 30/01/2023	Logged By: JM/MA	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448597.30, 213336.32	Checked By: CV	Flush: Air mist
Hydrock Project No: C-19114-C	Ground Level: 61.47m OD		Scale: 1:50

Sample/Core Run (m)	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min Mean Max							
				80	80	79			Very strong to strong light greenish grey fine to medium grained LIMESTONE with occasional fine to coarse gravel sized shell fossils. Fractures are horizontal, sub-horizontal and sub-vertical, medium spaced, rough and undulating, open to moderately wide, with clean, striated grey stained mineral infill. Sub vertical fracture from 17.70m to 18.00m, stepped, open with clean infill. Sub-vertical fracture from 18.64m to 18.76m stepped, moderately wide with clean infill. Sub-vertical fracture from 19.25m to 19.46m stepped, moderately wide with clean infill. (WHITE LIMESTONE FORMATION) ... From 19.70m to 20.00m: Band of firm grey clay with occasional fine to coarse sand sized shell fragments.	21.00	(1.00)	40.47		
									Strong thickly laminated light grey muddy fine grained LIMESTONE with occasional fine to medium gravel sized fragments of shell fossils. Laminations are undulating (ripple marks) of weak grey siltstone. Fractures are horizontal, sub-horizontal and sub-vertical, medium spaced, rough and undulating, open to moderately wide, with clean infill. (WHITE LIMESTONE FORMATION) End of Borehole at 21.00m	22				
										23				
										24				
										25				
										26				
										27				
										28				
										29				
										30				

Progress and Observations									Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)	
												1) Inspection pit hand dug to 1.20m bgl, terminated hand digging due to water ingress. 2) Borehole dynamic sampled to 5.00m, then rotary cored from 5.00m to 21.00m. 3) Gas and groundwater monitoring well installed to 8.35m bgl, with response zone between 6.00m and 8.35m bgl. 4) Hydrock dipped borehole at 8.35m bgl after installation.

Method: Rotary Cored	Date(s): 31/01/2023 - 02/02/2023	Logged By: JM	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 449117.89, 212482.32	Checked By: CV	Flush: Air mist
Hydrock Project No: C-19114-C	Ground Level: 60.12m OD		Scale: 1:50

Sample/Core Run (m)	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If. Mean Max							
1.00 - 2.00 80% rec	0.10 - 0.20	ES							Soft dark brown slightly gravelly sandy CLAY with frequent rootlets. and coarse gravel sized fragment of brick. Gravel is sub-angular fine of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	59.82		
	0.50 - 0.80	B							Soft light orangish brown sandy CLAY. (ALLUVIUM)	0.60	(0.30)	59.52		
2.00 - 3.00 80% rec	1.00	SPT	N=31 (3,4,7,6,8,10)						Light orangish brown mottled light yellowish brown silty slightly gravelly medium grained SAND. Gravel is angular to sub-angular fine to coarse of tabular medium grained iron-rich sandstone. (RIVER TERRACE DEPOSITS)	1.00	(0.90)			
	1.00	D							Dense light orangish brown silty very gravelly medium grained SAND with bands of gravel. Gravel is angular to rounded fine to coarse of tabular medium grained iron-rich sandstone, flint, quartzite and white limestone. (RIVER TERRACE DEPOSITS)	1.70	(0.50)	58.42		
3.00 - 4.00 100% rec	2.00	D							Dark brown very gravelly coarse grained SAND with bands of gravel. Gravel is sub- angular to rounded fine to coarse of tabular medium grained iron-rich sandstone, flint, quartzite and white shelly limestone. (RIVER TERRACE DEPOSITS)	2.20	(0.50)	57.92		
	2.80	D	59kPa						Dark brown sandy GRAVEL. Gravel is sub- angular to rounded fine to coarse of tabular medium grained iron-rich sandstone, flint, quartzite and white shelly limestone. (RIVER TERRACE DEPOSITS)	2.70	(1.30)	57.42		
4.00 - 5.00 80% rec	3.00 - 3.50	HSV	90kPa						Firm thinly laminated grey silty CLAY with occasional medium gravel sized fragments of bivalve and ammonite fossils. Bedding fissures are extremely closely spaced horizontal. (OXFORD CLAY FORMATION)	3.50				
	3.50	D	72kPa							4.00		56.12		
5.00 - 6.50 80% rec	4.00	SPT	N=23 (2,3,3,6,6,8)						Stiff thinly laminated grey silty CLAY with occasional medium gravel sized fragments of bivalve and ammonite fossils. Bedding fissures are extremely closely spaced horizontal. (OXFORD CLAY FORMATION) ... Below 4.00m: Becoming stiff.	4.00				
	4.00	D	135kPa							5.00				
6.50 - 8.00 95% rec	4.50	HSV	72kPa							5.50				
	5.00	D	122kPa							5.70				
8.00 - 9.50 70% rec	5.50	SPT	N=27 (3,5,5,6,8,8)							6.10				
	5.70	HSV	102kPa							6.20				
9.50 - 11.00 70% rec	6.10	HSV	112kPa							6.30				
	6.20	D	50/150mm (4,6,6,7)							6.50				
8.00 - 9.50 70% rec	6.50	SPT	125kPa							6.50				
	6.50	D	112kPa							7.20				
9.50 - 11.00 70% rec	7.20	HSV	121kPa							7.60				
	7.60	D	125kPa							7.70				
9.50 - 11.00 70% rec	7.70	HSV	90kPa							8.00				
	8.00	SPT	N=46 (5,8,10,10,13,13)							8.65				
9.50 - 11.00 70% rec	8.65	HSV	50/145mm (7,12,30,20)							8.70				
	8.70	D	125kPa							9.30				
9.50 - 11.00 70% rec	9.30	D	90kPa							9.40				
	9.40	HSV	50/145mm (7,12,30,20)							9.50				
9.50 - 11.00 70% rec	9.50	SPT	125kPa							9.70				
	9.70	D	90kPa							9.90				
9.50 - 11.00 70% rec	9.90	HSV	50/145mm (7,12,30,20)							10.00				
	10.00	D	125kPa							10.00				

Progress and Observations										Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)		
Commachio 300	02/02	0000	14.00	5.50		0.10	Air mist	grey				1) Inspection pit hand dug to 0.90m bgl, terminated hand digging due to water ingress. 2) Dynamic sampled to 8.00m, then rotary cored from 8.00m to 20.00m. 3) Gas and groundwater monitoring well installed to 2.50m bgl, with response zone between 1.00m and 2.50m bgl. 4) Hydrock dipped well at 2.50m bgl after installation.	

Method: Rotary Cored	Date(s): 31/01/2023 - 02/02/2023	Logged By: JM	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 449117.89, 212482.32	Checked By: CV	Flush: Air mist
Hydrock Project No: C-19114-C	Ground Level: 60.12m OD		Scale: 1:50

Sample/Core Run (m)	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min Mean Max							
11.00 - 12.50 60% rec	10.30	HSV	130kPa						Stiff thinly laminated grey silty CLAY with occasional medium gravel sized fragments of bivalve fossils. Bedding fissures are extremely closely spaced horizontal. (OXFORD CLAY FORMATION)		(1.60)			
	10.70	D							... From 10.70m to 11.0m: Very stiff.					
	11.00	SPT	140kPa 50/165mm (10,15,21,25,4)									48.82		
12.50 - 14.00 73% rec	11.60	D							Stiff grey sandy CLAY with occasional medium to coarse gravel sized bivalve (oyster) fossils. (KELLAWAYS SAND MEMBER)		(1.30)			
	12.50	SPT	50/120mm (13,12,45,5)									47.52		
	12.70	D							Very dense grey slightly silty fine to medium grained SAND with frequent medium to coarse gravel sized bivalve fossils. (KELLAWAYS SAND MEMBER)		(0.60)			
14.00 - 15.50 100% rec	13.30	D							... From 12.80m to 12.90m: Band of moderately weak grey fine to medium grained partially weathered SANDSTONE with occasional coarse gravel sized bivalve fossils.		(0.15)			
	13.30	D							Stiff grey sandy CLAY with frequent medium to coarse gravel sized bivalve (occasionally pyritised) and belemnite fossils. (KELLAWAYS SAND MEMBER)		(0.65)			
	14.00	D							Very stiff thinly laminated grey silty micaceous CLAY with occasional mudstone lithorelicts and fine to medium gravel sized fragments of bivalve fossils. Laminae are very closely spaced of fine sand and silt. Bedding fissures are extremely closely spaced horizontal. (KELLAWAYS SAND MEMBER)		(0.44)			
15.50 - 17.00 100% rec	14.80	D							Grey very silty fine to medium grained possibly micaceous, SAND. (KELLAWAYS SAND MEMBER)		(2.66)			
	15.60	D							... From 14.10m to 14.40m: Band of grey very silty sand with occasional coarse gravel sized bivalve (look like gryphaea) fossils.					
	16.20	HSV	140kPa						Very stiff thinly laminated grey silty possibly micaceous CLAY with occasional mudstone lithorelicts and occasional fine to medium gravel sized fragments of (occasionally pyritised) bivalve (oysters) and belemnite fossils. Laminae are closely spaced of silt. Bedding fissures are extremely closely spaced horizontal. (KELLAWAYS CLAY MEMBER)					
17.00 - 18.50	16.50	D							... From 15.91m to 15.97m: Sub horizontal fissure 60 degrees.					
	16.70	HSV	140kPa						... From 16.00 to 17.30m: Occasional pockets (1cm by 5cm max) of greyish green pyritic silt.					
	17.20	D							Stiff dark greenish grey slightly sandy CLAY with abundant fine to coarse gravel sized bivalve shells and shell fragments. (KELLAWAYS CLAY MEMBER)		(0.20)			
18.50 - 20.00				81	81	81		250 400 700	Very strong thickly laminated grey shelly muddy LIMESTONE with occasional dissolution surface voids and bivalve fossils. Laminae are closely to very closely spaced of clay. Fractures are horizontal, sub-horizontal and sub-vertical, medium to widely spaced, rough and undulating, open with clay infill. Sub vertical fracture from 18.70m to 19.00m, stepped, open with clay infill. (CORNBURASH LIMESTONE FORMATION)		(2.70)			
									... From 17.30 to 17.50m: Appears brecciated with frequent clay veins.					
				100	89	89			... Below 17.50m: Frequent shell fossils ... From 19.0-19.50m: White very strong shelly LIMESTONE with abundant fine to coarse gravel sized bivalve shells and shell fragments and siltstone inclusions.					
									... From 19.70 - 20.0m: Dark grey crystalline limestone with rare shell fossils and rare siltstone					

Continued on Next Sheet

Progress and Observations										Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)		
												1) Inspection pit hand dug to 0.90m bgl, terminated hand digging due to water ingress. 2) Dynamic sampled to 8.00m, then rotary cored from 8.00m to 20.00m. 3) Gas and groundwater monitoring well installed to 2.50m bgl, with response zone between 1.00m and 2.50m bgl. 4) Hydrock dipped well at 2.50m bgl after installation.	





Project: Begbroke

Borehole No

RO305

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Method: Rotary Cored	Date(s): 31/01/2023 - 02/02/2023	Logged By: JM	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 449117.89, 212482.32	Checked By: CV	Flush: Air mist
Hydrock Project No: C-19114-C	Ground Level: 60.12m OD		Scale: 1:50

Sample/Core Run (m)	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min Mean Max							
									Very strong thickly laminated grey shelly muddy LIMESTONE with occasional dissolution surface voids and bivalve fossils. Laminae are closely to very closely spaced of clay. Fractures are horizontal, sub-horizontal and sub-vertical, medium to widely spaced, rough and undulating, open with clay infill. Sub vertical fracture from 18.70m to 19.00m, stepped, open with clay infill. (CORNBRAsh LIMESTONE FORMATION) ... From 19.70 - 20.0m: Dark grey crystalline limestone with rare shell fossils and rare siltstone inclusions. End of Borehole at 20.00m	21				
										22				
										23				
										24				
										25				
										26				
										27				
										28				
										29				
										30				

Progress and Observations									Chiselling			General Remarks:
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)	
												1) Inspection pit hand dug to 0.90m bgl, terminated hand digging due to water ingress. 2) Dynamic sampled to 8.00m, then rotary cored from 8.00m to 20.00m. 3) Gas and groundwater monitoring well installed to 2.50m bgl, with response zone between 1.00m and 2.50m bgl. 4) Hydrock dipped well at 2.50m bgl after installation.



Method: Dynamic Sampled & Rotary Cored	Date(s): 08/02/2023	Logged By: ZC	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 447306.56, 213761.66	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 65.63m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If. Mean Max							
1.20 - 2.70 110mm 67% rec									Soft brown slightly sandy CLAY with frequent rootlets (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	65.33		
									Soft light brown sandy CLAY. (ALLUVIUM)	0.70	(0.40)	64.93		
2.70 - 4.00									Soft brown mottled grey slightly gravelly sandy CLAY. Gravel is sub-angular to sub-rounded fine to medium of flint and sandstone. (ALLUVIUM)	1.20	(0.50)	64.43		
									Firm orangish brown slightly gravelly sandy CLAY with occasional cobbles of sub-angular to sub-rounded limestone. Gravel is rounded to sub-angular fine to coarse flint and limestone. (ALLUVIUM)	2.70	(1.50)	62.93		
4.00 - 5.50					77	37	18	10 100 140	Soft orangish brown slightly gravelly sandy CLAY with occasional shell fragments. Sand is coarse. Gravel is sub-angular to sub-rounded fine to coarse of flint and sandstone. (ALLUVIUM) <i>... Between 3.05m and 3.15m: Becoming mottled grey and more sandy and gravelly.</i>	3.15	(0.45)	62.48		
								50 300 400	Strong light grey with orange and dark grey staining shelly LIMESTONE. Fractures are horizontal to sub-horizontal, open, wavy and undulating with occasional sand infill. (CORNBRASS LIMESTONE FORMATION)	4.60	(1.45)	61.03		
					67	62	53		Weak grey very thinly laminated MUDSTONE with rare shell fragments and occasional thin bands (5mm) of limestone. (FOREST MARBLE FORMATION)	5.50	(0.90)	60.13		
End of Borehole at 5.50m														

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 2.70m bgl, then rotary cored to 5.50m bgl. 3) Borehole installed with groundwater monitoring well to 4.50m bgl, with response zone between 3.50m and 4.50 bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)
Commachio 205	07/02	1700	5.50	2.70	144		Air/Mist	NR



Method: Dynamic Sampled & Rotary Cored	Date(s): 08/02/2023	Logged By: ZC	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 447315.61, 213666.35	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 66.09m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If. Mean Max							
1.20 - 2.70 110mm 87% rec									Soft brown slightly sandy CLAY with frequent rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	65.79		
									Soft light brown sandy CLAY. (RIVER TERRACE DEPOSITS)	0.70	(0.40)	65.39		
									Soft orangish brown mottled brown gravelly very sandy CLAY. Gravel is sub-angular to sub-rounded medium to coarse of sandstone flint and quartzite. (RIVER TERRACE DEPOSITS)	1.00	(1.60)			
2.70 - 3.20 110mm 100% rec									... Between 1.70m and 2.30m bgl: Becoming less sandy.	2.30		63.79		
									Soft orangish brown sandy very gravelly CLAY. Gravel is sub-angular to sub-rounded fine to coarse of flint and sandstone and quartzite. (RIVER TERRACE DEPOSITS)	3.00	(0.70)	63.09		
3.20 - 4.70									... Between 2.55m and 3.00m bgl: Becoming more gravelly with occasional cobbles of limestone.	3.90	(0.90)			
									Strong light brownish grey with reddish brown staining shelly weathered LIMESTONE. Fractures are horizontal to sub-horizontal, open to closed, wavy and undulating, with occasional sand infill. (CORNBRASSH LIMESTONE FORMATION)	4.70	(0.80)	62.19		
									... Between 3.00m and 3.45m bgl: Non intact.	5.00	(0.30)	61.09		
4.70 - 5.20									Moderately weak light grey shelly LIMESTONE. Fractures are horizontal to sub-horizontal, open to closed and undulating with shelly clay infill. (CORNBRASSH LIMESTONE FORMATION)	5.20	(0.20)	60.89		
									Strong light grey shelly LIMESTONE. Fractures are horizontal to sub-vertical, open and closed, clean, rough and undulating with occasional sand infill. (CORNBRASSH LIMESTONE FORMATION)	5.20	(0.20)	60.89		
									Very weak grey thinly bedded MUDSTONE. (FOREST MARBLE FORMATION)					
End of Borehole at 5.20m														

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 3.20m bgl, then rotary cored to 5.20m bgl. 3) Borehole installed with groundwater monitoring well to 5.00m bgl, with response zone between 3.50m and 5.00m bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)
Commachio 205	08/02	0845	5.20	3.20	144		Air/Mist	NR







Method: Dynamic Sampled & Rotary Cored	Date(s): 07/02/2023	Logged By: ZC	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 447465.29, 213576.01	Checked By: NT	Flush:
Hydrock Project No: C-19114-C	Ground Level: 68.30m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If. Mean Max							
1.20 - 2.70 110mm 93% rec									Firm brown slightly gravelly sandy CLAY with frequent rootlets. Gravel is sub-angular fine of quartz and flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	68.00		
									Firm yellowish brown slightly gravelly sandy CLAY. Gravel is sub-angular to rounded fine to coarse of flint sandstone and quartzite. (RIVER TERRACE DEPOSITS)	1.10	(0.80)	67.20		
									Yellowish brown sandy sub-angular to sub-rounded fine to coarse flint, sandstone and limestone GRAVEL. (RIVER TERRACE DEPOSITS)	1.60	(0.50)	66.70		
									Yellowish brown gravelly SAND. Gravel is sub-angular to sub-rounded fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	2.70	(1.10)			
2.70 - 4.20 110mm 100% rec									Yellowish brown sandy sub-angular to sub-rounded fine to coarse flint, sandstone and limestone GRAVEL. (RIVER TERRACE DEPOSITS)	3.15	(3.15)			
5.70 - 7.20									Stiff dark grey slightly sandy CLAY. (KELLAWAYS CLAY MEMBER)	5.85	(0.20)	62.45		
				100	84	55			Very strong light grey shelly LIMESTONE. Fractures are horizontal to sub-horizontal closed to open undulating and rough. (CORNBRAsh LIMESTONE FORMATION)	6.05	(1.15)	62.25		
7.20 - 8.70									... Between 6.90m and 7.20m bgl: Becoming more shelly.	7.20	(1.00)	61.10		
				94	94	73			Medium strong grey shelly LIMESTONE. Fractures are horizontal to sub-horizontal, open, wavy and undulating with occasional clay infill. (CORNBRAsh LIMESTONE FORMATION)	8.20	(0.50)	60.10		
8.70 - 10.20									Very strong light grey with occasional brown staining shelly LIMESTONE. Fractures are sub-horizontal, open, undulating and rough with brown sandy infill. (CORNBRAsh LIMESTONE FORMATION)	8.70	(0.40)	59.60		
				93	93	82			Weak grey thinly bedded MUDSTONE. (FOREST MARBLE FORMATION) ... Between 8.95m and 9.05m bgl: Becoming sandy and mottled brown.	9.10	(0.60)	59.20		
									Interbedded weak grey thinly bedded MUDSTONE and very strong light grey shelly oolitic LIMESTONE. (FOREST MARBLE FORMATION)	9.70		58.60		
									Weak grey thinly bedded MUDSTONE. (FOREST MARBLE FORMATION)	10.00				

Continued on Next Sheet

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 5.70m bgl, then rotary cored to 12.70m bgl. 3) Borehole backfilled with bentonite pellets and arisings on completion.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam. (mm)	Water Depth (m)	Flush Type	Returns (colour)



Project: Begbroke

Borehole No  
**RO308**  
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Method: Dynamic Sampled & Rotary Cored	Date(s): 07/02/2023	Logged By: ZC	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 447465.29, 213576.01	Checked By: NT	Flush:
Hydrock Project No: C-19114-C	Ground Level: 68.30m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min. If. Mean Max							
10.20 - 11.70									Weak grey thinly bedded MUDSTONE. (FOREST MARBLE FORMATION)	10.50	(0.80)	57.80		
				100	100	82			Interbedded weak grey thinly bedded MUDSTONE and very strong light grey shelly oolitic LIMESTONE. (FOREST MARBLE FORMATION)	10.75	(0.25)	57.55		
11.70 - 12.70									Weak grey thinly bedded MUDSTONE. (FOREST MARBLE FORMATION)	11	(0.75)			
				100	100	91			Interbedded weak grey thinly bedded MUDSTONE and very strong light grey shelly oolitic LIMESTONE. (FOREST MARBLE FORMATION)	11.50		56.80		
									End of Borehole at 12.70m	12.70		55.60		
										13				
										14				
										15				
										16				
										17				
										18				
										19				
										20				

Progress and Observations									General Remarks: 1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 5.70m bgl, then rotary cored to 12.70m bgl. 3) Borehole backfilled with bentonite pellets and arisings on completion.
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	

Method: Dynamic Sampled & Rotary Cored	Date(s): 09/02/2023	Logged By: MA	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 447738.02, 214074.61	Checked By: NT	Flush:
Hydrock Project No: C-19114-C	Ground Level: 68.22m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If. Mean Max							
1.20 - 2.00 110mm 100% rec									Firm dark brown slightly sandy slightly gravelly CLAY. Gravel is sub-angular to rounded fine to coarse of flint and sandstone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	67.92		
									Dark orangish brown gravelly slightly clayey SAND. Gravel is sub-angular to rounded fine to coarse of flint quartzite and sandstone. (RIVER TERRACE DEPOSITS)	1	(1.30)			
4.00 - 5.50									Orangish brown sandy sub-angular to rounded fine to coarse quartzite and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	1.60		66.62		
									Moderately strong light grey stained orangish brown partially weathered shelly LIMESTONE. Fractures are horizontal to sub-horizontal, open to closely spaced, undulating and smooth. (CORNBURASH LIMESTONE FORMATION)	3.90		64.32		
5.50 - 6.40														
									Very stiff grey thinly laminated CLAY with occasional lenses of coarse sand and shell fragments. (FOREST MARBLE FORMATION)	5.50		62.72		
									End of Borehole at 6.40m	6.40		61.82		

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 2.00m bgl. Open holed from 2.00m to 4.00m, then rotary cored to 6.40m bgl. 3) Borehole installed with groundwater monitoring well to 5.50m bgl, with response zone between 4.50m and 5.50m bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)



Project: Begbroke

Borehole No  
RO309A

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Method: Rotary Open	Date(s): 09/02/2023	Logged By: MA	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 447738.02, 214074.61	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 68.22m OD		Scale: 1:100

Run (m)	Samples / Tests			Drilling Record			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	Weight (Kg)	Mins	Secs							
								Firm dark brown slightly sandy slightly gravelly CLAY. Gravel is sub-angular to rounded fine to coarse of flint and sandstone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	67.92		
								Dark orangish brown gravelly slightly clayey SAND. Gravel is sub-angular to rounded fine to coarse of flint quartzite and sandstone. (RIVER TERRACE DEPOSITS)	1.60	(1.30)	66.62		
								Orangish brown sandy sub-angular to rounded fine to coarse quartzite and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	3.00	(2.30)			
								End of Borehole at 3.90m	3.90		64.32		
									4				
									5				
									6				
									7				
									8				
									9				
									10				
									11				
									12				
									13				
									14				
									15				
									16				
									17				
									18				
									19				
									20				

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Geology and strata boundaries have been interpreted from nearby rotary cored position. 3) Borehole open holed to 3.90m bgl. 4) Borehole installed with groundwater monitoring well to 3.50m bgl with response zone between 2.00m and 3.50m bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)
Commachio 205	09/02	1220	3.90	0.00	144		Air/Mist	NR





Method: Dynamic Sampled & Rotary Cored	Date(s): 13/02/2023	Logged By: MA	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 447730.99, 213943.05	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 67.04m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If. Mean Max							
1.20 - 2.50 110mm 100% rec									Firm dark brown slightly sandy slightly gravelly CLAY. Gravel is sub-angular to rounded fine to coarse of flint and sandstone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	66.74		
									Yellowish brown gravelly SAND. Gravel is sub-angular to rounded fine to coarse of flint sandstone and quartzite. (RIVER TERRACE DEPOSITS)	0.50	(0.20)	66.54		
2.50 - 4.00							NI		Yellowish brown SAND and GRAVEL. Gravel is sub-angular to rounded fine to coarse of sandstone limestone and quartzite. (RIVER TERRACE DEPOSITS)	1	(1.45)			
									Stiff grey mottled yellowish brown fissured silty CLAY. Fissures are very closely spaced and randomly oriented. (KELLAWAYS CLAY MEMBER)	1.95		65.09		
4.00 - 5.50									... Between 3.00m and 3.10m bgl: Abundant fine gravel sized selenite crystals.	3		63.94		
					80	31	20		Strong grey with orangish brown staining weathered shelly LIMESTONE. Fractures are horizontal to sub-vertical, very closely spaced, open to closed, wavy and rough with occasional sandy infill. (CORNBRAsh LIMESTONE FORMATION)	3.10				
5.50 - 6.50									... Between 3.80m and 4.70m bgl: Very shelly with spheroidal weathering.	4				
					100	100	89		... Between 4.80m and 4.90m bgl: Medium strong.	5				
									Very strong dark grey unweathered shelly LIMESTONE. (CORNBRAsh LIMESTONE FORMATION)	5.50		61.54		
					75	75	57		Interbedded very weak dark grey thinly bedded MUDSTONE and very weak shelly LIMESTONE. (FOREST MARBLE FORMATION)	6		60.94		
									Very weak grey thinly bedded MUDSTONE. (FOREST MARBLE FORMATION)	6.10		60.94		
									End of Borehole at 6.50m	6.20	(0.10)	60.84		
										6.50	(0.30)	60.54		

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 2.50m bgl, then rotary cored to 6.50m bgl. 3) Borehole installed with groundwater monitoring well to 6.00m bgl, with response zone between 3.50m and 6.00m bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)
Commachio 205	13/02	1300	6.50	2.00	128		Air/Mist	NR



Method: Dynamic Sampled & Rotary Cored	Date(s): 10/02/2023	Logged By: ZC	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 447746.00, 213823.06	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 64.41m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If. Mean Max							
1.20 - 2.70 110mm 87% rec									Soft brown slightly sandy CLAY with frequent rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	64.11		
									Light brown slightly gravelly SAND. Gravel is sub-angular to sub-rounded fine to coarse of flint and quartzite. (RIVER TERRACE DEPOSITS)	1.20	(0.90)	63.21		
2.70 - 3.80									Soft orangish brown very sandy CLAY (RIVER TERRACE DEPOSITS)	2.10	(0.90)	62.31		
									Orangish brown very gravelly SAND with occasional sub-rounded cobbles of quartzite. Gravel is sub-angular to sub-rounded fine to coarse of quartzite sandstone and flint. (RIVER TERRACE DEPOSITS)	2.40	(0.30)	62.01		
3.80 - 5.20					78	51	40	30 120 200	Soft light brown sandy very gravelly CLAY with frequent cobbles of limestone. Gravel is sub-rounded to angular fine to coarse of flint quartzite and limestone. (RIVER TERRACE DEPOSITS)	2.60	(0.20)	61.81		
									Strong light brown shelly weathered LIMESTONE. Fractures are horizontal open rough and undulating with sand infill. (CORNBRAsh LIMESTONE FORMATION)	3.20	(0.60)	61.21		
5.20 - 6.60									Strong light grey with orangish brown staining shelly weathered LIMESTONE. Fractures are horizontal rough and undulating with sand infill. (CORNBRAsh LIMESTONE FORMATION)	4.00	(2.10)			
					63	54	39	60 110 210	Very weak light grey thinly bedded MUDSTONE. (FOREST MARBLE FORMATION)	5.30		59.11		
									... Between 6.40m and 6.60m bgl: Occasional thin beds (up to 5cm) of grey limestone.	6.60		57.81		
									End of Borehole at 6.60m					

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 2.70m bgl, then rotary cored to 6.60m bgl. 3) Borehole installed with groundwater monitoring well to 5.00m bgl, with response zone between 3.00m and 5.00m bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)
Commachio 205	10/02	1130	6.60	2.70	144		Air/Mist	NR

Method: Dynamic Sampled & Rotary Cored	Date(s): 09/02/2023	Logged By: ZC	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 447753.11, 213733.38	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 67.28m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If. Mean Max							
1.20 - 2.70 110mm 93% rec									Soft brown slightly sandy CLAY with frequent rootlets. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	66.98		
									Light brown slightly gravelly SAND. Gravel is sub-angular to sub-rounded fine to coarse of flint and quartzite. (RIVER TERRACE DEPOSITS)	1.20	(0.90)	66.08		
2.70 - 4.20 110mm 100% rec									Brown very gravelly SAND with occasional cobbles of sandstone and quartzite. Gravel is sub-angular to sub-rounded fine to coarse of flint sandstone and quartzite. (RIVER TERRACE DEPOSITS)	2.45	(1.25)	64.83		
									... Between 2.35m and 2.45m bgl: Becoming orangish brown and clayey.	2.60	(0.15)	64.68		
									Firm orangish brown mottled grey and orange slightly sandy silty CLAY. Sand forms in occasional lenses. (KELLAWAYS SAND MEMBER)	3.00	(0.40)	64.28		
									Firm grey slightly sandy CLAY with occasional very thin bands of brown sand. (KELLAWAYS SAND MEMBER)	3.90	(0.90)	63.38		
4.20 - 5.70 110mm 93% rec									Stiff grey mottled yellow and orange slightly sandy CLAY. (KELLAWAYS SAND MEMBER)	4.00	(0.90)	63.38		
									Stiff grey thinly bedded CLAY. (KELLAWAYS CLAY MEMBER)	5.00	(2.15)			
5.70 - 7.20										6.05		61.23		
									Strong grey shelly weathered LIMESTONE. Fractures are horizontal open to closed undulating rough with occasional sand infill. (CORNBURASH LIMESTONE FORMATION)	7.00	(3.05)			
7.20 - 8.70									... From 6.30m bgl: Becoming light grey.	8.00				
									... Between 6.50m and 6.60m bgl: One wavy verticle fracture present.	9.00		58.18		
8.70 - 10.20									Very weak light grey thinly bedded MUDSTONE. (FOREST MARBLE FORMATION)	10.00	(1.10)			

Continued on Next Sheet

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 5.70m bgl, then rotary cored to 10.20m bgl. 3) Borehole installed with groundwater monitoring well to 9.00m bgl, with response zone between 6.00m and 9.00m bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)
Commachio 205	09/02	1330	10.20	0.00			Air/Mist	NR



Project: Begbroke

Borehole No

RO312

Page No. 2 of 2

Method: Dynamic Sampled & Rotary Cored	Date(s): 09/02/2023	Logged By: ZC	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 447753.11, 213733.38	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 67.28m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min. Mean Max							
									Very weak light grey thinly bedded MUDSTONE. (FOREST MARBLE FORMATION) End of Borehole at 10.20m	10.20		57.08		
										11				
										12				
										13				
										14				
										15				
										16				
										17				
										18				
										19				
										20				

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 5.70m bgl, then rotary cored to 10.20m bgl. 3) Borehole installed with groundwater monitoring well to 9.00m bgl, with response zone between 6.00m and 9.00m bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)







Method: Dynamic Sampled & Rotary Cored	Date(s): 09/02/2023	Logged By: MA	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 447995.70, 214111.64	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 65.84m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If. Mean Max							
0.80 - 2.00							NI		Firm dark brown slightly sandy slightly gravelly CLAY. Gravel is sub-angular to rounded fine to coarse of flint and sandstone. (AGRICULTURALLY DISTURBED TOPSOIL) Firm dark orangish brown slightly sandy slightly gravelly CLAY with rare cobbles of sub-angular to sub-rounded limestone. Gravel is sub-angular to sub-rounded fine to coarse of limestone and sandstone. (RIVER TERRACE DEPOSITS) Moderately strong grey with orange brown staining weathered shelly LIMESTONE. Fractures are sub-horizontal to sub-vertical open wavy and rough with rare clay infill. (CORNBURASH LIMESTONE FORMATION)	0.30	(0.30)	65.54		
				42	0	0				0.80	(0.50)	65.04		
2.00 - 3.00				80	50	24	40 70 130		Very weak grey thinly bedded MUDSTONE with occasional thin beds (2mm) of siltstone. (FOREST MARBLE FORMATION) Very strong grey unweathered crystalline LIMESTONE with occasional shell fragments. Fractures are closely spaced open to closed undulating and smooth with clay infill. (FOREST MARBLE FORMATION)		(3.70)			
3.00 - 4.00				75	41	33	50 100 220							
4.00 - 4.50				70	4	0	NI							
4.50 - 5.50				95	82	72	20 120 280			4.50		61.34		
									4.80	(0.30)	61.04			
									5.50	(0.70)	60.34			
									End of Borehole at 5.50m					

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 0.80m bgl, onto rock head 2) Borehole rotary cored to 5.50m bgl. 3) Borehole installed with groundwater monitoring well to 4.50m bgl, with response zone between 2.00m and 4.50m bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)
Commachio 205	09/02	1700	5.50	1.50	142	4.00	Air/Mist	NR



Project: Begbroke

Borehole No  
**RO313A**  
 Page No. 1 of 1

Method: Rotary Open	Date(s): 09/02/2023	Logged By: MA	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 447995.70, 214111.64	Checked By: NT	Flush: N/A
Hydrock Project No: C-19114-C	Ground Level: 65.84m OD		Scale: 1:100

Run (m)	Samples / Tests			Drilling Record			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	Weight (Kg)	Mins	Secs							
								Firm dark brown slightly sandy slightly gravelly CLAY. Gravel is sub-angular to rounded fine to coarse of flint and sandstone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	65.54		
								Firm dark orangish brown slightly sandy slightly gravelly CLAY with rare cobbles of sub-angular to sub-rounded limestone. Gravel is sub-angular to sub-rounded fine to coarse of limestone and sandstone. (RIVER TERRACE DEPOSITS) End of Borehole at 0.90m	0.90	(0.60)	64.94		
									1				
									2				
									3				
									4				
									5				
									6				
									7				
									8				
									9				
									10				
									11				
									12				
									13				
									14				
									15				
									16				
									17				
									18				
									19				
									20				

Progress and Observations									General Remarks: 1) Inspection pit hand dug to 0.90m bgl, onto rock head 2) Borehole installed with groundwater monitoring well to 0.80m bgl, with response zone between 0.50m and 0.80m bgl.				
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)					
Hand Tools	10/02	0955	0.90	0.00			N/A	NR					



Method: Dynamic Sampled & Rotary Cored	Date(s): 10/02/2023	Logged By: MA	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 447995.86, 213918.34	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 63.98m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If. Mean Max							
1.20 - 2.50 110mm 100% rec									Firm dark brown slightly sandy slightly gravelly CLAY. Gravel is sub-angular to rounded fine to coarse of flint and sandstone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	63.68		
									Orangish brown gravelly slightly clayey SAND. Gravel is sub-rounded to rounded fine to coarse of flint and sandstone. (ALLUVIUM)	1	(0.90)			
									Soft dark brown organic slightly gravelly silty CLAY with abundant plant matter and organic odour. Gravel is rounded fine to coarse of flint. (ALLUVIUM)	1.20		62.78		
2.50 - 4.00 110mm 67% rec									Light brownish grey SAND (ALLUVIUM)	1.70	(0.50)	62.28		
									Yellowish brown slightly clayey sandy angular to sub-rounded fine to coarse limestone sandstone and flint GRAVEL. (RIVER TERRACE DEPOSITS) ... Between 2.40m and 3.70m: Frequent cobbles of sub-angular limestone.	1.85	(0.15)	62.13		
										2				
4.00 - 5.50									Firm grey sandy CLAY. (RIVER TERRACE DEPOSITS)	3.75	(0.05)	60.23		
									Moderately strong grey oolitic LIMESTONE. (CORNBURASH LIMESTONE FORMATION)	3.90		60.18		
									Interbedded very weak grey thinly bedded MUDSTONE and moderately strong grey shelly LIMESTONE. (FOREST MARBLE FORMATION)	4.25	(0.45)	59.73		
5.50 - 7.00				100	2	0				5				
										6				
				73	67	67				7	(2.75)			
										7		56.98		
End of Borehole at 7.00m										7				

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 4.00m bgl, then rotary cored to 7.00m bgl. 3) Borehole installed with groundwater monitoring well to 4.50m bgl, with response zone between 4.00m and 4.50m bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)
Commachio 205	10/02	1600	7.00	4.00	142		Air/Mist	NR





Method: Rotary Cored

Date(s): 09/02/2023 - 10/02/2023

Logged By: JM

Drilled By: Marshall Drilling

Client: Oxford University Development

Co-ords: 448001.11, 213870.42

Checked By: NT

Flush: Air mist, Air/Mist

Hydrock Project No: C-19114-C

Ground Level: 63.32m OD

Scale: 1:50

Sample/Core Run (m)	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min Mean Max							
1.00 - 2.00 100% rec	0.10	ES							Firm brown slightly gravelly sandy CLAY with frequent rootlets and coarse gravel sized fragment of brick. Gravel is sub-angular fine of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	63.02		
	0.30 - 0.60	B							Firm orangish brown slightly gravelly slightly sandy CLAY with rare rootlets. Gravel is sub-angular medium of dark grey flint. (ALLUVIUM)	0.60	(0.30)	62.72		
2.00 - 3.50 0% rec	0.50 - 1.20	B							Very soft light grey mottled orangish brown slightly gravelly slightly sandy CLAY with a slight organic odour. Gravel is sub-angular to sub-rounded fine to coarse of flint and fine grained sandstone. (ALLUVIUM)	1.00	(0.40)	62.32		
									Dark orangish brown very gravelly coarse grained SAND. Gravel is sub-angular to rounded fine to coarse of tabular light grey medium grained shelly limestone, tabular fine grained sandstone, dark orangish brown iron rich medium grained sandstone, flint and quartzite. (RIVER TERRACE DEPOSITS)	2.50	(1.50)	60.82		
4.00 - 5.50									Dark brown sandy GRAVEL. Gravel is sub- angular to rounded fine to coarse of tabular medium grained iron-rich sandstone, flint, quartzite and white shelly limestone. (RIVER TERRACE DEPOSITS)	3.00	(1.55)			
									... At 3.50m: Smear of grey clay at the end of the run, however could be just mixed in grey alluvium.	4.05	(0.29)	59.27		
				20	3	0			... From 4.00m to 4.20m: Gravel is coarse, sands blasted out, was a sandy gravel.	4.34	(0.29)	58.98		
									Strong grey (outer layer weathered yellowish brown) ooidal, shelly LIMESTONE with occasional bivalve fossils. (CORNBURASH LIMESTONE FORMATION)	5.00	(1.16)			
	5.20	HSV	140kPa						... From 4.05m to 4.35m: Non-intact.	5.50	(1.16)	57.82		
									Very stiff thinly laminated bluish grey silty CLAY. Laminae are very closely spaced of white siltstone, muddy limestone. Bedding fractures are extremely closely spaced horizontal. (FOREST MARBLE FORMATION)					
									... From 4.90m to 5.00m: Band of strong grey limestone with frequent inclusions of carbonised plant fossils (lignite).					
									End of Borehole at 5.50m					

Progress and Observations									Chiselling			General Remarks: 1) Inspection pit hand dug to 1.20m bgl. 2) Dynamic sampled to 3.00m, then rotary cored from 3.00m to 5.50m. 3) Gas and groundwater monitoring well installed to 5.50m bgl, with response zone between 4.50m and 5.50m bgl. 4) Hydrock dipped well at 5.30m after installation.
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	From (m)	To (m)	Duration (HH:MM)	
Commachio 205	10/02	1730	5.50	4.00	128		Air/Mist	NR				
Commachio 300	10/02	0000	3.00	3.00		0.50	Air mist	orangish brown				



Method: Dynamic Sampled & Rotary Cored	Date(s): 13/02/2023	Logged By: MA	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448018.45, 213789.65	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 65.50m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If. Mean Max							
1.20 - 2.50 110mm 69% rec									Firm dark brown slightly sandy slightly gravelly CLAY. Gravel is sub-angular to rounded fine to coarse of flint and sandstone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	65.20		
									Orangish brown sandy sub-angular to rounded fine to coarse quartzite limestone and sandstone GRAVEL with frequent cobbles of sub-angular to sub-rounded limestone. (RIVER TERRACE DEPOSITS)	1.00	(1.00)			
2.50 - 4.00									Stiff grey mottled yellowish brown fissured silty CLAY. Fissures are very closely spaced and randomly oriented. (KELLAWAYS CLAY MEMBER)	1.30		64.20		
										2.00	(1.70)			
4.00 - 5.50									Moderately strong grey with orange brown staining weathered shelly Limestone. Fractures are horizontal to sub-vertical closely spaced open rough and undulating with sand infill. (CORNBRAsh LIMESTONE FORMATION)	3.00		62.50		
										4.00	(2.70)			
5.50 - 7.00									Very weak grey thinly bedded MUDSTONE. (FOREST MARBLE FORMATION)	5.70		59.80		
									Very strong grey shelly Limestone. Fractures are horizontal closely to extremely closely spaced, planar and smooth with clay infill. (FOREST MARBLE FORMATION)	6.20	(0.50)	59.30		
										6.20	(0.80)			
									End of Borehole at 7.00m	7.00		58.50		

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 2.50m bgl, then rotary cored to 7.00m bgl. 3) Borehole installed with groundwater monitoring well to 3.50m bgl, with response zone between 3.50m and 5.50m bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)
Commachio 205	13/02	1700	6.50	2.00	128	4.00	Air/Mist	NR



Project: Begbroke

Borehole No  
**RO316A**  
Page No. 1 of 1

Method: Rotary Open	Date(s): 14/02/2023	Logged By: MA	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448018.45, 213789.65	Checked By: NT	Flush: N/A
Hydrock Project No: C-19114-C	Ground Level: 65.50m OD		Scale: 1:100

Run (m)	Samples / Tests			Drilling Record			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	Weight (Kg)	Mins	Secs							
								Firm dark brown slightly sandy slightly gravelly CLAY. Gravel is sub-angular to rounded fine to coarse of flint and sandstone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	65.20		
								Orangish brown sandy sub-angular to rounded fine to coarse quartzite limestone and sandstone GRAVEL with frequent cobbles of sub-angular to sub-rounded limestone. (RIVER TERRACE DEPOSITS)	1.20	(0.90)	64.30		
								End of Borehole at 1.20m	2.00				
									3.00				
									4.00				
									5.00				
									6.00				
									7.00				
									8.00				
									9.00				
									10.00				
									11.00				
									12.00				
									13.00				
									14.00				
									15.00				
									16.00				
									17.00				
									18.00				
									19.00				
									20.00				

Progress and Observations									General Remarks: 1) Inspection pit hand dug to 1.20m bgl. 2) Geology and strata boundaries have been interpreted from nearby rotary cored position. 3) Borehole installed with groundwater monitoring well to 1.20m bgl, with response zone between 0.50m and 1.20m bgl.				
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)					
Hand Tools	14/02	1330	1.20	0.00			N/A	NR					

Method: Dynamic Sampled & Rotary Cored	Date(s): 02/02/2023 - 03/02/2023	Logged By: MH	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448164.06, 213940.20	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 62.75m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If: Mean Max							
1.20 - 2.50									Soft dark brown slightly gravelly sandy CLAY. Gravel is angular to sub angular fine to medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	62.45		
									Soft brown slightly sandy CLAY. (ALLUVIUM)	0.50		61.95		
2.50 - 4.00				46					Orangish brown slightly clayey SAND AND GRAVEL. Gravel is angular to rounded fine to coarse of flint and quartzite. (RIVER TERRACE DEPOSITS) ... Between 1.20m and 2.50m bgl: Core lost during extraction.	0.80				
										1	(2.20)			
4.00 - 5.50									Firm grey slightly gravelly CLAY. Gravel is angular to sub angular fine to coarse of siltstone and mudstone. (FOREST MARBLE FORMATION)	3.00		59.75		
				100						3				
5.50 - 7.00										4				
				100						5	(3.50)			
7.00 - 8.50									Very strong grey shelly interbedded fine grained LIMESTONE. Interbeds are stiff grey slightly gravelly CLAY. Gravel is angular fine to coarse mudstone and siltstone. Fractures are horizontal very closely spaced planar rough tight to open aperture. (FOREST MARBLE FORMATION)	6.50		56.25		
				87	27	23	20 50 80			6				
									Very strong grey shelly fine grained LIMESTONE. Fractures are horizontal to sub vertical dipping up to 80 degrees very closely to closely spaced planar rough to undulating rough tight to open aperture. (FOREST MARBLE FORMATION) ... Below 7.95m bgl: Limestone becoming light grey.	7.95		54.80		
										7	(1.45)			
										8				
										9	(3.55)			
										10				

Continued on Next Sheet

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater encountered in hand pit at 1.00m. 3) Borehole dynamic sampled to 5.50m bgl, then rotary cored to 11.50m bgl. 4) Borehole installed with groundwater monitoring well to 7.30m bgl, with response zone between 6.70m and 7.30m bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)
Commachio 205	02/02	1640	11.50	5.50	142	0.20	Air/Mist	NR





Project: Begbroke

Borehole No  
**RO317**  
 Page No. 2 of 2

Method: Dynamic Sampled & Rotary Cored	Date(s): 02/02/2023 - 03/02/2023	Logged By: MH	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448164.06, 213940.20	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 62.75m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min. If. Mean Max							
									Very strong grey shelly fine grained LIMESTONE. Fractures are horizontal to sub vertical dipping up to 80 degrees very closely to closely spaced planar rough to undulating rough tight to open aperture. (FOREST MARBLE FORMATION)	11				
									End of Borehole at 11.50m	11.50		51.25		
										12				
										13				
										14				
										15				
										16				
										17				
										18				
										19				
										20				

Progress and Observations									General Remarks: 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater encountered in hand pit at 1.00m. 3) Borehole dynamic sampled to 5.50m bgl, then rotary cored to 11.50m bgl. 4) Borehole installed with groundwater monitoring well to 7.30m bgl, with response zone between 6.70m and 7.30m bgl.
Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)	







Method: Dynamic Sampled & Rotary Cored	Date(s): 03/02/2023	Logged By: MH	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448348.70, 213847.10	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 62.21m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If. Mean Max							
1.20 - 2.70									Soft brown slightly sandy CLAY. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	61.81		
									Firm orangish brown and grey slightly gravelly sandy CLAY. Gravel is angular to rounded fine to medium of flint. (ALLUVIUM)	0.90	(0.50)	61.31		
2.70 - 3.80				100					Orangish brown slightly clayey SAND AND GRAVEL. Gravel is angular to rounded fine to coarse of flint and quartzite. (RIVER TERRACE DEPOSITS)	1				
										2	(1.95)			
3.80 - 5.30									Soft light brown slightly sandy gravelly CLAY. Gravel is angular to sub angular fine to coarse of limestone. (RIVER TERRACE DEPOSITS)	2.85		59.36		
				100						3	(0.95)			
5.30 - 6.80							NI 25 40		Very strong grey shelly fine grained LIMESTONE. Fractures are horizontal closely spaced undulating rough open aperture. (CORNBRAsh LIMESTONE FORMATION)	3.80		58.41		
				27	11	0				4	(1.60)			
							NI 64 70		Very strong grey shelly interbedded fine grained LIMESTONE. Interbeds are stiff grey slightly gravelly CLAY. Gravel is angular fine to coarse mudstone and siltstone. Fractures are horizontal very closely spaced planar rough tight to open aperture. (FOREST MARBLE FORMATION) ... Below 5.40m bgl: Thin bands of grey clay infill.	5.40		56.81		
				60	9	0				6	(1.40)			
									End of Borehole at 6.80m	6.80		55.41		
										7				
										8				
										9				
										10				

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater encountered in hand pit at 1.00m. 3) Borehole dynamic sampled to 3.80m bgl, then rotary cored to 6.80m bgl. 4) Borehole installed with groundwater monitoring well to 5.50m bgl, with response zone between 3.50m and 5.50m bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)
Commachio 205	03/02	1115	6.80	0.00			Air/Mist	NR



Method: Dynamic Sampled & Rotary Cored	Date(s): 31/01/2023	Logged By: MH	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448348.40, 213792.77	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 62.18m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If. Mean Max							
1.20 - 2.70									Soft dark brown slightly gravelly sandy CLAY. Gravel is angular to sub angular fine to medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	61.88		
									Soft brown slightly gravelly sandy CLAY. Gravel is angular to sub angular fine to medium of flint. (ALLUVIUM)	0.70	(0.40)	61.48		
2.70 - 3.10				100					Orangish brown SAND AND GRAVEL. Gravel is angular to rounded fine to coarse of flint and quartzite. (RIVER TERRACE DEPOSITS)	1	(1.70)			
									Soft light brown and cream slightly sandy gravelly CLAY. Gravel is angular to sub angular fine to coarse of limestone. (RIVER TERRACE DEPOSITS)	2.40	(0.60)	59.78		
3.10 - 4.10				100					Non intact very strong grey shelly fine grained LIMESTONE. Fractures are horizontal very closely spaced planar rough tight to open aperture. (CORNBURASH LIMESTONE FORMATION)	3	(0.30)	59.18		
							NI 40 50		Very strong grey shelly fine grained LIMESTONE. Fractures are horizontal very closely spaced planar rough tight to open aperture. (CORNBURASH LIMESTONE FORMATION)	3.30	(0.30)	58.88		
5.00 - 6.00									Interbedded weak grey very thinly bedded MUDSTONE and moderatley weak grey siltstone. (FOREST MARBLE FORMATION)	5.40	(2.10)	56.78		
				75	62	53			Weak grey thinly bedded MUDSTONE. (FOREST MARBLE FORMATION)	6	(1.20)			
6.00 - 7.00									Weak grey thinly bedded MUDSTONE. (FOREST MARBLE FORMATION)	6.60	(0.40)	55.58		
				75	72	66			End of Borehole at 7.00m	7.00	(0.40)	55.18		

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater encountered in hand pit at 1.00m. 3) Borehole dynamic sampled to 3.10m bgl, then rotary cored to 7.00m bgl. 4) Borehole installed with groundwater monitoring well to 5.00m bgl, with response zone between 3.50m and 5.00m bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)
Commachio 205	01/02	1645	7.00			1.00	Air/Mist	NR

Method: Dynamic Sampled & Rotary Cored	Date(s): 30/01/2023 - 31/01/2023	Logged By: MH	Drilled By: Marshall Drilling
Client: Oxford University Development	Co-ords: 448351.31, 213741.52	Checked By: NT	Flush: Air/Mist
Hydrock Project No: C-19114-C	Ground Level: 62.55m OD		Scale: 1:50

Sample/Core Run (m) Smpl. Ø (mm) Smpl. rec. %	Samples / Tests			Mechanical Log				Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
	Depth (m)	Type	Results	TCR	SCR	RQD	Min If. Mean Max							
1.20 - 2.70									Soft dark brown slightly gravelly sandy CLAY. Gravel is angular to sub angular fine to medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	62.25		
									Soft brown slightly gravelly sandy CLAY. Gravel is angular to sub angular fine to medium of flint. (ALLUVIUM)	0.70	(0.40)	61.85		
									Soft light brown and orangish brown slightly sandy CLAY. (ALLUVIUM)	0.90	(0.20)	61.65		
2.70 - 4.00				100					Orangish brown slightly gravelly clayey SAND. Gravel is fine to medium angular to sub rounded of flint. (RIVER TERRACE DEPOSITS)	2.40	(1.50)	60.15		
									Light brown and yellowish brown slightly clayey slightly sandy GRAVEL. Gravel is angular fine to coarse angular of limestone. (RIVER TERRACE DEPOSITS)	2.70	(0.30)	59.85		
									Strong cream fine to coarse grained non intact LIMESTONE recovered as gravel. (CORNBURASH LIMESTONE FORMATION)	3.00	(0.30)	59.55		
4.00 - 5.50				67	50	40	NI 60 200		Very strong grey shelly fine grained LIMESTONE. Fractures are horizontal very closely spaced planar rough tight aperture. (CORNBURASH LIMESTONE FORMATION)	4.00	(1.00)	58.55		
				0					Stiff grey slightly gravelly CLAY. Gravel is angular to sub angular fine to coarse of mudstone and siltstone. (FOREST MARBLE FORMATION)	5.00	(4.50)			
5.50 - 7.00														
7.00 - 8.50														
										8.50		54.05		
End of Borehole at 8.50m														

Progress and Observations

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Borehole dynamic sampled to 2.70m bgl, then rotary cored to 8.50m bgl. 3) Borehole installed with groundwater monitoring well to 4.00m bgl, with response zone between 3.00m and 4.00m bgl.

Rig	Date	Time	Borehole Depth (m)	Casing Depth (m)	Casing Diam.(mm)	Water Depth (m)	Flush Type	Returns (colour)
Commachio 205	31/01	1100	8.50	5.50	142	4.00	Air/Mist	NR



Method: Trial Pit	Date(s): 27/09/2021	Logged By: MH	Checked By: NT
Client: Oxford University Development	Co-ords: 447588.42, 213465.31	Stability: Stable	Dimensions: 2.30m
Hydrock Project No: C-19114-C	Ground Level: 68.18m OD	Plant: JCB 3CX	Scale: 1:25

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				Brown slightly gravelly SAND with roots less than 2mm. Gravel is angular to rounded, fine to medium flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	67.78	
				Firm brown orange brown slightly gravelly sandy CLAY. Gravel is angular to rounded, fine to medium flint. (HEAD DEPOSITS)	0.80	(0.40)	67.38	
				Light brown orange brown SAND & GRAVEL. Gravel is angular to rounded, fine to medium flint and quartz. (RIVER TERRACE DEPOSITS)	1.40	(0.60)	66.78	
				Light brown SAND & GRAVEL. Gravel is angular to rounded, fine to coarse flint and quartz. (RIVER TERRACE DEPOSITS)	2.00	(0.60)	66.18	
				----- Base of Excavation at 2.00m	2			
					3			
					4			
					5			

General Remarks:  
1) Trial pit completed at 2.00m. 2) Backfilled to 1.00m with gravel, then 1.00m of arisings. Soakaway monitoring pipes installed to base of pit and top of gravel.





Method: Trial Pit	Date(s): 27/09/2021	Logged By: MH	Checked By: NT
Client: Oxford University Development	Co-ords: 447750.12, 213653.24	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 67.95m OD	Plant: JCB 3CX	0.65m <input type="text"/>

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				Brown slightly gravelly SAND with roots less than 2mm. Gravel is angular to sub-rounded, fine to medium flint quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.25	(0.25)	67.70	
				Brown orange brown SAND with roots less than 2mm. Gravel is sub-rounded, fine to medium flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.55	(0.30)	67.40	
				Brown orange brown slightly clayey slightly gravelly SAND. Gravel is angular, fine to medium flint. (RIVER TERRACE DEPOSITS)	0.75	(0.20)	67.20	
				Brown light brown SAND & GRAVEL. Gravel is angular to rounded, fine to medium flint and quartz. (RIVER TERRACE DEPOSITS)	1	(1.25)		
				----- Base of Excavation at 2.00m	2		65.95	
					3			
					4			
					5			

General Remarks:  
1) Trial pit completed at 2.00m. 2) Backfilled to 1.00m with gravel, then 1.00m of arisings. Soakaway monitoring pipes installed to bas of pit and top of gravel.



Method: Trial Pit	Date(s): 27/09/2021	Logged By: MH	Checked By: NT
Client: Oxford University Development	Co-ords: 447837.37, 213834.70	Stability: Unstable	Dimensions: 2.20m
Hydrock Project No: C-19114-C	Ground Level: 63.93m OD	Plant: JCB 3CX	Scale: 1:25

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				Brown orange brown slightly clayey slightly gravelly SAND. Gravel is angular to rounded, fine to medium flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.45	(0.45)	63.48	
				Firm light brown CLAY with silt pockets and rare gravel. Gravel is sub-rounded, fine to medium flint. (ALLUVIUM)	0.85	(0.40)	63.08	
			▼	Firm orange brown grey brown light brown CLAY with occasional silt pockets. (ALLUVIUM)	1.20	(0.35)	62.73	
				Soft light brown slightly sandy slightly gravelly CLAY. Gravel is sub-rounded, fine to medium flint. (ALLUVIUM)	1.30	(0.10)	62.63	
				Base of Excavation at 1.30m				
					2			
					3			
					4			
					5			

**General Remarks:**  
 1. Pit terminated at 1.30m due to side wall collapse at 1.20m to 1.30m, exacerbated by presence of groundwater instability. 2) Backfilled with arisings.

Groundwater: Water ingress at 1.10m. No rise in 10 minutes.



Method: Trial Pit	Date(s): 27/09/2021	Logged By: MH	Checked By: NT
Client: Oxford University Development	Co-ords: 447837.37, 213834.70	Stability: Stable	Dimensions: 2.20m
Hydrock Project No: C-19114-C	Ground Level: 63.93m OD	Plant: JCB 3CX	Scale: 1:25

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				Brown orange brown slightly clayey slightly gravelly SAND. Gravel is angular to rounded, fine to medium flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.45	(0.45)	63.48	
				Stiff light brown CLAY with silt pockets and rare gravel. Gravel is sub-rounded, fine to medium flint. (ALLUVIUM)	0.85	(0.40)	63.08	
				Firm orange brown grey brown light brown CLAY with occasional silt pockets. (ALLUVIUM)	1.00	(0.15)	62.93	
▼ Base of Excavation at 1.00m								
					2			
					3			
					4			
					5			

**General Remarks:**  
 1) Pit stable but terminated at 1.00m due to the presence of groundwater. 2) Backfilled with 0.50m of gravel and 0.50m of arisings. Soakaway monitoring pipes installed to base of pit and top of gravel.

Groundwater: Water ingress at 1.00m. No rise in 10 minutes.



Project: Begbroke

Trialpit No  
**SA04**  
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Method: Trial Pit	Date(s): 27/09/2021	Logged By: MH	Checked By: NT
Client: Oxford University Development	Co-ords: 448089.66, 213881.73	Stability: Unstable	Dimensions: 2.20m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 63.57m OD	Plant: JCB 3CX	0.50m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				Brown slightly gravelly sandy CLAY with roots less than 2mm. Gravel is angular to rounded, fine to medium flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	63.17	
				Firm brown light brown slightly gravelly sandy friable CLAY with roots less than 1mm. Gravel is sub-rounded fine to medium flint. (ALLUVIUM)	0.80	(0.40)	62.77	
				Soft to Firm light brown brown slightly sandy slightly gravelly CLAY. Gravel is sub rounded, fine to medium flint. (ALLUVIUM)	1.00	(0.20)	62.57	
			▼	Soft light brown yellow brown orange brown slightly sandy slightly gravelly CLAY. Gravel is sub-angular, fine to medium flint. (ALLUVIUM)	1.40	(0.40)	62.17	
				----- Base of Excavation at 1.40m				
					2			
					3			
					4			
					5			

**General Remarks:**  
 1) Pit terminated at 1.40m due to minor pit side wall collapse at 1.30m to 1.40m exacerbated by presence of groundwater. 2) Backfilled to 0.80m with gravel, then 0.60m of arisings. Soakaway monitoring pipes installed to base of pit and top of gravel..

Groundwater: Water ingress at 1.20m. Sitting at 0.70m bgl the following day.



Method: Trial Pit	Date(s): 28/09/2021	Logged By: MH	Checked By: NT
Client: Oxford University Development	Co-ords: 448305.74, 213944.39	Stability: Stable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 62.35m OD	Plant: JCB 3CX	0.65m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				Brown slightly gravelly SAND with roots less than 1mm. Gravel is sub-rounded fine to medium flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	61.95	
				Firm brown grey orange brown slightly sandy CLAY. (ALLUVIUM)	0.60	(0.20)	61.75	
				Light brown orange brown slightly clayey SAND & GRAVEL. Gravel is angular to rounded, fine to medium flint quartz. (RIVER TERRACE DEPOSITS)	1.10	(0.50)	61.25	
				Grey SAND & GRAVEL. Gravel is angular to rounded, fine to medium flint quartz. (RIVER TERRACE DEPOSITS)	1.40	(0.30)	60.95	
				▼ Base of Excavation at 1.40m				
					2			
					3			
					4			
					5			

**General Remarks:**  
 1) Pit stable but terminated at 1.40m due to water ingress. 2) Backfilled with 0.90m of gravel and 0.50m of arisings to ground level. Soakaway monitoring pipes installed to base of pit and top of gravel.



Project: Begbroke

Trialpit No  
**SA06**  
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Method: Trial Pit	Date(s): 28/09/2021	Logged By: MH	Checked By: NT
Client: Oxford University Development	Co-ords: 448145.36, 213469.65	Stability: Stable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 68.07m OD	Plant: JCB 3CX	0.65m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				Brown slightly gravelly SAND with roots less than 1mm. Gravel is angular to rounded, fine to medium flint (AGRICULTURALLY DISTURBED TOPSOIL)	0.80	(0.80)	67.27	
				Light brown SAND & GRAVEL. Gravel is angular to rounded, fine to medium flint quartz. (RIVER TERRACE DEPOSITS)	1	(1.20)	66.07	
----- Base of Excavation at 2.00m -----					2			
					3			
					4			
					5			

General Remarks:  
1) Pit complete at 2.00m. 2) Backfilled to 1.30m with gravel, then 1.30m of arisings. Soakaway monitoring pipes installed to base of pit and top of gravel.

Groundwater: No groundwater encountered





Method: Trial Pit	Date(s): 28/09/2021	Logged By: MH	Checked By: NT
Client: Oxford University Development	Co-ords: 448373.61, 212979.77	Stability: Stable	Dimensions: 2.00m
Hydrock Project No: C-19114-C	Ground Level: 62.06m OD	Plant: JCB 3CX	Scale: 1:25

Samples / Tests			Water-Strikes	Stratum Description	Depth m/bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				Dark brown slightly gravelly SAND with roots less than 1mm. Gravel is angular to rounded, fine to medium flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	61.76	
				Orange brown slightly clayey slightly gravelly SAND. Gravel is sub-rounded, fine to medium flint. (RIVER TERRACE DEPOSITS)	0.80	(0.50)	61.26	
				Firm friable orange brown sandy CLAY. (RIVER TERRACE DEPOSITS)	1.25	(0.45)	60.81	
				Firm brown sandy CLAY. (RIVER TERRACE DEPOSITS)	1.90	(0.65)	60.16	
				Firm brown sandy CLAY. (RIVER TERRACE DEPOSITS)	2.00	(0.10)	60.06	
Base of Excavation at 2.00m								

General Remarks:  
1) Pit complete at 2.00m 2) Backfilled to 1.00m with gravel, then 1.00m of arisings. Soakaway monitoring pipes installed to base of pit and top of gravel.

Groundwater: No groundwater encountered

Method: Trial Pit	Date(s): 28/09/2021	Logged By: MH	Checked By: NT
Client: Oxford University Development	Co-ords: 429894.34, 212858.70	Stability: Unstable	Dimensions: 2.00m
Hydrock Project No: C-19114-C	Ground Level: 60.88m OD	Plant: JCB 3CX	Scale: 1:25

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				Dark brown slightly gravelly SAND. Gravel is fine to coarse, angular to rounded flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.25	(0.25)	60.63	
				Firm orange brown slightly sandy slightly gravelly CLAY. Gravel is sub-rounded, fine to medium flint. (ALLUVIUM)	0.65	(0.40)	60.23	
				Brown slightly clayey SAND & GRAVEL. Gravel is angular to rounded, fine to medium flint. (RIVER TERRACE DEPOSITS)	0.80	(0.15)	60.08	
			▼	Light brown SAND & GRAVEL. Gravel is angular to rounded, fine to medium flint quartz. (RIVER TERRACE DEPOSITS)	1	(0.30)	59.78	
----- Base of Excavation at 1.10m					1.10			
					2			
					3			
					4			
					5			

General Remarks:  
 1) Pit terminated at 1.10m due to nor collapse on side walls between 1.00 - 1.10m, exacerbated by presence of groundwater. 2) Backfilled with 0.60m of gravel and 0.50m of arisings. Soakaway monitoring pipes installed to base of pit and top of gravel.





Method: Trial Pit	Date(s): 31/01/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 448360.91, 213374.67	Stability: Stable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 62.88m OD	Plant: JCB 3-CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth (m)	Thickness (m)	Level (m OD)	Legend	
Depth (m)	Type	Results							
				Light brown organic slightly gravelly clayey SAND. Gravel is rounded to sub-angular fine of quartz, flint and limestone. (AGRICULTURALLY DISTURED TOPSOIL)	0.33	(0.33)	62.55		
				Orange brown slightly gravelly clayey SAND. Gravel is sub-rounded to sub-angular fine to medium of limestone and sandstone. (ALLUVIUM)	0.70	(0.37)	62.18		
				Yellowish brown very sandy rounded to sub-angular fine to coarse of limestone, quartz, flint and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	1.00	(1.80)	60.38		
				▼ Base of Excavation at 2.50m					
					2.50		60.38		
					3				
					4				
					5				

General Remarks:  
1. Moderate inflow of groundwater encountered at 2.40m. 2. Trial pit walls did not collapse during the period the excavation remained open (10 mins)

Groundwater: No groundwater encountered.



Method: Trial Pit	Date(s): 31/01/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 447674.25, 213307.83	Stability: Stable	Dimensions: 1.70m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 67.50m OD	Plant: JCB 3-CX	0.60m <input type="text"/>

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				Light brown organic slightly gravelly clayey SAND. Gravel is rounded to sub-angular fine of quartz, flint and limestone. (AGRICULTURALLY DISTURED TOPSOIL)	0.30	(0.30)	67.20	
				Orange brown slightly gravelly clayey SAND with frequent pockets (up to 240mm in diameter) of soft to firm sandy clay. Gravel is sub-rounded to sub-angular fine to medium of limestone, flint and quartz. (ALLUVIUM)	1.10	(0.80)	66.40	
				Yellowish brown very sandy rounded to sub-angular fine to coarse of limestone, quartz, flint and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	2.50	(1.40)	65.00	
				----- Base of Excavation at 2.50m				
					3			
					4			
					5			

General Remarks:  
1. Trial pit walls did not collapse during the period the excavation remaned open (20 mins)

Groundwater: No groundwater encountered.

Method: Trial Pit	Date(s): 17/08/2021	Logged By: MA	Checked By: NT
Client: Oxford University Development	Co-ords: 448128.44, 213186.73	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 67.44m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	ES			Orangish brown silty slightly gravelly SAND with high root content. Gravel is angular to sub-rounded fine and medium brick and sandstone with rare metal wire. (TOPSOIL - MADE GROUND)	0.15	(0.15)	67.29	
0.40	ES			Orangish brown and grey slightly clayey gravelly SAND. Gravel sized fragments of angular to sub-angular coarse brick and concrete with frequent broken clay pipe, glass, plastic bags, timber, metal wire, batteries, newspaper, plastic and glass bottles. (LANDFILL - MADE GROUND)				
1.00	ES				1	(1.65)		
					1.80		65.64	
2.00	ES			Soft grey very gravelly CLAY. Gravel sized fragments of sub-angular brick with abundant newspaper (Dated 1960), glass mirrors, plastic wrappers and carpet. (LANDFILL - MADE GROUND)	2	(0.50)		
					2.30		65.14	
2.50	ES			MADE GROUND consisting of grey and black plastic, broken glass, newspaper, ash, tyres and metal wires. With strong putrid smell. (LANDFILL - MADE GROUND)		(0.50)		
					2.80		64.64	
				Grey sandy sub-angular to rounded fine to coarse GRAVEL of sandstone and mixed lithologies. (RIVER TERRACE DEPOSITS)	2.90	(0.10)	64.54	
				Base of Excavation at 2.90m				
					4			
					5			

General Remarks:  
 1) Completed at 2.90m bgl. 2) Backfilled with arisings on completion. 3) Landfill deposits have a putrid odour throughout.





Method: Trial Pit	Date(s): 20/08/2021	Logged By: MA	Checked By: NT
Client: Oxford University Development	Co-ords: 448088.82, 213139.16	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 66.85m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.50	ES			Dark brown gravelly SAND with high root content. (TOPSOIL - MADE GROUND) Dark brown gravelly SAND. Gravel sized fragments of angular fine to coarse brick and concrete with frequent whole bricks, whole glass bottles (containing liquid), plastic, fabric, plastic wrappers, animal bone and wire. (LANDFILL - MADE GROUND)	0.05	(0.05)	66.80	
1.30	ES			Orange brown slightly clayey slightly gravelly SAND. Gravel is sub-angular to sub-rounded fine to coarse flint and sandstone with rare gravel sized fragments of angular fine to coarse brick and slag. (LANDFILL - MADE GROUND)	1.20	(0.30)	65.65	
2.30	ES			Dark brown slightly clayey gravelly SAND. Gravel sized fragments of angular fine to coarse brick and concrete with frequent glass bottles, shoes, whole car tyres, plastic and putrid odour. (LANDFILL - MADE GROUND)	1.50	(1.00)	65.35	
				Orangish brown angular to sub-rounded fine to coarse SAND & GRAVEL of flint and sandstone. (RIVER TERRACE DEPOSITS)	2.50	(0.10)	64.35	
				Base of Excavation at 2.60m	2.60		64.25	

General Remarks:  
1) Completed at 2.60m bgl. 2) Backfilled with arisings on completion. 3) Landfill deposits have a putrid odour throughout.



Project: Begbroke

Trialpit No  
**TP04**  
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Method: Trial Pit	Date(s): 20/08/2021	Logged By: MA	Checked By: NT
Client: Oxford University Development	Co-ords: 448181.72, 213126.90	Stability: Stable	Dimensions: 2.50m
Hydrock Project No: C-19114-C	Ground Level: 67.33m OD	Plant: JCB 3CX	Scale: 1:25

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.50	ES			Dark brown silty SAND with high root content. (TOPSOIL - MADE GROUND) Brick red gravelly SAND with occasional boulders of concrete (30cm x 60cm). Gravel sized fragments of angular fine to coarse brick with broken glass, rubber, plastic and scrap metal. (LANDFILL - MADE GROUND)	0.05	(0.05)	67.28	[Cross-hatched pattern]
					0.90	(0.85)	66.43	
1.20	ES			Dark orange brown and black gravelly SAND. Sand is of ash. Gravel sized fragements of brick and concrete with frequent nails, glass bottles (contianing liquid) plastic and pottery. (LANDFILL - MADE GROUND)	1.00	(0.60)		
					1.50	(1.30)	65.83	
2.00	ES			Yellowish brown SAND with frequent scrap metal, glass bottles, tyres and whole bricks. (LANDFILL - MADE GROUND)	2.00			[Cross-hatched pattern]
					2.80	(1.30)	64.53	
2.80	ES			Yellowish brown sub-rounded to rounded fine to coarse sandy GRAVEL of flint and sandstone. (RIVER TERRACE DEPOSITS)	2.90	(0.10)	64.43	[Stippled pattern]
				Base of Excavation at 2.90m				




General Remarks:  
 1) Completed at 2.90m bgl. 2) Backfilled with arisings on completion. 3) Landfill deposits have a putrid odour throughout.

Method: Trial Pit	Date(s): 20/08/2021	Logged By: MA	Checked By: NT
Client: Oxford University Development	Co-ords: 448134.66, 213009.23	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 67.09m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.50	ES			Dark brown gravelly SAND with high root content. (TOPSOIL - MADE GROUND) Orange brown clayey gravelly SAND. Gravel sized fragments of angular fine to coarse brick and concrete with occasional concrete boulders (40cm x 30cm) and frequent wire, scrap metal, glass bottles, plastic and fabric. (LANDFILL - MADE GROUND)	0.05	(0.05)	67.04	
1.30	ES			Orange brown gravelly SAND. Gravel sized fragments of angular fine to coarse concrete brick and asphalt with frequent plastic. (LANDFILL - MADE GROUND)	1.20	(0.20)	65.89	
2.00	ES			MADE GROUND consisting of black ash, concrete, brick, scrap metal, bike frames, knives, glass bottles (containing unknown liquid), paper and tyres. With strong putrid odour. (LANDFILL - MADE GROUND)	1.40	(0.20)	65.69	
2.90	ES			Greyish brown slightly clayey sub-rounded to rounded fine to coarse SAND & GRAVEL of flint and sandstone. (RIVER TERRACE DEPOSITS)	2.80	(0.10)	64.29	
				Base of Excavation at 2.90m	2.90	(0.10)	64.19	

General Remarks:  
1) Completed at 2.90m bgl. 2) Backfilled with arisings on completion. 3) Landfill deposits have a putrid odour throughout.

Method: Trial Pit	Date(s): 20/08/2021	Logged By: MA	Checked By: NT
Client: Oxford University Development	Co-ords: 448209.46, 213029.65	Stability: Stable	Dimensions: 4.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 67.25m OD	Plant: JCB 3CX	0.60m <input type="text"/>

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	ES			Brown silty gravelly SAND. Gravel is sub-rounded fine to coarse flint and sandstone. Gravel sized fragments of angular fine to coarse brick and concrete with frequent glass and plastic. (TOPSOIL - MADE GROUND)	0.20	(0.20)	67.05	
0.70	ES			Dark brown gravelly SAND with occasional boulders of concrete (40cm x 50cm). Gravel sized fragments of angular fine to coarse concrete brick and slag with frequent timber, glass bottles, plastic wrappers, pottery and metal scraps. (LANDFILL - MADE GROUND)	0.89	(0.69)	66.36	
				MADE GROUND consisting of blocks of concrete and cemented bricks. (LANDFILL - MADE GROUND)	0.90	(0.61)	66.35	
				Base of Excavation at 0.90m	1			
					2			
					3			
					4			
					5			

General Remarks:  
1) Terminated at 0.90m bgl due to hard dig. 2) Backfilled with arisings on completion. 3) Landfill deposits have a putrid odour throughout.











Project: Begbroke

Trialpit No  
TP203

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Method: Trial Pit	Date(s): 06/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 447731.15, 213920.36	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 65.76m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Brown slightly gravelly clayey SAND. Gravel is sub angular to sub rounded fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	65.46	
0.80	D			Yellowish brown SAND and GRAVEL. Gravel is sub angular to sub rounded fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	1.10	(0.80)	64.66	
1.30 1.30	B HSV	46kPa		Firm to stiff grey and yellowish brown extremely closely fissured (blocky) CLAY. (KELLAWAYS CLAY MEMBER)	1.80	(0.70)	63.96	
1.65	HSV	48kPa			1.85	(0.05)	63.91	
1.80	D			Extremely weathered grey LIMESTONE. (CORNBRAsh LIMESTONE FORMATION) Base of Excavation at 1.85m	2			

General Remarks:  
1) Excavation completed at 1.85m bgl 2) Sides stable throughout excavation 3) No groundwater encountered 4) Backfilled with arisings 5) Moved 2.5m south from original position

Method: Trial Pit	Date(s): 06/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 447909.18, 213997.44	Stability: Unstable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 67.81m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Brown clayey slightly gravelly SAND with frequent rootlets. Gravel is angular to sub rounded fine to coarse of flint and limestone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	67.51	
0.60 - 0.70	B			Yellowish brown sandy GRAVEL with red staining. Gravel is angular to sub angular fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	0.80	(0.50)	67.01	
1.00	B			Yellowish brown slightly gravelly SAND. Gravel is angular to sub angular fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)  ... At 1.20m bgl gravelly.	1.90	(1.10)	65.91	
2.30	D			Dark yellowish brown SAND and GRAVEL with dark red staining. Gravel is angular to sub rounded fine to coarse of flint and limestone with rare cobbles of sub angular limestone. (RIVER TERRACE DEPOSITS)	2.60	(0.70)	65.21	
2.70 2.70 2.90	D HSV HSV	45kPa 89kPa		Stiff grey mottled with orangish brown extremely closely fissured CLAY. (KELLAWAYS CLAY MEMBER) ... From 2.70m bgl becoming grey and yellowish brown.  ... At 2.90m bgl band of flint cobbles.	3.00	(0.40)	64.81	
Base of Excavation at 3.00m								

General Remarks:  
 1) Excavation completed at 3.00m bgl 2) Side collapse from 1.90m bgl 3) No groundwater encountered 4) Backfilled with arisings

Method: Trial Pit	Date(s): 09/09/2022	Logged By: WS	Checked By: CV
Client: Oxford University Development	Co-ords: 447337.39, 213452.03	Stability: Unstable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 67.51m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.15	ES			Stiff friable dark brown very sandy slightly gravelly CLAY with rootlets. Gravel is angular to subrounded, fine to coarse of limestone and flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	67.21	
0.75	B			Stiff orangish brown and light brown very sandy CLAY. (HEAD DEPOSITS)	0.40	(0.10)	67.11	
0.75	B			Light brown and light grey very sandy angular to subrounded fine to coarse flint GRAVEL. (RIVER TERRACE DEPOSITS)	0.85	(0.45)	66.66	
1.00	D			Light brown very gravelly SAND. Gravel is angular to rounded, fine to coarse of flint and ironstone. (RIVER TERRACE DEPOSITS)	1	(1.15)		
2.70	B			Light greyish brown very sandy angular to rounded, fine to coarse flint and limestone GRAVEL. (RIVER TERRACE DEPOSITS)	2	(1.00)	65.51	
Base of Excavation at 3.00m					3.00		64.51	
					4			
					5			

General Remarks:  
 1) Excavation completed at 3.00m bgl 2) Sides stable throughout excavation 3) No groundwater encountered 4) Backfilled with arisings


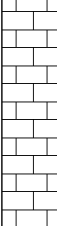


Method: Trial Pit	Date(s): 08/09/2022	Logged By: WS	Checked By: CV
Client: Oxford University Development	Co-ords: 447662.22, 213756.49	Stability: Unstable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 67.51m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Dark brown and brown slightly gravelly clayey SAND with rootlets. Gravel is subangular to subrounded, fine to coarse of flint and limestone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	67.21	
0.40	D			Stiff brown sandy gravelly CLAY. Gravel is angular to subrounded, fine to coarse of flint and ironstone. (HEAD DEPOSITS)	0.50	(0.20)	67.01	
1.20	B			Light brown and yellow brown SAND & GRAVEL. Gravel is angular to subrounded, fine to coarse of flint, limestone and ironstone. (RIVER TERRACE DEPOSITS)	1.00	(0.50)	66.51	
2.60	D			... At 2.00m bgl: 20mm bands of soft very sandy clay.	2	(2.20)		
3.10	B			... At 2.60m bgl: 20mm bands of soft very sandy clay.	3			
				Base of Excavation at 3.20m	3.20		64.31	
					4			
					5			

General Remarks:  
 1) Excavation completed at 3.20m bgl 2) Sides stable throughout excavation 3) No groundwater encountered 4) Backfilled with arisings

Method: Trial Pit	Date(s): 06/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448046.16, 213963.36	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 64.01m OD	Plant: JCB 3CX	0.60m <input type="text"/>

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				Stiff (dry) brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is angular to sub rounded fine to coarse of flint and limestone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	63.71	
				Light grey weak LIMESTONE recovered as fine gravel to cobble sized angular to sub angular with weak fossils. (CORNBASH LIMESTONE FORMATION)	1.10	(0.80)	62.91	
				----- Base of Excavation at 1.10m				
					2			
					3			
					4			
					5			

General Remarks:  
 1) Excavation completed at 1.10m bgl 2) Sides stable throughout excavation 3) No groundwater encountered 4) Backfilled with arisings




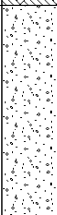
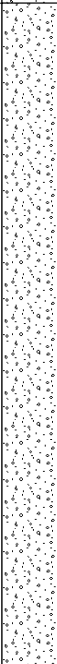

Method: Trial Pit	Date(s): 06/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448046.16, 213963.36	Stability: Stable	Dimensions: 2.50m 0.60m <input type="text"/>
Hydrock Project No: C-19114-C	Ground Level: 64.01m OD	Plant: JCB 3CX	Scale: 1:25

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Stiff (dry) brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is angular to sub rounded fine to coarse of flint and limestone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	63.61	
0.70	B			Stiff yellowish brown slightly sandy slightly gravelly CLAY. Gravel is angular to sub angular fine to coarse of limestone. (CORNBASH LIMESTONE FORMATION)	0.70	(0.30)	63.31	
1.10	B			Light grey weak LIMESTONE recovered as fine gravel to cobble sized angular to sub angular with weak fossils. (CORNBASH LIMESTONE FORMATION)	1.10	(0.40)	62.91	
				----- Base of Excavation at 1.10m				

**General Remarks:**  
 1) Excavation completed at 1.10m bgl 2) Sides stable throughout excavation 3) No groundwater encountered 4) Backfilled with arisings



Method: Trial Pit	Date(s): 06/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 447957.84, 213761.80	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 66.96m OD	Plant: JCB 3CX	0.60m <input type="text"/>

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Stiff (dry) slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is sub angular to sub rounded fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	66.66	
0.60	B			Orangish brown gravelly SAND. Gravel is angular to rounded fine to coarse of flint quartz and limestone with dark red staining. (RIVER TERRACE DEPOSITS)		(0.70)		
1.40	D			Yellowish brown SAND and GRAVEL. Gravel is angular to sub rounded fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)  ... From 1.50m bgl becoming grey.	1.00		65.96	
3.40	D			Stiff grey extremely closely fissured (blocky) CLAY. (KELLAWAYS CLAY MEMBER)  ... From 2.50m bgl pockets of red brown slightly gravelly sandy clay. Gravel is sub angular of flint.	3.20	(2.20)	63.76	
				Base of Excavation at 3.40m	3.40	(0.20)	63.56	

General Remarks:  
1) Excavation completed at 3.40m bgl 2) Sides stable throughout excavation 3) No groundwater encountered 4) Backfilled with arisings





Method: Trial Pit	Date(s): 06/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448139.28, 213830.17	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 63.78m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Stiff (dry) brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is sub angular to rounded fine to coarse of flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	63.48	
				Stiff orangish brown slightly sandy slightly gravelly CLAY. Gravel is sub angular to sub rounded fine to coarse of flint. (HEAD DEPOSITS)	0.50	(0.20)	63.28	
0.70	B			Extremely weathered grey LIMESTONE recovered as sub angular gravel and cobbles. (CORNBURASH LIMESTONE FORMATION)	0.70	(0.20)	63.08	
				----- Base of Excavation at 0.70m				
1								
2								
3								
4								
5								

General Remarks:  
 1) Excavation completed at 0.7m bgl 2) Sides stable throughout excavation 3) No groundwater encountered 4) Backfilled with arisings



Project: Begbroke

Trialpit No  
**TP211**  
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Method: Trial Pit	Date(s): 09/09/2022	Logged By: WS	Checked By: CV
Client: Oxford University Development	Co-ords: 447736.46, 213417.42	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 67.97m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.15	ES			Dark brown and brown very clayey slightly gravelly SAND. Gravel is angular to rounded, fine to coarse of flint, limestone and rare brick. (AGRICULTURALLY DISTURBED TOPSOIL)	0.25	(0.25)	67.72	
0.60	D			Stiff brown very sandy gravelly CLAY. Gravel is subangular to rounded, fine to coarse of flint, ironstone and limestone. (RIVER TERRACE DEPOSITS)	0.85	(0.60)	67.12	
1.20	B			Orangish brown gravelly clayey SAND. Gravel is subangular to rounded, fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	1	(0.75)	66.37	
1.80	D			Light brown SAND & GRAVEL. Gravel is subangular to rounded, fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	1.60			
2.10	D			... From 2.00m bgl: Pockets of clayey gravelly fine to coarse sand.	2			
				Base of Excavation at 3.00m	3.00		64.97	
					4			
					5			

General Remarks:  
 1) Excavation completed at 3.00m bgl 2) Slight spalling in pit walls. 3) No groundwater encountered 4) Backfilled with arisings



Method: Trial Pit	Date(s): 06/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448113.62, 213758.36	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 65.26m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Stiff (dry) brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is sub angular to sub rounded fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	64.96	
0.70	B			Stiff (dry) orangish brown slightly sandy slightly gravelly CLAY. Gravel is sub angular to sub rounded fine to medium of flint with dark red staining. (RIVER TERRACE DEPOSITS)	1.00	(0.70)	64.26	
1.30	D			Very stiff yellow brown slightly gravelly sandy CLAY. Gravel is angular to subrounded, fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	1.70	(0.70)	63.56	
2.10 2.10	D HSV	55kPa		Stiff grey extremely closely fissured (blocky) CLAY. (KELLAWAYS CLAY MEMBER)	2	(1.00)		
2.40	HSV	69kPa						
2.80	D			Yellow brown clayey sandy GRAVEL of subangular fine to coarse limestone. (CORNBASH LIMESTONE FORMATION) Base of Excavation at 2.80m	2.70 2.80	(0.10)	62.56 62.46	
					3			
					4			
					5			

General Remarks:  
 1) Excavation completed at 2.80m bgl 2) Sides stable throughout excavation 3) Groundwater encountered at 2.70m bgl 4) Backfilled with arisings



Method: Trial Pit	Date(s): 08/09/2022	Logged By: WS	Checked By: CV
Client: Oxford University Development	Co-ords: 448069.09, 213481.30	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 68.21m OD	Plant: JCB 3CX	0.60m <input type="text"/>

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
				Dark brown slightly gravelly clayey fine to medium SAND with rootlets. Gravel is angular to subrounded, fine to coarse of flint and limestone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	67.91	
0.50 0.60	ES B			Brown and orangish brown clayey gravelly SAND. Gravel is angular to coarse, fine to coarse of flint, limestone, ironstone and ironstone. (RIVER TERRACE DEPOSITS)	0.90	(0.60)	67.31	
1.10	D			Light brown SAND & GRAVEL. Gravel is angular to rounded, fine to coarse, flint and occasional ironstone. (RIVER TERRACE DEPOSITS)	1	(1.70)		
2.50	B			Reddish brown to brown very gravelly clayey SAND. Gravel is angular to rounded, fine to coarse, flint and occasional ironstone. (RIVER TERRACE DEPOSITS)	2.60	(0.50)	65.61	
3.30	D			Soft light grey sandy gravelly CLAY. Gravel is subangular to subrounded, fine to coarse flint and limestone. (RIVER TERRACE DEPOSITS)	3.10	(0.40)	65.11	
				Base of Excavation at 3.50m	3.50		64.71	
					4			
					5			

General Remarks:  
1) Excavation completed at 3.50m bgl 2) Sides stable throughout excavation 3) No groundwater encountered 4) Backfilled with arisings



Method: Trial Pit	Date(s): 06/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448273.01, 213681.66	Stability: Unstable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 64.79m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Stiff brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is sub angular to rounded fine to medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	64.49	
0.80	D			Stiff orangish brown slightly sandy slightly gravelly CLAY. Gravel is angular to sub angular fine to medium of flint. (HEAD DEPOSITS)	1.20	(0.90)	63.59	
1.70 1.70	B HSV	47kPa		Stiff yellowish brown sandy CLAY with black speckles. (RIVER TERRACE DEPOSITS)	2.70	(1.50)	62.09	
2.20	HSV	27kPa		... At 2.0m bgl: Firm.				
2.80	D			Brown clayey SAND and GRAVEL. Gravel is sub angular fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	3.20	(0.50)	61.59	
				Firm grey and yellowish brown thin laminated CLAY with occasional oyster shells. (KELLAWAYS CLAY MEMBER)	3.60	(0.40)	61.19	
Base of Excavation at 3.60m								

General Remarks:  
 1) Excavation completed at 3.60m bgl 2) Sides stable throughout excavation 3) Groundwater encountered at 3.50m bgl 4) Backfilled with arisings

Method: Trial Pit	Date(s): 08/09/2022	Logged By: WS	Checked By: CV
Client: Oxford University Development	Co-ords: 447976.36, 213242.20	Stability: Unstable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 67.88m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Stiff friable dark brown very sandy gravelly CLAY with rootlets. Gravel is angular to subrounded, fine to coarse flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.35	(0.35)	67.53	
				Stiff brown friable very sandy slightly gravelly CLAY. Gravel is angular to subrounded, fine to coarse flint. (HEAD DEPOSITS)	0.60	(0.25)	67.28	
0.80	ES			Light brown sandy angular to rounded, fine to coarse flint and limestone GRAVEL with some shell fragments. (RIVER TERRACE DEPOSITS)	0.90	(0.30)	66.98	
1.40	D			Light brown gravelly SAND with occasional slightly clayey pockets. Gravel is angular to rounded, fine to coarse flint and limestone (RIVER TERRACE DEPOSITS)	1			
2.70	B				2	(2.20)		
3.15	D			Soft light brown very sandy CLAY. (RIVER TERRACE DEPOSITS)	3.10		64.78	
				Base of Excavation at 3.20m	3.20	(0.10)	64.68	
					4			
					5			

General Remarks:  
 1) Excavation completed at 3.20m bgl 2) Sides stable throughout excavation 3) No groundwater encountered 4) Backfilled with arisings

Method: Trial Pit	Date(s): 08/09/2022	Logged By: WS	Checked By: CV
Client: Oxford University Development	Co-ords: 448136.71, 213298.99	Stability: Unstable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 66.63m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.40	ES			Stiff dark brown very sandy gravelly CLAY with rootlets. Gravel is subangular to rounded, fine to coarse of flint and occasional limestone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	66.33	
0.80	D			Light brown very sandy subangular to subrounded, fine to coarse of flint and limestone GRAVEL. (RIVER TERRACE DEPOSITS)	0.60	(0.30)	66.03	
1.50	B			Light brown slightly gravelly SAND. Gravel is subangular to subrounded, fine to coarse of flint and limestone (RIVER TERRACE DEPOSITS)	1.10	(0.50)	65.53	
2.80	D			Brown and light brown angular to subrounded, fine to coarse of flint, limestone and occasional ironstone GRAVEL with shell fragments and occasional very weakly cemented gravel of above material. (RIVER TERRACE DEPOSITS)	2.70	(1.60)	63.93	
				Light greyish and light brown sandy slightly clayey subangular to subrounded, fine to coarse flint GRAVEL. (RIVER TERRACE DEPOSITS)	3.00	(0.30)	63.63	
Base of Excavation at 3.00m					3.00		63.63	

General Remarks:  
 1) Excavation completed at 3.00m bgl due to continued collapse to 2.90m bgl. 2) Groundwater encountered at 2.65m bgl. 3) Backfilled with arisings.

Method: Trial Pit	Date(s): 08/09/2022	Logged By: WS	Checked By: CV
Client: Oxford University Development	Co-ords: 448249.99, 213425.70	Stability: Unstable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 65.01m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.15	ES			Stiff dark brown very sandy slightly gravelly CLAY with rootlets. Gravel is subangular to rounded, fine to coarse of flint and occasional limestone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.25	(0.25)	64.76	
0.70	B			Stiff friable orangish brown very sandy CLAY. (RIVER TERRACE DEPOSITS)	0.60	(0.35)	64.41	
0.70	B			Stiff friable orangish brown slightly sandy CLAY. (RIVER TERRACE DEPOSITS)	1.00	(1.60)		
2.40 2.40	D HSV	23kPa		Soft to firm very sandy CLAY with bands of black subrounded to rounded fine to course flint gravel. (RIVER TERRACE DEPOSITS)	2.20	(0.70)	62.81	
3.20	D			Soft light brown very sandy SILT/CLAY. (KELLAWAYS SAND MEMBER)	2.90	(0.50)	62.11	
				Base of Excavation at 3.40m	3.40		61.61	
					4			
					5			

General Remarks:  
 1) Excavation completed at 3.40m bgl 2) Sides stable throughout excavation 3) No groundwater encountered 4) Backfilled with arisings



Project: Begbroke

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**TP219**  
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Method: Trial Pit	Date(s): 08/09/2022	Logged By: WS	Checked By: CV
Client: Oxford University Development	Co-ords: 448304.80, 213502.00	Stability: Unstable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 66.63m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.25	ES			Stiff friable dark brown very sandy gravelly CLAY. Gravel is angular to subrounded, fine to coarse ironstone and flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.35	(0.35)	66.28	
0.70	D			Light brown and brown SAND & GRAVEL with low cobble content of limestone. Gravel is angular to subrounded, fine to coarse flint, limestone and ironstone. (RIVER TERRACE DEPOSITS)	1.50	(1.15)	65.13	
1.60	B			Light brown and brown slightly clayey SAND & GRAVEL with low cobble content of limestone. Gravel is angular to subrounded, fine to coarse flint, limestone and ironstone. (RIVER TERRACE DEPOSITS)	2.00	(0.50)	64.63	
2.30	D			Soft grey and orangish brown sandy clayey SILT with occasional black staining. (KELLAWAYS SAND MEMBER) <i>... At 2.00m bgl in east end of pit: Stiff grey sandy silty clay.</i>	2.80	(0.80)	63.83	
Base of Excavation at 2.80m					2.80		63.83	
					3			
					4			
					5			

General Remarks:  
 1) Excavation completed at 2.80m bgl 2) Sides stable throughout excavation 3) No groundwater encountered 4) Backfilled with arisings



Method: Trial Pit	Date(s): 06/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448329.39, 213600.23	Stability: Unstable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 66.61m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Stiff brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is angular to sub rounded fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	66.31	
0.70	D			Stiff yellowish brown slightly sandy slightly gravelly CLAY. Gravel is sub angular to sub rounded fine to medium of flint. (RIVER TERRACE DEPOSITS)	0.80	(0.50)	65.81	
1.20	B			Stiff orangish brown mottled with grey sandy slightly gravelly CLAY. Gravel is sub angular to sub rounded fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	1.50	(0.70)	65.11	
1.60	D			Orangish brown sandy GRAVEL. Gravel is angular to sub rounded fine to coarse of flint limestone with dark red staining. (RIVER TERRACE DEPOSITS)	2.20	(0.70)	64.41	
2.50	B			Stiff grey mottled with orangish brown sandy SILT. Sand is fine. (KELLAWAYS SAND MEMBER)	2.60	(0.40)	64.01	
2.90	HSV	77kPa		Very stiff grey mottled with orangish brown thin laminated CLAY with reddish brown staining. (KELLAWAYS CLAY MEMBER)	3.10	(0.50)	63.51	
3.10	D			... At 3m bgl dark blue grey with occasional yellow speckle. ----- Base of Excavation at 3.10m				

General Remarks:  
 1) Excavation completed at 3.10m bgl 2) Sides stable throughout excavation 3) No groundwater encountered 4) Backfilled with arisings



Method: Trial Pit	Date(s): 05/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 447975.27, 213011.57	Stability: Unstable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 67.16m OD	Plant: JCB 3CX	0.60m <input type="text"/>

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Stiff (dry) brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is sub rounded fine to medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	66.86	
0.70	B			Stiff (dry) orangish brown slightly sandy slightly gravelly CLAY. Gravel is sub angular to angular fine to medium of flint. (HEAD DEPOSITS)	1.30	(1.00)	65.86	
1.70	D			Orangish brown slightly gravelly SAND. Gravel is sub rounded to sub angular fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	1.90	(0.60)	65.26	
2.20 - 2.23	B			Brownish grey gravelly SAND. Gravel is sub rounded to sub angular fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	2.30	(0.40)	64.86	
----- Base of Excavation at 2.30m								
					3			
					4			
					5			

General Remarks:  
 1) Excavation completed at 2.30m bgl 2) Side collapse from 1.90m bgl 3) No groundwater encountered 4) Backfilled with arisings




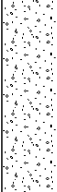
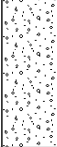


Method: Trial Pit	Date(s): 08/09/2022	Logged By: WS	Checked By: CV
Client: Oxford University Development	Co-ords: 448471.84, 213229.20	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.61m OD	Plant: JCB 3CX	

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.15	ES			Stiff friable dark brown slightly gravelly very sandy CLAY. Gravel is subangular to subrounded, fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	61.31	
0.60	D			Stiff friable brown slightly gravelly sandy CLAY. Gravel is subangular to subrounded, fine to coarse of flint. (ALLUVIUM)	0.90	(0.60)	60.71	
1.20	B			Greyish brown and brown slightly clayey very gravelly SAND. Gravel is angular to subrounded, fine to coarse of limestone and flint. (RIVER TERRACE DEPOSITS)	1.10	(0.20)	60.51	
2.40	D		▼	Greyish brown and brown SAND & GRAVEL. Gravel is angular to subrounded, fine to coarse of limestone and flint. (RIVER TERRACE DEPOSITS)	2.60	(1.50)	59.01	
				Base of Excavation at 2.60m				
					3			
					4			
					5			

General Remarks:  
 1) Excavation completed at 2.60m bgl due to continued collapse. 2) Groundwater encountered at 2.10m bgl. 3) Backfilled with arisings.

Method: Trial Pit	Date(s): 08/09/2022	Logged By: WS	Checked By: CV
Client: Oxford University Development	Co-ords: 448434.28, 213117.11	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.80m OD	Plant: JCB 3CX	0.60m <input type="text"/>

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.50	ES			Dark brown and brown slightly gravelly clayey SAND with rootlers. Gravel is subangular to rounded, fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	61.50	
0.90	B			Very stiff brown, light brown and orangish brown sandy slightly gravelly CLAY. Gravel is subangular to subrounded, fine to coarse of flint and limestone. (ALLUVIUM)	1.20	(0.90)	60.60	
1.60	D			Brown slightly clayey very gravelly SAND. Gravel is angular to rounded, fine to coarse of flint, ironstone and limestone. (RIVER TERRACE DEPOSITS)	1.50	(0.30)	60.30	
2.60	B			Brown very gravelly SAND. Gravel is angular to rounded, fine to coarse of flint, ironstone and limestone. (RIVER TERRACE DEPOSITS)	2.20	(0.70)	59.60	
				Brown SAND & GRAVEL. Gravel is angular to rounded, fine to coarse of flint, ironstone and limestone. (RIVER TERRACE DEPOSITS)	2.70	(0.50)	59.10	
				Base of Excavation at 2.70m				
					3			
					4			
					5			

General Remarks:  
1) Excavation completed at 2.70m bgl due to continued collapse. 2) Groundwater encountered at 2.20m bgl. 3) Backfilled with arisings.



Method: Trial Pit	Date(s): 05/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448048.64, 212681.25	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 60.91m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	ES			Stiff (dry) brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is sub rounded fine to medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	60.61	
0.70	B			Stiff (dry) orangish brown slightly sandy slightly gravelly CLAY with dark red staining. Gravel is angular to sub angular fine to coarse of flint. (ALLUVIUM)  ... From 0.90m bgl becoming mottled grey.	1.10	(0.80)	59.81	
1.30	D		▼	Soft greyish brown very sandy CLAY. (ALLUVIUM)	1.40	(0.30)	59.51	
1.90	B			Greyish brown sandy rounded to sub angular fine to coarse of flint GRAVEL. (RIVER TERRACE DEPOSITS)	2.00	(0.60)	58.91	
----- Base of Excavation at 2.00m -----					2			
					3			
					4			
					5			

General Remarks:  
 1) Excavation completed at 2.00m bgl 2) Sides collapse from 1.40m bgl 3) Groundwater encountered at 1.40m bgl 4) Backfilled with arisings

Method: Trial Pit	Date(s): 05/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448078.07, 212771.36	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.55m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Stiff (dry) brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is sub rounded fine to medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.35	(0.35)	61.20	
0.80	D			Stiff (dry) orangish brown slightly sandy slightly gravelly CLAY with dark red staining. Gravel is angular to sub rounded fine to medium of flint. (ALLUVIUM)	0.90	(0.55)	60.65	
1.40 1.40	B HSV	kPa		Stiff grey slightly gravelly CLAY with dark red staining. Gravel is sub angular fine to course of flint. (ALLUVIUM)	1.80	(0.90)	59.75	
2.10 2.10	D HSV	11kPa		Soft grey and orangish brown sandy slightly gravelly CLAY. Gravel is sub rounded fine to course of limestone and rare cobbles of sub angular flint. (ALLUVIUM)	2.80	(1.00)	58.75	
3.00	D			Greyish brown sandy GRAVEL. Gravel is rounded to sub angular fine to course of flint quartz and limestone. (RIVER TERRACE DEPOSITS)	3.10	(0.30)	58.45	
				Base of Excavation at 3.10m				
5								

General Remarks:  
 1) Excavation completed at 3.10m bgl 2) Sides stable throughout excavation 3) Groundwater encountered at 2.80m bgl 4) Backfilled with arisings



Method: Trial Pit	Date(s): 05/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448227.15, 212898.83	Stability: Unstable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 63.98m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Stiff (dry) brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is angular to sub rounded fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	63.68	
0.70	B			Stiff (dry) brown slightly sandy slightly gravelly CLAY. Gravel is angular to sub rounded fine to coarse of flint. (HEAD DEPOSITS)	1.20	(0.90)	62.78	
1.30	D			Dark grey clayey slightly gravelly SAND. Gravel is angular to sub rounded fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	2.00	(0.80)	61.98	
2.20	B		▼	Grey brown SAND and GRAVEL. Gravel is sub angular to rounded fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	2.20	(0.20)	61.78	
				Base of Excavation at 2.20m				
					3			
					4			
					5			

General Remarks:  
 1) Excavation completed at 2.20m bgl 2) Side collapse from 1.90m bgl on south east wall of pit 3) Groundwater encountered at 2.10m bgl 4) Backfilled with arisings

Method: Trial Pit	Date(s): 05/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448181.17, 212706.13	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 60.71m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Stiff (dry) brown slightly sandy slightly gravelly CLAY. Gravel is sub angular to rounded fine to medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	60.41	
0.60 - 0.70 0.65	B HSV	73kPa		Stiff grey and orangish brown slightly sandy slightly gravelly CLAY. Gravel is angular to sub angular fine to coarse of flint. (ALLUVIUM)	1.20	(0.90)	59.51	
1.70	D		▼	Greyish brown sandy GRAVEL. Gravel is sub angular to rounded fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	1.90	(0.70)	58.81	
Base of Excavation at 1.90m					2			
					3			
					4			
					5			

General Remarks:  
 1) Excavation completed at 1.90m bgl 2) Sides collapse from 1.40m bgl 3) Groundwater encountered at 1.50m bgl 4) Backfilled with arisings

Method: Trial Pit	Date(s): 05/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448346.09, 212872.94	Stability: Unstable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.32m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Stiff (dry) brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is sub rounded fine to medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	60.92	
0.70	D			Stiff (dry) dark brown mottled with orangish brown slightly sandy slightly gravelly CLAY with occasional rootlets. Gravel is sub rounded to angular fine to medium of flint. (ALLUVIUM) ... At 0.50m bgl possible land drain, pit moved back.	1.00	(0.60)	60.32	
1.20	B			Light grey gravelly SAND. Gravel is sub angular to rounded fine to coarse of flint quartz and limestone. (RIVER TERRACE DEPOSITS)	1.60	(0.60)	59.72	
2.00	D		▼	Brownish grey SAND and GRAVEL. Gravel is sub angular to rounded fine to coarse of flint quartz and limestone. (RIVER TERRACE DEPOSITS)	2.00	(0.40)	59.32	
----- Base of Excavation at 2.00m					2			
					3			
					4			
					5			

General Remarks:  
 1) Excavation completed at 2.00m bgl 2) Side collapse from 1.30 to 2.00m bgl 3) Groundwater encountered at 1.80m bgl 4) Backfilled with arisings 5) Possible land drain at 0.50m bgl pit moved back.



Method: Trial Pit	Date(s): 07/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448885.52, 213149.34	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.10m OD	Plant: JCB 3CX	0.60m <input type="text"/>

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Very stiff brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is subangular to subrounded, fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	60.80	
0.60	ES			Stiff grey and orange brown slightly sandy slightly gravelly CLAY with occasional rootlets, pockets of dark red staining and pockets of sandy clay. Gravel is subangular to subrounded, fine to medium of flint. (ALLUVIUM)	0.80	(0.50)	60.30	
1.00	D			Grey SAND & GRAVEL. Gravel is angular to subrounded, fine to coarse of flint and limestone. (ALLUVIUM)	1.20	(0.40)	59.90	
			▼	Grey slightly gravelly SAND. Gravel is subangular to subrounded, fine to coarse of flint and limestone. (ALLUVIUM)	1.50	(0.30)	59.60	
				Grey SAND & GRAVEL. Gravel is angular to subrounded, fine to coarse of flint and limestone. (ALLUVIUM)	2.15	(0.65)	58.95	
2.20	D			Soft grey slightly sandy slightly gravelly SILT. Gravel is angular to subangular, fine to coarse of flint. (ALLUVIUM)	2.20	(0.05)	58.90	
				Base of Excavation at 2.20m				
3								
4								
5								

General Remarks:  
1) Excavation completed at 2.20m bgl due to collapse to 1.40m bgl. 2) Groundwater encountered at 1.40m bgl 3) Backfilled with arisings.

Method: Trial Pit	Date(s): 07/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448870.93, 212956.78	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 60.73m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Very stiff (dry) brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is sub angular to rounded fine to medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	60.43	
0.60	D			Stiff (dry) orangish brown slightly sandy slightly gravelly CLAY. Gravel is sub angular to rounded fine to coarse of flint. (ALLUVIUM)	0.80	(0.50)	59.93	
1.10	B			Grey yellowish brown slightly gravelly SAND. Gravel is angular to sub rounded fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	1.30	(0.50)	59.43	
2.10	D		▼	Grey sandy GRAVEL. Gravel is angular to sub rounded fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	2.10	(0.80)	58.63	
Base of Excavation at 2.10m								

General Remarks:  
 1) Excavation completed at 2.10m bgl 2) Side collapse at 1.60m bgl with running sands 3) Groundwater encountered at 1.60m bgl 4) Backfilled with arisings

Method: Trial Pit	Date(s): 07/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 449151.45, 212990.46	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 60.72m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Very stiff dark brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is angular to sub angular fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	60.42	
0.50	B			Stiff orangish brown mottled with grey slightly sandy slightly gravelly CLAY. Gravel is sub angular to sub rounded fine to medium of limestone with dark red staining and occasional shells. (ALLUVIUM)	0.70	(0.40)	60.02	
0.80	HSV	17kPa		Soft grey mottled with orangish brown sandy slightly gravelly CLAY. Gravel is sub angular to sub rounded fine to coarse of flint limestone with dark red staining. (ALLUVIUM)	0.90	(0.20)	59.82	
1.00	D			Grey mottled with orangish brown clayey slightly gravelly SAND. Gravel is sub angular to sub rounded fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)	1.50	(0.60)	59.22	
1.70	B			Firm to stiff dark blueish grey CLAY. (OXFORD CLAY FORMATION)	1.90	(0.40)	58.82	
1.80	HSV	57kPa						
				Base of Excavation at 1.90m				
2								
3								
4								
5								

General Remarks:  
 1) Excavation completed at 1.90m bgl 2) Side collapse at 2.00m bgl with running sands 3) Groundwater encountered at 0.70m bgl 4) Backfilled with arisings



Method: Trial Pit	Date(s): 07/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448968.63, 212654.79	Stability: Slight Spalling	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 60.40m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Very stiff brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is angular to sub angular fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	60.10	
0.50	D			Firm yellowish brown mottled with grey slightly sandy slightly gravelly CLAY. Gravel is sub angular fine to coarse of flint. (ALLUVIUM)	0.80	(0.50)	59.60	
1.40	D		▼	Grey SAND and GRAVEL. Gravel is sub angular to rounded fine to coarse of flint limestone and quartz. (RIVER TERRACE DEPOSITS)  ... From 1.54m bgl pockets of sand.	1	(1.30)		
2.10	B			Base of Excavation at 2.10m	2.10		58.30	
					3			
					4			
					5			

General Remarks:  
 1) Excavation completed at 2.10m bgl 2) Side collapse at 1.50m bgl with running sands 3) Groundwater encountered at 1.50m bgl 4) Backfilled with arisings

Method: Trial Pit	Date(s): 07/09/2022	Logged By: AA	Checked By: CV
Client: Oxford University Development	Co-ords: 448830.19, 212358.75	Stability: Stable	Dimensions: 2.50m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 59.92m OD	Plant: JCB 3CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Very stiff brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is angular to sub angular fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	59.62	
0.70 - 0.90	B			Firm grey mottled with yellowish brown sandy CLAY. (ALLUVIUM)  ... Land drain at 0.60m bgl.	0.70	(0.40)	59.22	
1.70	D		▼	Grey SAND and GRAVEL. Gravel is angular to sub rounded fine to coarse of flint quartz and limestone. (ALLUVIUM)  ... From 1.60m bgl pockets of grey sand.	1.90	(1.20)	58.02	
1.90	HSV	55kPa		Firm to stiff grey slightly gravelly silty CLAY. Gravel is sub angular medium to coarse of flint and limestone. (ALLUVIUM)	2.00	(0.10)	57.92	
2.00	D			Base of Excavation at 2.00m				

General Remarks:  
 1) Excavation completed at 2.00m bgl 2) Side collapse at 1.20m bgl 3) Groundwater encountered at 1.70m bgl 4) Backfilled with arisings



Method: Trial Pit	Date(s): 31/01/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 448360.91, 213377.67	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 62.88m OD	Plant: JCB 3-CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Dark brown organic slightly gravelly clayey SAND. Gravel is rounded to sub-angular fine of flint and quartz, with occasional limestone. (AGRICULTURALLY DISTURED TOPSOIL)	0.35	(0.35)	62.53	
0.80 - 1.00	B			Light brown very clayey SAND with frequent pockets (up to 160mm diameter) of soft to firm sandy clay. (ALLUVIUM)	1.00	(1.55)		
1.20	ES		▼		1.90		60.98	
2.10 - 2.40	B		▼	Grey mottled brown clayey gravelly SAND. Gravel is rounded to sub-angular fine to medium of limestone, quartz and flint. (ALLUVIUM)	2.10	(0.20)	60.78	
2.20	HSV	40kPa		Soft light brown slightly silty sandy CLAY. (ALLUVIUM)	2.45	(0.35)	60.43	
2.60 - 2.70	B			Yellowish brown sandy rounded to sub-angular fine to coarse of limestone, quartz, flint and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	2.70	(0.25)	60.18	
				Base of Excavation at 2.70m	3.00			
					4.00			
					5.00			

**General Remarks:**

1. Trial pit terminated at 2.70m bgl.
2. Trial pit walls show minor instability during excavation between 1.75m to 2.50m.
3. Trial pit walls did not collapse during the period the excavation remained open (15 mins)





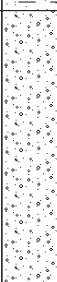
Method: Trial Pit	Date(s): 31/01/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 448427.69, 213380.45	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.93m OD	Plant: JCB 3-CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20	ES			Dark brown organic slightly gravelly clayey SAND. Gravel is rounded to sub-angular fine of flint and quartz, with occasional limestone. (AGRICULTURALLY DISTURED TOPSOIL)	0.34	(0.34)	61.59	
0.80 - 1.00	B			Light brown very clayey SAND with frequent pockets (up to 130mm in diameter) of soft to firm sandy clay. (ALLUVIUM)	1.00	(1.16)		
1.20	ES		▼		1.50		60.43	
1.60 - 1.70	B			Yellowish brown sandy rounded to sub-angular fine to coarse of limestone, quartz, flint and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	1.70	(0.20)	60.23	
				Base of Excavation at 1.70m				
				2				
				3				
				4				
				5				

**General Remarks:**  
 1. Trial pit terminated at 1.70m bgl  
 2. Trial pit walls showed high instability from 0.5m to 1.70m - Trial pit collapsed to 1.30m depth from 1.70m.  
 3. Constant collapse of pit walls prevented excavation advancing beyond 1.70m depth.

Groundwater: Moderate inflow of groundwater encountered at 1.20m.

Method: Trial Pit	Date(s): 02/02/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 448482.86, 213384.09	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.61m OD	Plant: JCB 3-CX	0.60m <input type="text"/>

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	ES			Light brown organic slightly gravelly clayey SAND. Gravel is rounded to sub-angular fine of quartz, flint and limestone. (AGRICULTURALLY DISTURED TOPSOIL)	0.25	(0.25)	61.36	
0.30 - 0.60	B			Soft to firm light orange brown very sandy CLAY with frequent pockets (up to 170mm in diameter) of clayey sand. (ALLUVIUM)	0.80	(0.55)	60.81	
0.80 - 1.20	B			Yellowish brown sandy rounded to sub-angular fine to coarse of limestone, quartz, flint and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	1.70	(0.90)	59.91	
Base of Excavation at 1.70m								
					2			
					3			
					4			
					5			

**General Remarks:**

1. Trial pit terminated at 1.70m bgl.
2. Trial pit walls showed high instability from 0.80m to 1.70m - Trial pit collapsed to 1.40m depth.
3. Constant collapse of pit walls prevented excavation advancing beyond 1.70m depth.

Groundwater: Moderate inflow of groundwater encountered at 1.40m

Method: Trial Pit	Date(s): 31/01/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 448360.51, 213311.58	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 62.40m OD	Plant: JCB 3-CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.20 - 1.20	ES			Light brown organic slightly gravelly clayey SAND. Gravel is rounded to sub-angular fine of quartz, flint and limestone. (AGRICULTURALLY DISTURED TOPSOIL)	0.30	(0.30)	62.10	
0.60 - 0.80	B			Light orange brown very clayey SAND with frequent pockets (up to 220mm in diameter) of soft sandy clay. (ALLUVIUM)	1.10	(0.80)	61.30	
0.80	ES							
1.30 - 1.50	B		▼	Dark grey and brown very clayey SAND with frequent pockets (up to 180mm in diameter) of soft sandy clay. (ALLUVIUM)	2.30	(1.20)	60.10	
2.40 - 2.50	B			Yellowish brown sandy rounded to sub-angular fine to coarse of limestone, quartz, flint and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	2.50	(0.20)	59.90	
				Base of Excavation at 2.50m				
					3			
					4			
					5			

**General Remarks:**  
 1. Trial pit terminated at 2.50m bgl .  
 2. Trial pit walls showed high instability from 1.10m to 2.50m - Trial pit collapsed to 1.70m depth from 2.50m.  
 3. Constant collapse of pit walls prevented excavation advancing beyond 2.50m depth.

Groundwater: Moderate inflow of groundwater encountered at 1.0m

Method: Trial Pit	Date(s): 31/01/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 448431.09, 213314.69	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.70m OD	Plant: JCB 3-CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	
Depth (m)	Type	Results							
0.20	B			Light brown organic slightly gravelly clayey SAND. Gravel is rounded to sub-angular fine of quartz, flint and limestone. (AGRICULTURALLY DISTURED TOPSOIL)	0.28	(0.28)	61.42		
0.40 - 0.60	B		▼	Light orange brown very clayey SAND with frequent pockets (up to 180mm in diameter) of soft sandy clay. (ALLUVIUM)	0.85	(0.57)	60.85		
1.00 - 1.40	B			Yellowish brown sandy rounded to sub-angular fine to coarse of limestone, quartz, flint and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	1.40	(0.55)	60.30		
1.30	ES		▼	Base of Excavation at 1.40m					
					2				
					3				
					4				
					5				





**General Remarks:**

- Trial pit terminated at 1.40m bgl.
- Trial pit walls showed high instability from ground level to 1.40m - Trial pit collapsed to 1.0m depth from 1.40m.
- Constant collapse of pit walls prevented excavation advancing beyond 1.40m depth.

Groundwater: Minor inflow of groundwater encountered at 0.65m depth. High inflow of groundwater encountered at 1.40m.



Method: Trial Pit	Date(s): 02/02/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 448486.84, 213317.89	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.50m OD	Plant: JCB 3-CX	0.60m <input type="text"/>

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.50 0.50 0.60 - 0.80	ES HSV B	65kPa		Light brown organic slightly gravelly clayey SAND. Gravel is rounded to sub-angular fine of quartz, flint and limestone. (AGRICULTURALLY DISTURED TOPSOIL)	0.25	(0.25)	61.25	
1.00 - 1.20	B			Firm light brown sandy CLAY with occasional pockets (up to 150mm in diameter) of clayey sand. (ALLUVIUM)	0.70	(0.45)	60.80	
1.50	ES		▼	Light brown very clayey SAND with occasional pockets (up to 130mm in diameter) of sandy clay. (ALLUVIUM)	1.00	(0.30)	60.50	
				Yellowish brown sandy rounded to sub-angular fine to coarse of limestone, quartz, flint and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)		(0.60)		
				Base of Excavation at 1.60m	1.60		59.90	
					2			
					3			
					4			
					5			

**General Remarks:**  
 1. Trial pit terminated at 2.40m bgl.  
 2. Trial pit walls showed high instability from ground level to 1.60m - Trial pit collapsed to from ground surface to 1.20m depth from 1.60m.  
 3. Constant collapse of pit walls prevented excavation advancing beyond 1.60m depth.

Groundwater: Moderate inflow of groundwater encountered at 1.40m.

Method: Trial Pit	Date(s): 06/02/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 448595.06, 213370.63	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.54m OD	Plant: JCB 3-CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.30 - 0.50	B			Dark brown organic slightly gravelly clayey SAND. Gravel is rounded to sub-angular fine of flint and quartz, with occasional limestone. (AGRICULTURALLY DISTURED TOPSOIL)	0.23	(0.23)	61.31	
0.50	HSV	55kPa		Firm light brown sandy CLAY with occasional pockets (up to 190mm in diameter) of clayey sand. (ALLUVIUM)	0.60	(0.37)	60.94	
				Light brown clayey SAND with occasional pockets (up to 140mm in diameter) of sandy clay. (ALLUVIUM)	1.00	(0.40)	60.54	
1.20 - 1.50	B		▼	Light grey and yellowish brown sandy GRAVEL. Gravel is rounded to sub-angular fine to coarse of limestone, quartz, flint, mudstone sandstone. (ALLUVIUM)	1.60	(0.60)	59.94	
2.20 - 2.40	B			Soft dark brown sandy CLAY/SILT with occasional sub vertical fine to medium rootlets. (ALLUVIUM)	2	(0.80)		
----- Base of Excavation at 2.40m -----					2.40		59.14	
					3			
					4			
					5			

**General Remarks:**  
 1. Trial pit terminated at 2.40m bgl.  
 2. Trial pit walls showed high instability from 0.60m to 2.40m - Trial pit collapsed to 1.70m depth from 2.40m.  
 3. Constant collapse of pit walls prevented excavation advancing beyond 1.60m depth. 5. Groundwater level in trial pit measured at 1.2m after 10 minutes.



Method: Trial Pit	Date(s): 06/02/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 448629.85, 213343.06	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.41m OD	Plant: JCB 3-CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	ES			Dark brown organic slightly gravelly very clayey SAND. Gravel is rounded to sub-angular fine of quartz, flint and limestone. (AGRICULTURALLY DISTURED TOPSOIL)	0.20	(0.20)	61.21	
0.50	HSV	55kPa		Firm light brown sandy CLAY with occasional pockets (up to 150mm in size) of clayey sand. (ALLUVIUM)	0.55	(0.35)	60.86	
0.60 - 0.70	B			Light brown very clayey SAND with occasional pockets (up to 110mm in size) of sandy clay. (ALLUVIUM)	0.80	(0.25)	60.61	
0.90 - 1.20	B			Light grey and orange brown very sandy rounded to sub-angular fine to coarse of limestone, quartz, flint, mudstone sandstone GRAVEL. (ALLUVIUM)	1.00	(1.00)		
1.90 - 2.00	B			Soft to firm light brown mottled dark brown sandy CLAY/SILT with occasional sub vertical fine to medium rootlets. (ALLUVIUM)	1.80	(0.40)	59.61	
Base of Excavation at 2.20m					2.20		59.21	
					3			
					4			
					5			

General Remarks:  
 1. Trial pit terminated at 2.20m bgl.  
 2. Trial pit walls showed high instability from 0.90 to 1.80m - Trial pit collapsed to 1.80m depth from 2.20m.  
 3. Constant collapse of pit walls prevented excavation advancing beyond 2.20m depth.

Groundwater: Moderate inflow of groundwater encountered at 1.50m



Project: Begbroke

Trialpit No  
**TP310**  
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Method: Trial Pit	Date(s): 06/02/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 448610.12, 213265.95	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.42m OD	Plant: JCB 3-CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10 0.10	B ES			Dark brown organic slightly gravelly very clayey SAND. Gravel is rounded to sub-angular fine of quartz, flint and limestone. (AGRICULTURALLY DISTURED TOPSOIL)	0.18	(0.18)	61.24	
0.40 0.40 - 0.70 0.50	ES B HSV	55kPa		Firm light brown sandy CLAY with occasional pockets (up to 210mm in diameter) of clayey sand. (ALLUVIUM)		(0.62)		
0.70 0.70 - 0.80	ES B		▼	Light brown very clayey SAND with occasional pockets (up to 80mm in diameter) of sandy clay. (ALLUVIUM)	0.80	(0.20)	60.62	
1.30 - 1.50	B			Light grey and yellowish brown sandy rounded to sub-angular fine to coarse of limestone, quartz, flint, mudstone sandstone GRAVEL. (ALLUVIUM)	1.00	(0.70)	60.42	
1.80 - 2.20	B			Soft light grey brown sandy CLAY/SILT with occasional sub vertical fine to medium rootlets. (ALLUVIUM)	1.70	(0.80)	59.72	
2.00	HSV	35kPa			2			
2.40 - 2.60	B				2.50		58.92	
				Base of Excavation at 2.50m				
3								
4								
5								

**General Remarks:**  
 1. Trial pit terminated at 2.50m bgl.  
 2. Trial pit walls showed high instability from 1.00m to 2.50m - Trial pit collapsed to 1.70m depth from 2.50m.  
 3. Constant collapse of pit walls prevented excavation advancing beyond 2.50m depth.

Groundwater: Moderate inflow of groundwater encountered at 0.80m



Method: Trial Pit	Date(s): 06/02/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 448652.45, 213278.86	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.37m OD	Plant: JCB 3-CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.50	HSV	65kPa		Dark brown organic slightly gravelly very clayey SAND. Gravel is rounded to sub-angular fine of quartz, flint and limestone. (AGRICULTURALLY DISTURED TOPSOIL)	0.23	(0.23)	61.14	
				Firm light brown very sandy CLAY with occasional pockets (up to 160mm in diameter) of clayey sand. (ALLUVIUM)	0.65	(0.42)	60.72	
				Light brown very clayey SAND with occasional pockets (up to 130mm in diameter) of sandy clay. (ALLUVIUM)	0.90	(0.25)	60.47	
				Light grey and yellowish brown sandy rounded to sub-angular fine to coarse of limestone, quartz, flint, mudstone sandstone GRAVEL. (ALLUVIUM)	1.60	(0.70)	59.77	
				Firm (locally soft) light brown sandy CLAY/SILT with occasional pockets of firm blue grey sandy clay. (ALLUVIUM)	2.60	(1.00)	58.77	
2.10	HSV	50kPa						
2.20	HSV	38kPa						
2.40	HSV	65kPa						
				Base of Excavation at 2.60m				
				3				
				4				
				5				

General Remarks:  
 1. Trial pit terminated at 2.60m bgl  
 2. Trial pit walls showed high instability from 0.90m to 1.60m - Trial pit collapsed to 1.90m depth from 2.60m.  
 3. Constant collapse of pit walls prevented excavation advancing beyond 2.60m depth.

Groundwater: Moderate inflow of groundwater encountered at 0.85m.

Method: Trial Pit	Date(s): 06/02/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 448649.13, 213209.72	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.28m OD	Plant: JCB 3-CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	ES			Dark brown organic slightly gravelly very clayey SAND. Gravel is rounded to sub-angular fine of quartz, flint and limestone. (AGRICULTURALLY DISTURED TOPSOIL)	0.26	(0.26)	61.02	
0.30 - 0.60	B			Firm light brown very sandy CLAY with occasional pockets (up to 120mm in diameter) of clayey sand. (ALLUVIUM)		(0.44)		
0.50	HSV	50kPa			0.70		60.58	
			▼	Light brown slightly clayey slightly gravelly SAND. Gravel is sub-rounded to sub-angular fine to medium of flint, limestone and quartz. (ALLUVIUM)	0.90	(0.20)	60.38	
1.00 - 1.40	B			Light grey and yellowish brown sandy GRAVEL. Gravel is rounded to sub-angular fine to coarse of limestone, quartz, flint, mudstone sandstone. (ALLUVIUM)	1	(0.60)		
			▼		1.50		59.78	
1.80	HSV	35kPa		Firm (locally soft) light brown sandy CLAY/SILT with frequent pockets of silty sand. (ALLUVIUM)		(1.20)		
2.00 - 2.50	B				2			
2.60	HSV	65kPa			2.70		58.58	
				Base of Excavation at 2.70m				
					3			
					4			
					5			

**General Remarks:**  
 1. Trial pit terminated at 2.70m bgl  
 2. Trial pit walls showed high instability from 0.80m to 2.70m - Trial pit collapsed to 2.30m depth from 2.70m.  
 3. Constant collapse of pit walls prevented excavation advancing beyond 2.70m depth.

Groundwater: Minor inflow of groundwater encountered at 0.70m depth. Moderate inflow of groundwater encountered at 1.20m

Method: Trial Pit	Date(s): 02/02/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 448681.76, 213223.67	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 61.22m OD	Plant: JCB 3-CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.12	ES			Dark brown organic slightly gravelly very clayey SAND. Gravel is rounded to sub-angular fine of quartz, flint and limestone. (AGRICULTURALLY DISTURED TOPSOIL)	0.25	(0.25)	60.97	
0.30 - 0.60	B			Firm light brown very sandy CLAY. (ALLUVIUM)				
0.50	HSV	50kPa				(0.60)		
			▼		0.85		60.37	
1.20 - 1.60	B			Light grey and yellowish brown sandy rounded to sub-angular fine to coarse of limestone, quartz, flint, mudstone sandstone GRAVEL. (ALLUVIUM)	1			
					1.80		59.42	
1.90 - 2.30	B			Firm light grey mottled brown slightly silty sandy CLAY with occasional pockets (up to 90mm in diameter) of light brown silt. (ALLUVIUM)	2			
2.00	HSV	70kPa				(0.60)		
2.40	HSV	65kPa			2.40		58.82	
				Base of Excavation at 2.40m				
					3			
					4			
					5			

**General Remarks:**  
 1. Trial pit terminated at 2.40m depth  
 2. Trial pit walls showed high instability from 0.90m to 2.40m - Trial pit collapsed to 1.50m depth from 2.40m.  
 3. Constant collapse of pit walls prevented excavation advancing beyond 2.40m depth.

Groundwater: Moderate inflow of groundwater encountered at 0.85m.

Method: Trial Pit	Date(s): 02/02/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 449114.96, 212508.88	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 60.12m OD	Plant: JCB 3-CX	0.60m



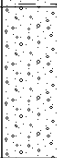
Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	ES			Light brown slightly organic slightly gravelly sandy CLAY. Gravel is sub-rounded to sub-angular flint and quartz. (AGRICULTURALLY DISTURED TOPSOIL)	0.20	(0.20)	59.92	
0.40 - 0.70	B			Soft to firm light brown very sandy CLAY with frequent pockets (up to 170mm in diameter) of clayey sand. (ALLUVIUM)		(0.60)	59.92	
0.50	ES							
0.60	HSV	50kPa						
1.00 - 1.40	B		▼	Yellowish brown very sandy rounded to sub-angular fine to coarse of limestone, quartz, flint and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	1	(0.90)	58.42	
			▼		1.70			
				Base of Excavation at 1.70m				
					2			
					3			
					4			
					5			

**General Remarks:**

1. Trial Pit terminated at 1.70m bgl.
2. Trial pit walls showed high instability from 1.10m to 1.70m - Trial pit collapsed to 1.40m depth from 1.70m.
3. Constant collapse of pit walls prevented excavation advancing beyond 1.70m depth.

Groundwater: Minor inflow of groundwater encountered at 0.80m depth. Moderate inflow of groundwater encountered at 1.60m

Method: Trial Pit	Date(s): 02/02/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 449083.07, 212483.30	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 60.10m OD	Plant: JCB 3-CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	B			Light brown slightly organic slightly gravelly sandy CLAY. Gravel is sub-rounded to sub-angular flint and quartz. (AGRICULTURALLY DISTURED TOPSOIL)	0.22	(0.22)	59.88	
0.30 - 0.50	B			Soft to firm light brown very sandy CLAY with frequent pockets (up to 160mm in diameter) of clayey sand. (ALLUVIUM)				
0.50	HSV	50kPa				(0.68)		
1.00 - 1.40	B		▼	Yellowish brown very sandy rounded to sub-angular fine to coarse of limestone, quartz, flint and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	1	(0.50)	59.20	
1.20	ES				1.40		58.70	
				Base of Excavation at 1.40m				
2								
3								
4								
5								

**General Remarks:**

1. Trial pit terminated at 1.40m bgl.
2. Trial pit walls showed high instability from 0.50m to 1.40m - Trial pit collapsed to 1.00m depth from 1.40m.
3. Constant collapse of pit walls prevented excavation advancing beyond 1.40m depth.

Groundwater: Moderate inflow of groundwater encountered at 0.90m.



Method: Trial Pit	Date(s): 02/02/2023	Logged By: CC	Checked By: NT
Client: Oxford University Development	Co-ords: 449119.84, 212452.72	Stability: Unstable	Dimensions: 2.00m Scale: 1:25
Hydrock Project No: C-19114-C	Ground Level: 60.14m OD	Plant: JCB 3-CX	0.60m

Samples / Tests			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend
Depth (m)	Type	Results						
0.10	ES			Light brown slightly organic slightly gravelly sandy CLAY. Gravel is sub-rounded to sub-angular flint and quartz. (AGRICULTURALLY DISTURED TOPSOIL)	0.25	(0.25)	59.89	
0.35 - 0.50	B			Firm light orange brown very sandy CLAY with frequent pockets (up to 180mm in diameter) of clayey sand. (ALLUVIUM)		(0.45)		
0.50	HSV	55kPa			0.70		59.44	
0.80 - 1.00	B			Dark grey brown sandy rounded to sub-angular fine to coarse of limestone, quartz, flint, mudstone and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	1	(1.30)		
1.80 - 2.00	B			Base of Excavation at 1.60m	2	2.00	58.14	

**General Remarks:**

- Trial pit terminated at 1.60m bgl.
- Trial pit walls showed high instability from 1.10m to 2.00m - Trial pit collapsed to 1.70m depth.
- Constant collapse of pit walls prevented excavation advancing beyond 2.00m depth.

Groundwater: Moderate inflow of groundwater encountered at 1.40m.





Method: Dynamic (Windowless) Sampler	Date(s): 18/08/2021	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448185.37, 213187.06	Checked By: NT	Rig: Terrier
Hydrock Project No: C-19114-C	Ground Level: 67.71m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.10	ES			Brown silty gravelly SAND. Gravel is angular to sub-rounded fine to coarse concrete flint and sandstone with fabric rags. (TOPSOIL - MADE GROUND)	0.25	(0.25)	67.46		
			0.40	ES			Firm yellowish greyish brown slightly sandy CLAY with rare gravels if sub-angular fine coal. (MADE GROUND - GENERAL)	0.50	(0.25)	67.21		
			1.00	ES			Reddish brown and black gravelly SAND. Gravel sized fragments of angular fine to coarse brick concrete and slag with frequent glass, metal and timber. (LANDFILL - MADE GROUND)	1.00	(1.80)			
			2.50	ES			Dark reddish brown slightly gravelly clayey SAND. Gravel is angular to sub-rounded fine to coarse sandstone and flint with rare gravel sized fragments of angular fine to coarse brick. (LANDFILL - MADE GROUND)	2.30	(1.10)	65.41		
							Yellowish brown sandy angular to sub-rounded fine to coarse GRAVEL of flint and sandstone. (RIVER TERRACE DEPOSITS)	3.40	(0.30)	64.31		
							End of Borehole at 3.70m	3.70		64.01		

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Drilling refusal at 3.70m bgl and borehole collapsed in to 2.70m bgl. 4) Gas and groundwater monitoring well installed to 2.70m bgl with response zone between 0.70m and 2.70m. 5) Landfill deposits have a putrid odour throughout.

Method: Dynamic (Windowless) Sampler	Date(s): 18/08/2021	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448229.25, 213152.21	Checked By: NT	Rig: Terrier
Hydrock Project No: C-19114-C	Ground Level: 66.74m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Orangish brown silty gravelly SAND. Gravel is angular to sub-rounded fine to coarse concrete brick flint and sandstone with fabric rags and pottery. (TOPSOIL - MADE GROUND)	0.30	(0.30)	66.44		
			0.80	ES			Brown gravelly SAND with occasional cobbles of concrete. Gravel sized fragments of angular fine to coarse brick and concrete. With frequent scrap metal, plastic and wire. (LANDFILL - MADE GROUND)		(1.20)			
			1.80	ES			Black and grey clayey gravelly SAND. Gravel sized fragments of angular fine to coarse slag and brick. (LANDFILL - MADE GROUND)	1.50		65.24		
			2.50	ES			... Between 2.30m and 2.80m bgl: Very clayey.		(1.70)			
			3.50	ES			Yellowish brown sandy angular to sub-rounded fine to coarse GRAVEL of flint and sandstone. (RIVER TERRACE DEPOSITS)	3.20		63.54		
							End of Borehole at 4.00m	4.00		62.74		

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Gas and groundwater monitoring well installed to 3.00m bgl with response zone between 1.00m and 3.00m. 3) Landfill deposits have a putrid odour throughout.



Method: Dynamic (Windowless) Sampler	Date(s): 18/08/2021	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448136.62, 213099.02	Checked By: NT	Rig: Terrier
Hydrock Project No: C-19114-C	Ground Level: 67.39m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Brown silty gravelly SAND with frequent cobbles of concrete. Gravel sized fragments of angular fine to coarse brick concrete and slag. With frequent pottery, plastic and metal wire. (TOPSOIL - MADE GROUND)	0.80	(0.80)	66.59		
			0.90	ES			Soft orange brown gravelly slightly sandy CLAY. Gravel is angular to sub-rounded fine to coarse flint and sandstone with frequent glass and scrap metal. (LANDFILL - MADE GROUND)	1.00				
			1.80	ES				2.00	(2.00)			
			2.80	ES			Very soft black sandy CLAY. Sand is of ash. With abundant glass and strong putrid odour. (LANDFILL - MADE GROUND) ... Between 2.80m and 3.00m bgl: Sample wet, assumed from broken glass bottle.	2.80		64.59		
			3.80	ES			Soft brownish grey sandy slightly gravelly CLAY with rare wood. Gravel is sub-rounded to rounded fine to coarse flint and sandstone. (RIVER TERRACE DEPOSITS)	3.60		63.79		
							End of Borehole at 4.00m	4.00		63.39		

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Gas and groundwater monitoring well installed to 3.00m bgl with response zone between 1.00m and 3.00m. 3) Landfill deposits have a putrid odour throughout.



Project: Begbroke

Borehole No  
**WS06**  
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Method: Dynamic (Windowless) Sampler	Date(s): 19/08/2021	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448109.90, 213074.00	Checked By: NT	Rig: Terrier
Hydrock Project No: C-19114-C	Ground Level: 66.97m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Greyish brown silty gravelly SAND. Gravel is sub-angular to sub-rounded fine to coarse flint and chalk with gravel sized fragments of angular fine to coarse concrete and brick. With frequent plastic, glass and pottery. (TOPSOIL - MADE GROUND)	0.30	(0.30)	66.67		
			0.50	ES			Orange brown clayey gravelly SAND. Gravel sized fragments of angular fine to coarse brick concrete and slag with frequent glass, scrap metal, wire and plastic wrapping. (LANDFILL - MADE GROUND)		(1.10)			
			1.80	ES			MADE GROUND consisting of black plastic wrapping, timber and glass with strong putrid odour. (LANDFILL - MADE GROUND)	1.40	(0.70)	65.57		
			2.50	ES			Yellowish brown slightly clayey sandy angular to rounded fine to coarse GRAVEL of flint and sandstone. (RIVER TERRACE DEPOSITS)	2.10	(0.90)	64.87		
----- End of Borehole at 3.00m -----								3.00		63.97		

General Remarks:  
1) Inspection pit hand dug to 1.20m bgl. 2) Gas and groundwater monitoring well installed to 2.00m bgl with response zone between 1.00m and 2.00m. 3) Landfill deposits have a putrid odour throughout.

Method: Dynamic (Windowless) Sampler	Date(s): 19/08/2021	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448200.37, 213063.05	Checked By: NT	Rig: Terrier
Hydrock Project No: C-19114-C	Ground Level: 67.14m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.30	ES			Dark brown gravelly SAND with high root content. (TOPSOIL - MADE GROUND) Brown silty gravelly SAND with occasional cobbles of concrete. Gravel sized fragments angular fine to coarse of brick and concrete. With frequent fabric, plastic wrapping, metal wire and glass bottles. (LANDFILL - MADE GROUND)	0.05	(0.05)	67.09		
			0.90	ES			Dark reddish brown and black sandy GRAVEL. Gravel sized fragments of angular fine to coarse slag brick and concrete. (LANDFILL - MADE GROUND) Firm orange brown sandy slightly gravelly CLAY. Gravel sized fragments of angular fine to coarse concrete and brick with frequent glass. (LANDFILL - MADE GROUND)	0.80	(0.20)	66.34		
			1.50	ES				1.00		66.14		
			2.30	ES			Soft grey mottled black slightly sandy gravelly CLAY. Gravel sized fragments of angular fine to coarse brick concrete and slag. With frequent timber, glass and plastic. (LANDFILL - MADE GROUND)	1.80	(0.80)	65.34		
								2.00	(0.70)			
								2.50		64.64		
End of Borehole at 2.50m												

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Drilling refusal at 2.50m bgl. 4) Gas and groundwater monitoring well installed to 2.50m bgl with response zone between 0.50m and 2.50m. 5) Landfill deposits have a putrid odour throughout.

Method: Dynamic (Windowless) Sampler	Date(s): 19/08/2021	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448264.91, 213073.48	Checked By: NT	Rig: Terrier
Hydrock Project No: C-19114-C	Ground Level: 67.02m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.50	ES		Dark brown silty SAND with high root content. (TOPSOIL - MADE GROUND) Brown silty gravelly SAND with occasional cobbles of concrete. Gravel is angular to sub-rounded flint and sandstone with gravel sized fragments of angular fine to coarse concrete and brick. With frequent glass bottles, plastic and pottery. (LANDFILL - MADE GROUND)	0.05	(0.05)	66.97			
			1.40	ES		Firm brown slightly sandy gravelly CLAY with frequent cobbles of concrete. Gravel sized fragments of angular fine to coarse concrete and brick. (LANDFILL - MADE GROUND)	1.10	(0.50)	65.92			
			2.40	ES		Orange brown and black gravelly SAND. Sand is of ash. Gravel sized fragments of angular fine to coarse brick and concrete. With frequent glass, plastic wrapping and timber. (LANDFILL - MADE GROUND)	1.60	(1.20)	65.42			
			3.40	ES		Soft brown mottled grey and black sandy slightly gravelly CLAY. Gravel sized fragments of angular fine to coarse brick. (LANDFILL - MADE GROUND)	2.80	(1.00)	64.22			
			3.90	ES		Greyish brown slightly clayey sub-rounded to rounded fine to coarse SAND & GRAVEL of flint and sandstone. (RIVER TERRACE DEPOSITS)	3.80	(0.20)	63.22			
						End of Borehole at 4.00m	4.00		63.02			

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Borehole collapsed to 3.80m. 4) Gas and groundwater monitoring well installed to 3.80m bgl with response zone between 0.80m and 3.80m. 5) Landfill deposits have a putrid odour throughout.

Method: Dynamic (Windowless) Sampler	Date(s): 19/08/2021	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448237.33, 213010.30	Checked By: NT	Rig: Terrier
Hydrock Project No: C-19114-C	Ground Level: 66.71m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.50	ES			Dark brown gravelly SAND with high root content. (TOPSOIL - MADE GROUND) Brown silty gravelly SAND with occasional cobbles of concrete. Gravel is angular to sub-rounded flint and sandstone with gravel sized fragments of angular fine to coarse concrete and brick. With frequent glass bottles, plastic, animal bone, plastic bottles and pottery. (LANDFILL - MADE GROUND)	0.05	(0.05)	66.66		
			1.50	ES			Soft brown gravelly slightly sandy CLAY. Gravel sized fragments of concrete and brick with rare plastic. (LANDFILL - MADE GROUND)	1.40	(0.80)	65.31		
			2.50	ES			Soft orange brown sandy slightly gravelly CLAY. Gravel is sub-angular to rounded fine to coarse sandstone and flint with rare gravel sized fragments of angular fine to coarse slag. (LANDFILL - MADE GROUND)	2.20	(1.00)	64.51		
			3.00	ES			... Between 2.90m and 3.10m bgl: Stained black with strong putrid odour.					
			3.80	ES			Yellowish brown gravelly SAND. Gravel is sub-angular to rounded fine to coarse flint and sandstone with frequent bands of firm yellowish brown clay. (RIVER TERRACE DEPOSITS)	3.20	(0.80)	63.51		
							End of Borehole at 4.00m	4.00		62.71		

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Gas and groundwater monitoring well installed to 3.00m bgl with response zone between 1.00m and 3.00m. 3) Landfill deposits have a putrid odour throughout.



Method: Dynamic (Windowless) Sampler	Date(s): 18/08/2021	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448249.42, 213165.97	Checked By: NT	Rig: Terrier
Hydrock Project No: C-19114-C	Ground Level: 66.71m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Orangish brown silty gravelly SAND. Gravel is angular to sub-rounded fine to coarse concrete flint and sandstone with fabric rags. (TOPSOIL - MADE GROUND)	0.30	(0.30)	66.41		
			0.60	ES			Dark brown gravelly clayey SAND. Gravel sized fragments of angular fine to coarse brick and concrete with frequent rubber plastic bottles and glass. (LANDFILL - MADE GROUND)		(1.20)			
			1.60	ES			Dark brown and black clayey gravelly SAND. Gravel sized fragments of angular fine to coarse concrete brick and slag with ash, glass and paper. (LANDFILL - MADE GROUND)		(1.30)	65.21		
							... Between 2.00m and 2.50m bgl: Void.					
			3.00	ES			Orangish brown gravelly SAND. Gravel sized fragments of angular fine to coarse brick with ash. (LANDFILL - MADE GROUND)		(0.40)	63.91		
			3.50	ES			Yellowish brown sandy sub-angular to sub-rounded fine to coarse GRAVEL of flint and sandstone. (RIVER TERRACE DEPOSITS)		(0.80)	63.51		
							End of Borehole at 4.00m	4.00		62.71		

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Gas and groundwater monitoring well installed to 3.00m bgl with response zone between 1.00m and 3.00m. 3) Landfill deposits have a putrid odour throughout.

Method: Dynamic (Windowless) Sampler	Date(s): 30/08/2022	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447118.69, 213722.34	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 67.36m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
1.20 - 2.00	110mm	100%	0.20	ES	N=8 (1,1,1,2,2,3)	Stiff desiccated brown slightly sandy slightly gravelly CLAY. Gravel is rounded fine and medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	67.06			
			0.50	D		Stiff greyish brown slighty sandy CLAY with rare tree roots (5 cm diameter). (ALLUVIUM)	0.80	(0.50)	66.56			
			1.10	D		Orangish brown sandy angular to sub-rounded fine to coarse sandstone and limestone GRAVEL. (RIVER TERRACE DEPOSITS)	1.00	(0.20)	66.36			
			1.20	SPT		Stiff grey slighty sandy CLAY with abundant sand to fine gravel sized selenite crystals. (KELLAWAYS CLAY MEMBER)						
			1.70	D								
			2.00	SPT	50/135mm (1,3,4,46)	... From 1.90m to 2.00m bgl: Mottled yellowish brown.	2	(1.30)				
							2.30		65.06	End of Borehole at 2.30m		
3												
4												
5												
6												

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater not encountered. 3) Borehole terminated on SPT refusal at 2.30m bgl. 4) Gas and groundwater monitoring well installed to 2.00m, response zone between 1.00m and 2.00m bgl.

Method: Dynamic (Windowless) Sampler	Date(s): 30/08/2022	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447270.02, 213757.88	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 65.92m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
1.20 - 2.00	110mm	90%	0.20	ES	N=0 (0,0,0,0,0,0)		Stiff desiccated brown slightly sandy slightly gravelly CLAY. Gravel is rounded fine and medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	65.62		
			0.50	ES			Firm orangish brown slightly gravelly sandy CLAY. Gravel is sub-angular to rounded fine to coarse of sandstone and flint. (MADE GROUND)	0.90	64.72			
			0.60	D			... From 1.00m to 1.20m bgl: Becomes soft with occasional fragments of brick.					
			1.20	SPT			Very loose yellowish brown slightly clayey gravelly SAND. Gravel is angular to sub-rounded fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)					
			1.20 - 2.00	B								
			2.00	SPT	50/295mm (3,4,8,12,14,16)		... From 2.00m bgl: Very dense.	2.40	(1.20)	63.52		
							End of Borehole at 2.40m					

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater encountered at 2.00m, rising to 1.80m over 20 minutes. 3) Borehole terminated on SPT refusal at 2.40m bgl. 4) Gas and groundwater monitoring well installed to 2.00m, response zone between 1.00m and 2.00m bgl.



Project: Begbroke

Borehole No

WS203

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Method: Dynamic (Windowless) Sampler

Date(s): 23/08/2022

Logged By: MH

Drilled By: RP Drilling

Client: Oxford University Development

Co-ords: 447704.80, 214072.83

Checked By: CV

Rig: Dart Terrier

Hydrock Project No: C-19114-C

Ground Level: 68.32m OD

Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.10	ES			Brown slightly gravelly slightly silty SAND. Gravel is angular to rounded, fine to medium of flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	67.92		
			0.60	ES			Orange brown slightly gravelly slightly clayey SAND. Gravel is angular to rounded, fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	1.00	(0.60)	67.32		
			1.10 1.20	D SPT	N=35 (6,8,8,9,9,9)		Dense orange brown gravelly SAND. Gravel is fine to medium, angular to rounded flint and quartz. (RIVER TERRACE DEPOSITS)	1.80	(0.80)	66.52		
			1.90 2.00	D SPT	N=50 (12,12,12,13,14,11)		Very dense brown SAND & GRAVEL. Gravel is angular to rounded, fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	2.00	(0.20)	66.32		
End of Borehole at 2.00m												

General Remarks:

1) Hand dug pit to 1.20m bgl. 2) Refusal at 2.0m bgl on SPT. 3) No groundwater encountered. 4) Gas and groundwater monitoring pipe installed to 2.00m bgl. Response zone between 1.00m bgl to 2.00m bgl.



Project: Begbroke

Borehole No  
**WS204**  
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Method: Dynamic (Windowless) Sampler	Date(s): 23/08/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448083.21, 214100.07	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 64.19m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Brown slightly gravelly slightly silty SAND. Gravel is angular to rounded, fine to medium of flint, quartz and limestone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	63.79		
			0.60	ES			Orange brown slightly gravelly slightly silty slightly clayey SAND. Gravel is angular, fine to medium of flint, quartz and limestone. (RIVER TERRACE DEPOSITS)	0.80	(0.40)	63.39		
			1.00	SPT	50/125mm (20,5,29,21)		Very dense brown to light grey slightly silty angular to subangular, fine to coarse limestone GRAVEL. (CORNBRAsh LIMESTONE FORMATION)	1	(0.45)			
			1.00	D				1.25		62.94		
							End of Borehole at 1.25m					
2												
3												
4												
5												
6												

General Remarks:  
 1) Hand dug pit to 0.90m bgl. 2) Refusal at 1.25m bgl on SPT. 3) Groundwater encountered at 1.30m bgl at base of SPT. 4) Gas and groundwater monitoring pipe installed to 1.00m bgl. Response zone between 0.70m bgl to 1.00m bgl.





Method: Dynamic (Windowless) Sampler	Date(s): 22/08/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447718.35, 213852.98	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 64.23m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Dark brown slightly clayey slightly gravelly SILT. Gravel is angular to rounded, fine to medium of flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	63.93		
			0.60	ES			Firm light brown and orange brown CLAY. (ALLUVIUM)	0.80	(0.50)	63.43		
			1.00	D			Soft grey and brown CLAY. (ALLUVIUM)	1.20	(0.40)	63.03		
			1.20	SPT	N=13 (1,2,2,2,5,4)		Firm orange brown sandy slightly gravelly CLAY. Gravel is angular to rounded, fine to medium, of flint and quartz. (RIVER TERRACE DEPOSITS)	1.60	(0.40)	62.63		
			1.40	D								
			1.70 - 2.00	B			Medium dense light brown and orange brown slightly clayey SAND & GRAVEL. Gravel is angular to rounded fine to coarse, of flint and quartz. (RIVER TERRACE DEPOSITS)	2.40	(0.80)	61.83		
			2.00	SPT	N=14 (4,2,3,2,4,5)							
			2.60	D			Very dense light brown sandy clayey GRAVEL. Gravel is angular to rounded, fine to coarse of flint and quartz. (RIVER TERRACE DEPOSITS)	3.00	(0.60)	61.23		
			3.00	SPT	50/155mm (6,8,12,33,5)							
End of Borehole at 3.00m												

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Refusal at 3.00m bgl on SPT. 3) Groundwater encountered at 1.70m bgl. 3) Gas and groundwater monitoring pipe installed to 3.00m bgl. Response zone between 1.00m bgl and 3.00m bgl. 4)

Method: Dynamic (Windowless) Sampler	Date(s): 24/08/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447923.93, 213875.85	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 64.72m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Brown slightly silty slightly gravelly SAND with occasional roots >2mm. Gravel is angular to rounded, fine to medium, flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	64.42		
			0.50	ES			Brown and orangish brown slightly silty slightly gravelly SAND. Gravel is angular to rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)		(1.00)			
			1.20	SPT	N=9 (4,2,3,2,2,2)					63.42		
			1.40	D			Loose brown and orangish brown slightly gravelly clayey SAND. Gravel is angular to rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)		(0.50)			
			1.90	D						62.92		
			2.00	SPT	N=12 (3,3,2,3,3,4)		Soft grey and orangish brown CLAY with fine gravel sized pockets of sand, with occasional roots >2mm. (KELLAWAYS CLAY MEMBER)		(0.60)			
			2.50	D			Light brown and cream slightly clayey slightly sandy GRAVEL. Gravel is angular fine to coarse of limestone. (CORNBRAsh LIMESTONE FORMATION)			62.32		
			3.00	SPT	N=27 (8,5,5,9,6,7)							
			3.00 - 3.20	D								
			3.20 - 4.00	B								
			4.00	SPT	N=10 (8,4,3,3,2,2)							
			4.40	D								
			4.50	SPT	50/40mm (25,50)					60.22		
								End of Borehole at 4.50m				

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Refusal at 4.50m bgl on SPT. 3) Groundwater encountered at 3.00m bgl. 3) Gas and groundwater monitoring pipe installed to 4.20m bgl. Response zone between 1.00m bgl and 4.20m bgl.



Method: Dynamic (Windowless) Sampler	Date(s): 25/08/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448287.18, 214030.07	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 62.33m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
1.20 - 2.00		100%	0.10	ES	N=34 (7,6,8,9,8,9)	▼	Stiff dark brown slightly sandy slightly gravelly CLAY with occasional roots <2mm. Gravel is angular to rounded fine to medium of flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	61.93		
			0.50	ES			Firm dark brown slightly sandy CLAY with occasional roots <2mm. (ALLUVIUM)	0.60	(0.20)	61.73		
2.00 - 3.00		25%	0.70	D	N=14 (5,4,4,3,2,5)		Dense orangish brown slightly clayey SAND & GRAVEL. Gravel is angular to rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	1.00	(1.00)			
			1.00	SPT				1.60		60.73		
3.00 - 4.00		70%	1.70	D	N=35 (6,8,7,9,9,10)		Medium dense to dense brown SAND & GRAVEL. Gravel is angular to rounded, fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	2.00				
			2.00	SPT								
			2.70	D					(2.40)			
			3.00	SPT								
			3.70	D	N=30 (4,7,7,6,8,9)							
			4.00	SPT				4.00		58.33		
<p>End of Borehole at 4.00m</p>												

General Remarks:  
 1) Hand dug pit to 1.00m bgl due to groundwater. 2) Refusal at 4.00m bgl on SPT. 3) Groundwater encountered at 0.90m bgl. 4) Gas and groundwater monitoring pipe installed to 2.20m bgl. Response zone between 0.80m bgl and 2.20m bgl.

Method: Dynamic (Windowless) Sampler	Date(s): 22/08/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447958.88, 213827.24	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 64.34m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.30	ES			Dark brown slightly gravelly slightly silty slightly clayey SAND. Gravel is angular to rounded, fine to medium of flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	63.94		
			0.70	ES			Brown and orange brown slightly gravelly slightly clayey SAND. Gravel is angular to rounded, fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	0.90	(0.50)	63.44		
			1.00	D			Light brown and orange brown slightly gravelly slightly clayey SAND. (RIVER TERRACE DEPOSITS)	1.20	(0.30)	63.14		
			1.20	SPT	N=6 (4,3,2,1,1,2)		Loose brown SAND & GRAVEL. Gravel is angular to rounded, fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	1.50	(0.30)	62.84		
			1.30	D								
			1.70	D			Soft brown slightly gravelly sandy CLAY. Gravel is angular, fine to medium of flint. (RIVER TERRACE DEPOSITS)	2.00	(0.50)	62.34		
			2.00	SPT	N=15 (3,2,4,4,4,3)		Medium dense light creamish brown slightly sandy slightly clayey GRAVEL. Gravel is angular to subangular, fine to coarse, limestone. (RIVER TERRACE DEPOSITS)	3.00	(2.00)			
			2.00 - 3.00	B								
			3.00	SPT	N=18 (10,8,5,3,1,9)							
			3.00 - 4.00	B								
			4.00	SPT	N=21 (2,3,3,3,7,8)					60.34		
							End of Borehole at 4.00m	4.00				

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Groundwater encountered at 2.00m bgl. 3) Refusal at 4.00m bgl during drilling. 4) Gas and groundwater monitoring pipe installed to 3.00m bgl. Response zone between 1.00m bgl and 3.00m bgl.



Method: Dynamic (Windowless) Sampler	Date(s): 25/04/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448274.07, 213879.39	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 62.37m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
		100%	0.10	ES		▼	Stiff dark brown slightly sandy slightly gravelly CLAY with occasional roots <2mm. Gravel is angular to rounded fine to medium of flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	62.07		
			0.40	ES			Stiff brown, grey and orangish brown CLAY with occasional roots <2mm. (ALLUVIUM)	0.60	(0.30)	61.77		
			0.80	D			Dark grey slightly silty slightly gravelly clayey SAND. Gravel is angular fine to coarse of sandstone. (ALLUVIUM)	1.00	(0.40)	61.37		
1.20 - 2.00		30%	1.20	SPT	N=9 (2,2,3,3,2,1)	▼	Loose orangish brown slightly clayey gravelly SAND. Gravel is angular to rounded fine to medium of flint and quartz. (ALLUVIUM)	1.60	(0.60)	60.77		
	1.20		D									
	1.70		D									
2.00 - 3.00		30%	2.00	SPT	N=17 (6,6,4,6,4,3)	▼	Soft brown and orangish brown slightly gravelly sandy CLAY. Gravel is angular to rounded fine to medium of flint and quartz. (ALLUVIUM)	2.60	(1.00)	59.77		
	2.70		D									
	3.00		SPT									
					50/265mm (5,5,4,10,26,10)		Very dense light brown slightly clayey slightly sandy GRAVEL. Gravel is angular fine to coarse of limestone. (RIVER TERRACE DEPOSITS)		(0.40)	59.37		
----- End of Borehole at 3.00m -----												

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Groundwater encountered at 1.30m bgl. 3) Refusal at 3.00m bgl during drilling. 4) Gas and groundwater monitoring pipe installed to 2.50m bgl. Response zone between 1.50m bgl and 2.50m bgl.

Method: Dynamic (Windowless) Sampler

Date(s): 31/08/2022

Logged By: AA

Drilled By: RP Drilling

Client: Oxford University Development

Co-ords: 447209.60, 213419.40

Checked By: CV

Rig: Dart Terrier

Hydrock Project No: C-19114-C

Ground Level: 68.29m OD

Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.10	ES			Stiff (dry) slightly sandy slightly gravelly CLAY with occasional rootlets. Gravel is subangular to subrounded, fine to coarse, flint and quartz.	0.20	(0.20)	68.09		
			0.30	D			(AGRICULTURALLY DISTURBED TOPSOIL) Stiff (dry) slightly sandy slightly gravelly CLAY with occasional rootlets. Gravel is angular to subrounded, fine to coarse, flint and limestone.	0.50	(0.30)	67.79		
			1.00	SPT	N=20 (7,6,5,6,4,5)		(HEAD DEPOSITS) Stiff yellow brown slightly sandy slightly gravelly CLAY. Gravel is subangular to rounded, fine to coarse of flint and quartz.	1.00	(0.50)	67.29		
			1.80	D			Stiff orange brown sandy slightly gravelly CLAY. Gravel is angular to subrounded fine to medium of flint and quartz.	1.50	(0.50)	66.79		
			2.00	SPT	N=14 (4,4,4,4,3,3)		(HEAD DEPOSITS) Medium dense brown clayey slightly gravelly SAND. Gravel is angular to subrounded fine to medium of flint and quartz.	2.00	(1.30)			
			2.90	D			(RIVER TERRACE DEPOSITS) Very loose yellow brown, grey and orange clayey SAND with occasional angular, fine to medium flint gravel.	2.80		65.49		
			3.00	SPT	N=3 (1,0,1,0,1,1)		... At 3.00m bgl: Gravelly.	3.00	(0.70)			
			4.00	SPT	50/105mm (13,12,32,18)		Soft grey and orange sandy CLAY with rare angular fine to medium flint gravel.	3.50	(0.75)	64.79		
							(RIVER TERRACE DEPOSITS)	4.25		64.04		
End of Borehole at 4.25m												

General Remarks:

1) Hand dug pit to 1.20m bgl. 2) Refusal at 4.25m bgl on SPT. 3) Groundwater encountered at 2.80m bgl. 3) Gas and groundwater monitoring pipe installed to 3.50m bgl. Response zone between 2.80m bgl and 3.50m bgl.



Project: Begbroke

Borehole No

WS212

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Method: Dynamic (Windowless) Sampler	Date(s): 30/08/2022	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447453.10, 213622.69	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 67.98m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20 0.30 - 1.20	ES B			Stiff desiccated brown slightly sandy slightly gravelly CLAY. Gravel is rounded fine and medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	67.68		
			1.20	SPT	50/275mm (6,9,12,14,14,10)		Very dense brown sandy sub-angular to rounded fine to coarse flint and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	1.20	(0.90)	66.78		
							End of Borehole at 1.20m					

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater not encountered. 3) Borehole terminated on SPT refusal at 1.20m bgl. 4) Borehole backfilled with arisings on completion.

Method: Dynamic (Windowless) Sampler	Date(s): 22/08/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447703.48, 213607.39	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 68.30m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.10	ES			Brown slightly gravelly slightly silty SAND. Gravel is angular to rounded, fine to medium of flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	68.00		
			0.50	ES			Brown slightly sandy slightly gravelly SILT. Gravel is angular to rounded fine to coarse, of flint and quartz. (RIVER TERRACE DEPOSITS)	0.70	(0.40)	67.60		
			0.80	D			Dense brown gravelly SAND. Gravel is angular to rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	1.00	(0.70)			
			1.20	SPT	N=37 (8,9,9,10,9,9)			1.40		66.90		
			1.60	D			Dense dark brown and brown slightly gravelly SAND. Gravel is angular to rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	2.00	(0.60)			
			2.00	SPT	N=43 (9,11,10,11,11,11)			2.20		66.30		
			2.20	D			Dense light brown slightly gravelly SAND. Gravel is subrounded, fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	3.00	(1.00)			
			3.00	SPT	N=48 (18,7,14,12,11,11)			3.20		65.30		
			3.20	D			Dense becoming very Dense brown SAND & GRAVEL. Gravel is angular to rounded, fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	3.70	(0.70)	64.60		
			3.70	SPT	50/145mm (25,28,22)			3.70				
			3.70	D			End of Borehole at 3.70m					

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Refusal at 3.70m bgl on SPT. 3) No groundwater encountered. 3) Gas and groundwater monitoring pipe installed to 3.70m bgl. Response zone between 1.00m bgl and 3.70m bgl.

Method: Dynamic (Windowless) Sampler	Date(s): 23/08/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447992.19, 213674.37	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 68.15m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.10	ES			Brown slightly gravelly slightly silty SAND. Gravel is angular to rounded, fine to coarse of flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	67.75		
			0.50	ES			Brown to orange brown slightly gravelly slightly clayey SAND. Gravel is angular to rounded, fine to medium, of flint and quartz. (RIVER TERRACE DEPOSITS)	0.80	(0.40)	67.35		
			0.90	D			Very dense brown gravelly slightly clayey SAND. Gravel is fine to medium, angular to rounded, flint, quartz and limestone. (RIVER TERRACE DEPOSITS)	1.20	(0.40)	66.95		
			1.20	SPT	50/225mm (13,12,15,17,18)	▼	End of Borehole at 1.20m					

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Refusal at 1.20m bgl on SPT. 3) Groundwater encountered at 1.30m bgl at base of SPT. 4) Gas and groundwater monitoring pipe installed to 1.20m bgl. Response zone between 0.90m bgl to 1.20m bgl.



Method: Dynamic (Windowless) Sampler	Date(s): 25/08/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448414.23, 213764.25	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 62.11m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
1.20 - 2.00		100%	0.20	ES	N=16 (3,3,4,3,4,5)		Stiff dark brown slightly gravelly sandy CLAY. Gravel is angular to rounded fine to coarse of flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	61.71		
			0.50	ES			Firm brown, grey and orangish brown silty CLAY. (ALLUVIUM)	0.80	(0.40)	61.31		
0.90	D		Soft orangish brown and light grey slightly sandy silty CLAY. (ALLUVIUM)	1.00		(0.20)	61.11					
1.10	D		Medium dense brown and orangish brown slightly clayey SAND & GRAVEL. Gravel is angular to sub angular of flint, quartz and limestone. (RIVER TERRACE DEPOSITS)	1.50		(0.50)	60.61					
1.20	SPT											
1.60	D											
2.00 - 3.00	60%		2.00	SPT		N=12 (3,2,1,2,4,5)	▼	Medium dense light brown slightly gravelly SAND. Gravel is angular to rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	2.50	(1.00)	59.61	
2.60			D		Very dense brown SAND & GRAVEL. Gravel is angular to rounded, fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)		3.00	(0.50)	59.11			
3.00			SPT		50/230mm (1,2,6,10,25,9)							
								End of Borehole at 3.00m				

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Refusal at 3.00m bgl on SPT. 3) Groundwater encountered at 1.20m bgl. 4) Gas and groundwater monitoring pipe installed to 2.70m bgl. Response zone between 1.00m bgl to 2.70m bgl.



Method: Dynamic (Windowless) Sampler	Date(s): 23/08/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447607.76, 213415.35	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 68.52m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.10	ES			Brown slightly gravelly slightly silty SAND with occasional roots <3mm. Gravel is angular to rounded fine to medium of flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	68.22		
			0.70	ES			Orange brown slightly silty slightly gravelly SAND. Gravel is angular to rounded, fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	0.80	(0.50)	67.72		
			1.00	D			Dense orange brown slightly gravelly clayey SAND. Gravel is angular to rounded, fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	1				
			1.20	SPT	N=30 (7,5,4,7,9,10)			1.50	(0.70)	67.02		
			1.70	D			Dense light brown SAND & GRAVEL. Gravel is angular to subrounded, fine to coarse of liemstone, flint and quartz. (RIVER TERRACE DEPOSITS)					
			2.00	SPT	N=34 (8,6,5,7,10,12)			2	(1.10)			
			2.70	D			Very dense brown and light brown slightly gravelly SAND. Gravel is fine to medium, agular to rounded flint and limestone. (RIVER TERRACE DEPOSITS)	2.60	(0.40)	65.92		
			3.00	SPT	50/135mm (20,5,22,28)			3.00		65.52		
----- End of Borehole at 3.00m -----												

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Refusal at 3.00m bgl on SPT. 3) No groundwater encountered. 3) Collapse of hole from 3.00m bgl to 2.00m bgl. 5) Gas and groundwater monitoring pipe installed to 2.00m bgl. Response zone between 1.20m bgl and 2.00m bgl.

Method: Dynamic (Windowless) Sampler	Date(s): 24/08/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448043.72, 213589.50	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 68.42m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.10	ES			Brown slightly silty slightly gravelly SAND. Gravel is angular to rounded, fine to medium, flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	68.12		
			0.60	ES			Brown and orangish brown slightly silty slightly gravelly SAND. Gravel is angular to rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	0.90	(0.60)	67.52		
			1.00	D			Dense rown slightly clayey slightly gravelly SAND. Gravel is fine to medium of flint, limestone and quartz. (RIVER TERRACE DEPOSITS)	1.50	(0.60)	66.92		
			1.20	SPT	N=43 (8,10,10,10,11,12)							
			1.60	D			Brown sandy GRAVEL. Gravel is angular fine to coarse of limestone and flint. (RIVER TERRACE DEPOSITS)	1.90	(0.40)	66.52		
			2.00	SPT	N=50 (13,11,13,14,19,4)		Very dense light brown slightly gravelly SAND. Gravel is angular to subrounded, fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	2.00	(0.10)	66.42		
			2.00	D			End of Borehole at 2.00m					

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Refusal at 2.00m bgl on SPT. 3) No groundwater encountered 4) Gas and groundwater monitoring pipe installed to 1.80m bgl. Response zone between 1.00m bgl and 1.80m bgl.

Method: Dynamic (Windowless) Sampler	Date(s): 24/08/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448376.88, 213618.45	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 65.68m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Brown slightly silty slightly gravelly SAND. Gravel is angular to rounded, fine to medium, flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	65.28		
			0.70	ES			Brown and orangish brown slightly silty slightly gravelly SAND. Gravel is angular to rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	1.00	(0.60)	64.68		
			1.10 1.20	D SPT	N=23 (6,6,6,6,6,5)		Medium dense brown clayey SAND. (KELLAWAYS SAND MEMBER)	1.50	(0.50)	64.18		
			1.60	D			Stiff light brown, greyish brown and orangish brown sandy CLAY with occasional roots <2mm. (KELLAWAYS SAND MEMBER)	1.90	(0.40)	63.78		
			2.00 2.00	SPT D	N=8 (1,2,1,2,2,3)		Firm grey and orangish brown CLAY with fine gravel sized pockets of fine to medium sand. (KELLAWAYS CLAY MEMBER)	2.50	(0.60)	63.18		
			2.60	D			Stiff grey CLAY. (KELLAWAYS CLAY MEMBER)	3.00				
			3.00 3.20 - 4.00	SPT B	N=10 (2,2,1,2,3,4)				(2.50)			
			4.00 4.20 - 5.00	SPT B	N=11 (2,1,3,2,3,3)							
			5.00	SPT	50/75mm (2,3,50)		End of Borehole at 5.00m	5.00		60.68		

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Refusal at 5.00m bgl on SPT. 3) No groundwater encountered 4) Gas and groundwater monitoring pipe installed to 5.00m bgl. Response zone between 1.00m bgl and 5.00m bgl.



Method: Dynamic (Windowless) Sampler	Date(s): 24/08/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448441.55, 213653.64	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 62.56m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.10	ES			Brown slightly silty slightly gravelly SAND. Gravel is angular to rounded, fine to medium, flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	62.26		
			0.60	ES			Brown and orangish brown slightly clayey SAND. Gravel is angular to rounded fine to medium of flint. (ALLUVIUM)		(0.90)			
			1.20	SPT	N=5 (2,2,1,2,1,1)		Firm brown and orangish brown sandy CLAY. (ALLUVIUM)	1.20		61.36		
			1.30	D					(0.40)			
			1.70	D			Soft orangish brown slightly sandy silty CLAY. (ALLUVIUM)		(0.40)			
			2.00	SPT	N=15 (2,3,2,4,5,4)		Medium dense to very dense brown and dark brown SAND & GRAVEL. Gravel is angular to rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	2.00		60.56		
			2.00 - 2.60	B					(1.00)			
			3.00	SPT	50/105mm (8,15,33,17)					59.56		
End of Borehole at 3.00m												

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Refusal at 3.00m bgl on SPT. 3) Groundwater encountered at 2.00m bgl. 4) Gas and groundwater monitoring pipe installed to 3.00m bgl. Response zone between 1.00m bgl and 3.00m bgl.



Method: Dynamic (Windowless) Sampler	Date(s): 25/08/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447964.87, 213420.06	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 68.14m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill	
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results								
1.20 - 2.00		100%	0.20	ES	N=28 (4,4,4,7,9,8)		Dark brown slightly silty slightly gravelly SAND with occasional roots <2mm. Gravel is angular to rounded fine to medium of flint and quartz (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	67.74			
			0.60	ES			Brown and orangish brown slightly clayey slightly silty slightly gravelly SAND. Gravel is angular to rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	0.80	(0.40)	67.34			
			1.00	D			Brown slightly gravelly clayey SAND. Gravel is angular to rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	1.20	(0.40)	66.94			
			1.20	SPT									
2.00 - 2.60		100%	2.00	SPT	N=43 (11,9,9,10,10,14)		Medium dense becoming very dense light brown and light grey SAND & GRAVEL. Gravel is angular to rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	2.00	(1.40)				
			2.00 - 2.60	B									
			2.60	SPT		50/115mm (25,32,18)							
End of Borehole at 2.60m													
3													
4													
5													
6													

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Refusal at 2.60m bgl on SPT. 3) No groundwater encountered 4) Gas and groundwater monitoring pipe installed to 2.60m bgl. Response zone between 0.80m bgl and 2.60m bgl.



Project: Begbroke

Borehole No

WS223

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Method: Dynamic (Windowless) Sampler

Date(s): 24/08/2022

Logged By: MH

Drilled By: RP Drilling

Client: Oxford University Development

Co-ords: 448293.75, 213542.69

Checked By: CV

Rig: Dart Terrier

Hydrock Project No: C-19114-C

Ground Level: 67.12m OD

Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.10	ES			Brown slightly silty slightly gravelly SAND. Gravel is angular to rounded, fine to medium, flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	66.72		
			0.50	ES			Brown and orangish brown slightly silty slightly gravelly SAND. Gravel is angular to rounded fine to medium of flint, limestone and quartz. (RIVER TERRACE DEPOSITS)	0.90	(0.50)	66.22		
			1.00	D			Dense light brown gravelly SAND. Gravel is angular to sub angular of limestone and flint. (RIVER TERRACE DEPOSITS)	1.40	(0.50)	65.72		
			1.20	SPT	N=43 (9,9,9,12,11,11)							
			1.50	D			Brown and orangish brown slightly clayey SAND & GRAVEL. Gravel is angular to sub angular of limestone. (RIVER TERRACE DEPOSITS)	1.80	(0.40)	65.32		
			2.00	SPT	50/210mm (18,7,20,17,13)		Very dense orangish brown SAND & GRAVEL. Gravel is angular to rounded of flint, limestone and quartz. (RIVER TERRACE DEPOSITS)	2.00	(0.20)	65.12		
			2.00	D			End of Borehole at 2.00m					

General Remarks:

1) Hand dug pit to 1.20m bgl. 2) Refusal at 2.00m bgl on SPT. 3) No groundwater encountered 4) Gas and groundwater monitoring pipe installed to 2.00m bgl. Response zone between 1.00m bgl and 2.00m bgl.

Method: Dynamic (Windowless) Sampler	Date(s): 08/09/2022	Logged By: NT	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448543.41, 213592.23	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 61.94m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.10	ES			Brown slightly clayey slightly gravelly SAND. Gravel is subangular to angular, sine to coarse of flint and limestone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.15	(0.15)	61.79		
			0.50	SPT	N=9 (7,4,3,2,2,2)		Cream slightly sandy gravelly limestone COBBLES (MADE GROUND)		(0.65)			
			1.00	SPT	50/215mm (1,2,8,18,24)		Firm orange and grey sandy slightly gravelly CLAY. Gravel is subangular to subrounded, fine to coarse of flint. (ALLUVIUM)	0.80		61.14		
			1.00	D			Soft grey and orange sandy CLAY with black remnant rootlets and with rare subangular to angular gravel. (ALLUVIUM)	1.10	(0.30)	60.84		
							Orange sandy subangular to rounded, fine to coarse, flint GRAVEL. (RIVER TERRACE DEPOSITS)	1.30	(0.20)	60.64		
							End of Borehole at 1.37m	1.37	(0.07)	60.57		

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater encountered at 1.30m bgl. 3) Borehole terminated on SPT refusal at 1.365m bgl. 4) Gas and groundwater monitoring well installed to 1.30m, response zone between 1.00m and 1.30m bgl.





Project: Begbroke

Borehole No

WS225

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Method: Dynamic (Windowless) Sampler

Date(s): 31/08/2022

Logged By: MA

Drilled By: RP Drilling

Client: Oxford University Development

Co-ords: 447426.02, 213163.40

Checked By: CV

Rig: Dart Terrier

Hydrock Project No: C-19114-C

Ground Level: 67.49m OD

Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
1.20 - 2.00	110mm	100%	0.20	ES	N=16 (1,1,3,4,4,5)		Stiff desiccated brown slightly sandy slightly gravelly CLAY. Gravel is rounded fine and medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	67.19		
			0.60	ES			Light brown slightly sandy slightly gravelly CLAY. Gravel is sub-angular to rounded fine to coarse of flint and sandstone. (RIVER TERRACE DEPOSITS)					
			0.70	D								
			1.20 - 2.00	SPT B								
2.00	SPT	50/135mm (20,5,25,25)	2.00		65.49							
							End of Borehole at 2.00m					

General Remarks:

1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater not encountered. 3) Borehole terminated on SPT refusal at 2.00m bgl. 4) Gas and groundwater monitoring well installed to 2.00m, response zone between 1.00m and 2.00m bgl.





Method: Dynamic (Windowless) Sampler	Date(s): 23/08/2022	Logged By: MH	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447923.72, 213321.95	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 68.21m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.30	ES			Brown slightly gravelly slightly silty SAND. Gravel is angular to rounded, fine to medium of flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.40	(0.40)	67.81		
			0.70	ES			Soft brown slightly sandy slightly gravelly CLAY. Gravel is angular to rounded, fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	1.00	(0.60)	67.21		
			1.10 1.20	D SPT	N=6 (3,2,2,1,1,2)		Loose brown slightly clayey SAND & GRAVEL. Gravel is angular to rounded, fine to coarse of flint, limestone and quartz. (RIVER TERRACE DEPOSITS)	1.40	(0.40)	66.81		
			1.60	D			Dense to very dense brown slightly clayey SAND & GRAVEL. Gravel is angular to rounded, fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	2.00	(1.30)			
			2.00 2.00	SPT D	N=48 (10,10,11,11,12,14)							
			2.60 2.70	D SPT	50/225mm (20,5,17,16,17)		... From 2.50m bgl: Becoming dark brown.	2.70		65.51		
							End of Borehole at 2.70m					
<p>3</p> <p>4</p> <p>5</p> <p>6</p>												

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Refusal at 2.70m bgl on SPT. 3) No groundwater encountered. 4) Gas and groundwater monitoring pipe installed to 2.70m bgl. Response zone between 1.00m bgl and 2.70m bgl.



Project: Begbroke

Borehole No

WS228

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Method: Dynamic (Windowless) Sampler	Date(s): 05/09/2022	Logged By: CR	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447936.14, 213111.76	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 67.66m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
0.70 - 1.00			0.30	ES			Brown clayey slightly gravelly SAND with occasional rootlets. Gravel is angular to rounded fine to medium of flint and quartz. (AGRICULTURALLY DISTURBED TOPSOIL)	0.50	(0.50)	67.16		
			0.70	SPT	50/155mm (11,13,19,26,5)		Very dense brown clayey slightly gravelly SAND. Gravel is angular to rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)  ... From 0.8m bgl: Becoming increasingly gravelly.	1.00	(0.50)	66.66		
----- End of Borehole at 1.00m												

General Remarks:  
 1) Hand dug pit to 0.70m bgl. 2) Refusal at 1.00m bgl on SPT. 3) No groundwater encountered. 4) Gas and groundwater monitoring pipe installed to 1.00m bgl. Response zone between 0.80m bgl and 1.00m bgl.

Method: Dynamic (Windowless) Sampler	Date(s): 02/09/2022	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448017.80, 213190.39	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 68.16m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
1.20 - 2.00	110mm	100%	0.10	ES	N=21 (4,3,4,4,6,7)		Stiff desiccated brown slightly sandy slightly gravelly CLAY. Gravel is rounded fine and medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL) Brown slightly clayey slightly gravelly SAND. Gavel is angular to sub-rounded fine to coarse of flint and sandstone. (RIVER TERRACE DEPOSITS)	0.15	(0.15)	68.01		
			0.60	ES				(0.85)				
			0.90	D								
			1.20	SPT				1.00	67.16			
			1.30 1.40 - 2.00	D B				(1.00)				
2.00	SPT	50/150mm (9,12,20,30)	2.00	66.16								
End of Borehole at 2.00m												
3												
4												
5												
6												

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater not encountered. 3) Borehole terminated on SPT refusal at 2.00m bgl. 4) Gas and groundwater monitoring well installed to 2.00m, response zone between 1.00m and 2.00m bgl.





Method: Dynamic (Windowless) Sampler	Date(s): 31/08/2022	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448266.84, 213204.22	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 64.77m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Stiff desiccated brown slightly sandy slightly gravelly CLAY. Gravel is rounded fine and medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	64.47		
			0.70	D			Stiff orangish brown slightly gravelly sandy CLAY. Gravel is sub-angular to sub-rounded fine to coarse of flint sandstone and limestone. (HEAD DEPOSITS)		(1.40)			
1.20 - 2.00	110mm	100%	1.20	SPT	N=25 (4,5,7,6,6,6)							
			1.80	D			Firm yellowish brown very sandy CLAY. (RIVER TERRACE DEPOSITS)	1.70		63.07		
2.00 - 3.00	110mm	100%	2.00	SPT	N=10 (2,2,3,2,2,3)							
			2.50	D								
3.00 - 4.00	110mm	100%	3.00	SPT	N=7 (1,1,2,2,1,2)							
			3.50	D			... from 3.50m bgl: Becomes soft.		(3.10)			
4.00 - 5.00	110mm	100%	4.00	SPT	N=7 (1,2,1,2,2,2)							
			4.90	D								
			5.00	SPT	N=3 (0,1,1,0,1,1)		Very loose dark orangish brown sandy angular to sub-rounded fine to coarse sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	4.80		59.97		
									(0.65)			
							End of Borehole at 5.45m	5.45		59.32		

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater not encountered. 3) Borehole completed at 5.45m bgl. 4) Gas and groundwater monitoring well installed to 5.00m, response zone between 1.00m and 5.00m bgl.

Method: Dynamic (Windowless) Sampler	Date(s): 26/08/2022	Logged By: NT	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448473.49, 213371.17	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 61.66m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Light brown slightly gravelly slightly clayey SAND with occasional rootlets. Gravel is fine to coarse, subangular to subrounded flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.35	(0.35)	61.31		
			0.50	ES			Brown slightly gravelly SAND. Gravel is fine to coarse, subangular to subrounded flint and quartz. (ALLUVIUM)	0.50	(0.15)	61.16		
1.20 - 2.00	110mm	100%	0.80	D	N=21 (3,3,3,5,6,7)		Firm orange brown slightly gravelly sandy CLAY. Gravel is subangular to subrounded, fine to coarse of flint and quartz. (ALLUVIUM)	0.90	(0.40)	60.76		
			1.20	SPT			Medium dense light brown slightly gravelly slightly clayey SAND. Gravel is subangular to angular fine to coarse of flint and quartz. (RIVER TERRACE DEPOSITS)	1				
2.00 - 3.00	110mm	100%	1.40	D	N=21 (6,5,5,6,5,5)							
			2.00	SPT			Brown gravelly slightly clayey SAND. Gravel is subangular to subrounded, fine to coarse of flint and quartz. (RIVER TERRACE DEPOSITS)	1.70	(0.30)	59.96		
			2.30	SPT			Medium dense brown slightly gravelly SAND. Gravel is fine to coarse, subangular to subrounded flint and quartz. (RIVER TERRACE DEPOSITS)	2	(0.30)	59.66		
3.00 - 4.00	110mm	100%	2.50	D	N=20 (7,8,6,5,5,4)		Medium dense brown sandy subangular to rounded, fine to coarse of flint and limestone GRAVEL. (RIVER TERRACE DEPOSITS)	2.30	(0.30)	59.36		
			3.00	SPT			... At 2.90m bgl: Coarse limestone and flint gravel.	3	(1.20)			
4.00 - 5.00	110mm	100%	3.70	D	N=10 (3,2,2,2,2,4)		Stiff closely fissured bluish grey CLAY with rare shell fragments. (KELLAWAYS CLAY MEMBER)	3.50		58.16		
			4.00	SPT				4	(1.30)			
			4.60	SPT			50/10mm (25.50)					
			4.80	D			End of Borehole at 4.80m	4.80		56.86		

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater encountered at 1.70m bgl. 3) Borehole completed at 4.80m bgl. 4) Gas and groundwater monitoring well installed to 3.00m, response zone between 1.00m and 3.00m bgl.





Project: Begbroke

Borehole No  
**WS234**  
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Method: Dynamic (Windowless) Sampler	Date(s): 08/09/2022	Logged By: NT	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448807.02, 213381.35	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 61.32m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.10	ES			Firm dry light brown sandy slightly gravelly CLAY. Gravel is fine to coarse, subangular to subrounded flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	61.02		
			0.50	ES			Firm grey CLAY with rare fine to medium flint gravel. (ALLUVIUM)		(0.50)			
			0.70	D				0.80		60.52		
			1.20	SPT	N=28 (2,3,5,8,7,8)		Medium dense orange and grey SAND. (RIVER TERRACE DEPOSITS)	1	(0.60)			
			1.20	D			Orange sandy subangular to rounded, fine to coarse, flint and limestone GRAVEL. (RIVER TERRACE DEPOSITS)	1.40	(0.40)	59.92		
			2.00	SPT	50/255mm (2,3,6,11,23,10)		Very dense light grey medium SAND. (KELLAWAYS SAND MEMBER)	2	(0.61)	58.91		
----- End of Borehole at 2.41m -----								2.41		58.91		
								3				
								4				
								5				
								6				

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater not encountered. 3) Borehole terminated on SPT refusal at 2.00m bgl. 4) Gas and groundwater monitoring well installed to 2.00m, response zone between 1.00m and 2.00m bgl.



Method: Dynamic (Windowless) Sampler	Date(s): 05/09/2022	Logged By: CR	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447770.82, 212798.25	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 64.31m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.30	ES			Brown slightly sandy gravelly CLAY with occasional rootlets. Gravel is sub angular to sub rounded fine to medium of quartz and flint with rare cobbles of chalk. (MADE GROUND)	0.50	(0.50)	63.81		
1.20 - 2.00	110mm	100%	1.20	SPT	N=16 (4,4,5,4,4,3)	▼	Medium dense orangish brown slightly clayey slightly gravelly SAND. Gravel is sub angular to sub rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)  ... From 1.10m bgl: Becoming silty.	1.60	(1.10)	62.71		
2.00 - 3.00	110mm	100%	2.00	SPT	N=6 (1,2,1,1,2,2)	▼	Loose orangish brown SAND & GRAVEL. Gravel is angular to sub rounded fine to medium of flint. (RIVER TERRACE DEPOSITS)	2.60	(1.00)	61.71		
3.00 - 4.00			3.00	SPT	N=7 (3,1,2,2,1,2)		Soft blueish grey slightly sandy CLAY. (OXFORD CLAY FORMATION)	3.30	(0.70)	61.01		
4.00 - 5.00			4.00	SPT	N=16 (2,2,3,4,4,5)		Firm grey sandy CLAY with fine to medium sized pockets of sand. (KELLAWAYS SAND MEMBER)	5.00	(1.70)	59.31		
			5.00	SPT	N=17 (3,2,4,4,4,5)		End of Borehole at 5.00m					

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Hole completed at 5.00m bgl 3) Groundwater encountered at 1.60m bgl. 4) Gas and groundwater monitoring pipe installed to 5.00m bgl. Response zone between 1.00m bgl and 5.00m bgl.



Project: Begbroke

Borehole No

WS236

Page No. 1 of 1

Method: Dynamic (Windowless) Sampler	Date(s): 05/09/2022	Logged By: CR	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447911.87, 212890.39	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 66.24m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
1.20 - 2.00			0.20	ES			Brown slightly sandy gravelly CLAY with occasional rootlets. Gravel is sub angular to sub rounded fine to medium of quartz and flint with rare cobbles of chalk and gravel sized fragments of brick. (MADE GROUND)	0.40	(0.40)	66.84		
			1.20	SPT	N=41 (9,9,10,10,10,11)		Dense light brown slightly gravelly SAND. Gravel is angular to sub angular fine to medium of flint quartz and sandstone. (RIVER TERRACE DEPOSITS)	1.70	(1.30)	64.54		
			2.00	SPT	50/60mm (21,4,50)		Very dense brown SAND & GRAVEL. Gravel is angular to sub rounded fine to medium of flint and quartz. (RIVER TERRACE DEPOSITS)	2.00	(0.30)	64.24		
							----- End of Borehole at 2.00m -----					

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Refusal at 2.00m bgl on SPT. 3) No groundwater encountered. 4) Gas and groundwater monitoring pipe installed to 2.00m bgl. Response zone between 1.00m bgl and 2.00m bgl.

Method: Dynamic (Windowless) Sampler	Date(s): 02/09/2022	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448061.09, 213086.14	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 67.40m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Stiff desiccated brown slightly sandy slightly gravelly CLAY. Gravel is rounded fine and medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.15	(0.15)	67.25		
			0.50 0.60 - 1.20	D B			Brown slightly clayey slightly gravelly SAND. Gavel is angular to sub-rounded fine to coarse of flint and sandstone. (RIVER TERRACE DEPOSITS)	0.60	(0.45)	66.80		
			1.20	SPT	N=62 (6,9,14,16,16,16)		Very dense yellowish brown sandy sub-angular to rounded fine to coarse flint sandstone and limestone GRAVEL. (RIVER TERRACE DEPOSITS)	1	(0.60)	66.20		
							End of Borehole at 1.20m	1.20				
<p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p>												

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater not encountered. 3) Borehole terminated on SPT refusal at 1.20m bgl. 4) Gas and groundwater monitoring well installed to 1.00m, response zone between 0.50m and 1.00m bgl.

Method: Dynamic (Windowless) Sampler	Date(s): 31/08/2022	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448303.20, 213087.29	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 65.12m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
1.20 - 2.00	110mm	100%	0.20	ES	N=16 (3,3,4,4,4,4)		Stiff desiccated brown slightly sandy slightly gravelly CLAY. Gravel is rounded fine and medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	64.82		
			0.60	ES			Orangish brown slightly clayey slightly gravelly SAND. Gravel is sub-angular to sub-rounded fine to coarse of flint and sandstone. (RIVER TERRACE DEPOSITS)		(0.70)			
			0.90	D								
2.00 - 3.00	110mm	100%	1.20	SPT	N=9 (5,3,2,2,2,3)		Medium dense brown sandy angular to sub-rounded fine to coarse sandstone and flint GRAVEL with occasional lenses of firm brown clay. (RIVER TERRACE DEPOSITS)	1.00		64.12		
			1.80	D								
			2.00	SPT								
3.00 - 4.00	110mm	90%	2.50	D	N=21 (2,2,3,4,6,8)		Firm to stiff grey CLAY with rare shell fragments. (OXFORD CLAY FORMATION)	2.10		63.02		
			3.00	SPT								
			3.50	D								
4.00 - 5.00	110mm	100%	4.00	SPT	N=12 (4,4,3,2,3,4)		... From 4.00m bgl: Very thinly laminated.	4.00				
			4.50	D								
			5.00	SPT								
			5.45				End of Borehole at 5.45m	5.45		59.67		

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater not encountered. 3) Borehole completed at 5.45m bgl. 4) Gas and groundwater monitoring well installed to 5.00m, response zone between 2.00m and 5.00m bgl.







Project: Begbroke

Borehole No

WS240

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Method: Dynamic (Windowless) Sampler	Date(s): 08/09/2022	Logged By: NT	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448717.01, 213225.93	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 61.26m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.10	ES			Firm dry light brown slightly gravelly sandy CLAY. Gravel is subangular to subrounded, fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.25	(0.25)	61.01		
			0.40	ES			Firm brownish orange sandy CLAY. (ALLUVIUM)		(0.75)			
			0.80	D				1.00		60.26		
			1.20	SPT	N=50 (5,9,14,14,15,7)		Very dense grey sandy rounded to subangular, fine to coarse flint and limestone GRAVEL. (RIVER TERRACE DEPOSITS)		(0.65)			
<p>End of Borehole at 1.65m</p>												
<p>2</p>												
<p>3</p>												
<p>4</p>												
<p>5</p>												
<p>6</p>												

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater not encountered. 3) Borehole terminated at 1.65m bgl on SPT refusal. 4) Gas and groundwater monitoring well installed to 1.20m, response zone between 0.90m bgl and 1.20m bgl.

Method: Dynamic (Windowless) Sampler	Date(s): 01/09/2022	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448923.06, 213314.09	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 61.59m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
1.20 - 2.00	110mm	90%	0.20	ES	N=19 (0,0,1,3,6,9)	▼	Stiff desiccated brown slightly sandy slightly gravelly CLAY. Gravel is rounded fine and medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	61.29		
			0.60	D			Firm yellowish brown slightly gravelly sandy CLAY with occasional shell fragments. Gravel is sub-angular to sub-rounded fine and medium of sandstone flint and coal. (ALLUVIUM)	1.20	(0.90)	60.39		
2.00 - 3.00	110mm	100%	1.20	SPT	N=22 (3,4,6,4,6,6)	▼	Soft grey mottled black sandy CLAY. (ALLUVIUM)	1.50	(0.30)	60.09		
			1.30	ES			Medium dense yellowish brown gravelly SAND. Gravel is sub-rounded to rounded fine to coarse of flint and sandstone. (RIVER TERRACE DEPOSITS)	2.00	(1.90)			
3.00 - 4.00	110mm	80%	2.00	SPT	N=24 (6,7,6,6,5,7)	▼	... From 2.70m to 3.40m bgl: Becomes very gravelly.	3.40		58.19		
			3.00	SPT			Firm grey very sandy CLAY. (KELLAWAYS SAND MEMBER)	3.90	(0.50)	57.69		
4.00 - 5.00	110mm	90%	4.00	SPT	N=14 (2,2,2,3,3,6)	▼	Stiff grey very thinly laminated CLAY. (KELLAWAYS CLAY MEMBER)	4.50				
			4.50	D			Stiff grey very thinly laminated CLAY. (KELLAWAYS CLAY MEMBER)	5.00	(1.55)			
			5.00	SPT	N=21 (2,3,4,4,6,7)	▼						
End of Borehole at 5.45m								5.45		56.14		

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater encountered at 2.00m, no rise. 3) Borehole completed at 5.45m bgl. 4) Gas and groundwater monitoring well installed to 2.00m, response zone between 1.00m and 2.00m bgl.

Method: Dynamic (Windowless) Sampler	Date(s): 05/09/2022	Logged By: CR	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 447808.73, 212721.52	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 61.92m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Brown slightly sandy gravelly CLAY with occasional rootlets. Gravel is sub angular to sub rounded fine to medium of quartz and flint with rare cobbles of chalk. (AGRICULTURALLY DISTURBED TOPSOIL)	0.50	(0.50)	61.42		
1.20 - 2.00			1.20	SPT	N=7 (2,1,1,2,1,3)	▼	Loose yellowish brown slightly clayey gravelly SAND. Gravel is sub angular to sub rounded fine to medium of flint. (RIVER TERRACE DEPOSITS)	1.30	(0.80)	60.62		
2.00 - 3.00			1.60	D			Firm yellowish brown sandy slightly gravelly CLAY. Gravel is sub angular to sub rounded fine to medium of flint. (RIVER TERRACE DEPOSITS)	2.50	(1.20)	59.42		
3.00 - 3.60			2.00	SPT	N=3 (0,0,0,1,1,1)		Medium dense yellowish brown clayey SAND. (RIVER TERRACE DEPOSITS)	3.30	(0.80)	58.62		
			3.00	SPT	N=27 (0,2,4,6,8,9)		Very dense yellowish brown SAND & GRAVEL. Gravel is sub angular to rounded of flint. (RIVER TERRACE DEPOSITS)	3.60	(0.30)	58.32		
							End of Borehole at 3.60m					
			4.00	SPT	50/245mm (4,9,15,16,14,5)							

General Remarks:  
 1) Hand dug pit to 1.20m bgl. 2) Refusal at 3.60m bgl on SPT. 3) Groundwater encountered at 1.10m bgl 4) Gas and groundwater monitoring pipe installed to 3.60m bgl. Response zone between 0.60m bgl and 3.60m bgl.



Project: Begbroke

Borehole No

WS243

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Method: Dynamic (Windowless) Sampler	Date(s): 02/09/2022	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448203.25, 212986.91	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 66.85m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Stiff desiccated brown slightly sandy slightly gravelly CLAY. Gravel is rounded fine and medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	66.55		
			0.40	ES			Brown slightly clayey slightly gravelly SAND. Gavel is angular to sub-rounded fine to coarse of flint and sandstone. (RIVER TERRACE DEPOSITS)	0.60	(0.30)	66.25		
			0.60 - 1.20	B			Very dense yellowish brown sandy sub-angular to rounded fine to coarse flint sandstone and limestone GRAVEL. (RIVER TERRACE DEPOSITS)	1.20	(0.60)	65.65		
			1.20	SPT	50/285mm (8,9,10,11,14,15)		End of Borehole at 1.20m					

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater not encountered. 3) Borehole terminated on SPT refusal at 1.20m bgl. 4) Gas and groundwater monitoring well installed to 1.00m, response zone between 0.50m and 1.00m bgl.











Method: Dynamic (Windowless) Sampler	Date(s): 06/09/2022	Logged By: NT	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448807.90, 213050.12	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 61.01m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
1.20 - 2.00	110mm	100%	0.10	ES	N=38 (4,5,7,9,11,11)	▼	Light brown slightly gravelly SAND with frequent roots and rootlets. Gravel is subangular to subrounded fine to coarse of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.25	(0.25)	60.76		
			0.90	ES			Orange brown slightly gravelly SAND. Gravel is subangular to subrounded, fine to coarse of flint. (RIVER TERRACE DEPOSITS)	0.75	(0.50)	60.26		
			1.00	D	Dense yellowish brown slightly gravelly SAND. Gravel is subangular to subrounded, fine to coarse of flint and limestone. (RIVER TERRACE DEPOSITS)		1.00					
			1.20	SPT			(1.05)					
			1.90	D	N=35 (5,6,6,8,11,10)		Dense greenish grey sandy subangular to angular fine to coarse limestone and flint GRAVEL. (RIVER TERRACE DEPOSITS) ... At 1.80m bgl: 2cm band of grey clay.	1.80		59.21		
			2.00	SPT				(0.65)				
								2.45		58.56	End of Borehole at 2.45m	
<p>General Remarks:</p> <p>1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater encountered at 1.15m, rising to 1.05m over 20 minutes. 3) Borehole terminated at 2.45m bgl due to collapse to 1.70m bgl and unable to case through gravels. 4) Gas and groundwater monitoring well installed to 1.70m bgl, response zone between 1.00m and 1.70m bgl.</p>												





Project: Begbroke

Borehole No

WS250

Page No. 1 of 1

Method: Dynamic (Windowless) Sampler	Date(s): 01/09/2022 - 06/09/2022	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 448747.99, 212781.45	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 60.81m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Stiff desiccated brown slightly sandy slightly gravelly CLAY. Gravel is rounded fine and medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	60.51		
			0.50	D			Orangish brown SAND. (RIVER TERRACE DEPOSITS)	0.70	(0.40)	60.11		
			1.20	SPT	50/105mm (23,2,37,13)		Light brown gravelly SAND. Gravel is sub-angular rounded fine to coarse of flint and sandstone. (RIVER TERRACE DEPOSITS)	1.20	(0.50)	59.61		
							Very dense light brown gravelly SAND. Gravel is sub-angular rounded fine to coarse of flint and sandstone. (RIVER TERRACE DEPOSITS)	1.39	(0.19)	59.42		
End of Borehole at 1.39m												

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater not encountered. 3) Borehole terminated on SPT refusal at 1.385m bgl. 4) Gas and groundwater monitoring well installed to 1.00m, response zone between 0.80m and 1.00m bgl.

Method: Dynamic (Windowless) Sampler	Date(s): 01/09/2022	Logged By: MA	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 449155.50, 212828.91	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 60.53m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results							
			0.20	ES			Stiff desiccated brown slightly sandy slightly gravelly CLAY. Gravel is rounded fine and medium of flint. (AGRICULTURALLY DISTURBED TOPSOIL)	0.30	(0.30)	60.23		
			0.50	D			Orangish brown SAND. (RIVER TERRACE DEPOSITS)		(0.80)			
1.20 - 2.00	110mm	90%	1.20 1.20 - 2.00	SPT B	N=17 (4,2,3,4,5,5)	<input checked="" type="checkbox"/>	Medium denserangish brown sandy sub-angular to rounded fine to coarse flint and sandstone GRAVEL. (RIVER TERRACE DEPOSITS)	1.10		59.43		
2.00 - 3.00	110mm	100%	2.00	SPT	N=8 (1,2,1,2,3,2)		Firm grey sandy CLAY. (OXFORD CLAY FORMATION)	2.00		58.53		
			2.50	D				2.60		57.93		
3.00 - 4.00	110mm	100%	3.00	SPT	N=19 (2,3,3,5,5,6)		Stiff grey very thinly laminated slightly sandy CLAY with occasional shell fragments and rare sub-angular gravels of burnt shale. Sand is fine and forms in occasional lenses. (OXFORD CLAY FORMATION)	3				
			3.50	D								
4.00 - 5.00	110mm	100%	4.00	SPT	N=17 (3,2,3,3,3,8)			4				
			4.50	D								
			5.00	SPT	N=19 (2,4,4,4,4,7)			5				
End of Borehole at 5.45m								5.45		55.08		

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater encountered at 1.15m, rising to 1.05m over 20 minutes. 3) Borehole completed at 5.45m bgl. 4) Gas and groundwater monitoring well installed to 2.00m, response zone between 1.00m and 2.00m bgl.



Method: Dynamic (Windowless) Sampler	Date(s): 06/09/2022	Logged By: NT	Drilled By: RP Drilling
Client: Oxford University Development	Co-ords: 449134.61, 212444.02	Checked By: CV	Rig: Dart Terrier
Hydrock Project No: C-19114-C	Ground Level: 60.40m OD		Scale: 1:30

Sample Run Info			Testing			Water-Strikes	Stratum Description	Depth m bgl	Thickness (m)	Level m OD	Legend	Instrumentation / Backfill	
Sample Run	Run Ø	Recovery	Depth (m)	Type	Results								
			0.10	ES			Stiff dessicated brown sandy slightly gravelly CLAY with abundant roots and rootlets. Gravel is fine to coarse, subangular to rubrounded flint, limestone and sandstone. (AGRICULTURALLY DISTURBED TOPSOIL)	0.25	(0.25)	60.15			
			0.40	ES				Soft orange brown sandy CLAY with rare subangular to subrounded, fine flint gravel. (ALLUVIUM)	(0.75)				
			0.60	D									
1.20 - 2.00	110mm	100%	1.20	SPT	N=4 (2,2,2,1,0,1)	▼	Very loose grey and yellow brown clayey SAND. (ALLUVIUM)	1.00	(0.50)	59.40			
			1.20	D									
2.00 - 3.00	110mm	100%	2.00	SPT	N=9 (1,1,2,2,2,3)		Firm locally soft grey slightly sandy slightly gravelly CLAY with a mild organic odour and occasional purple remnant roots. Gravel is subrounded to rounded, fine to coarse, of flint. (ALLUVIUM) ... Between 1.50 - 1.60m bgl: Grey.	2.60	(1.10)	58.90			
			1.80	D									
3.00 - 4.00	110mm	100%	3.00	SPT	N=9 (2,1,2,2,2,3)		Firm bluish grey CLAY with rare fine shell fragments. (OXFORD CLAY FORMATION)	3.60	(1.00)	57.80			
			3.60	D									
4.00 - 5.00	110mm	100%	4.00	SPT	N=15 (2,3,3,4,4,4)		Stiff bluish grey CLAY with rare fine shell fragments. (OXFORD CLAY FORMATION)		(1.85)				
			4.50	D									
			5.00	SPT	N=23 (4,3,4,5,6,8)								
								5.45		54.95			
								End of Borehole at 5.45m					

General Remarks:  
 1) Inspection pit hand dug to 1.20m bgl. 2) Groundwater encountered at 1.40m bgl, no rise. 3) Borehole completed at 5.45m bgl. 4) Gas and groundwater monitoring well installed to 5.00m, response zone between 1.00m and 5.00m bgl.

## *Exploratory Hole Photographs*


# SI Photograph Template

<p><b>Site Investigation Photograph 1</b></p>	
<p><b>Date:</b> 27/09/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> SA02 installation of soakaway monitoring pipes and backfilling of pit.</p>	

<p><b>Site Investigation Photograph 2</b></p>	
<p><b>Date:</b> 27/09/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> SA03a water ingress from base and side of the pit.</p>	



<p><b>Site Investigation Photograph 3</b></p>	
<p><b>Date:</b> 27/09/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> SA03a arisings with agriculturally disturbed topsoil over alluvium.</p>	

<p><b>Site Investigation Photograph 4</b></p>	
<p><b>Date:</b> 27/09/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> SA04 water ingress at base of the pit, with soakaway monitoring pipes being installed.</p>	



<p><b>Site Investigation Photograph 5</b></p>	
<p><b>Date:</b> 27/09/21</p>	
<p><b>Direction Photograph Taken:</b> n/a</p>	
<p><b>Description:</b> SA04 with gravel about to be placed in the pit and arisings comprising agriculturally disturbed topsoil over alluvium.</p>	


<p><b>Site Investigation Photograph 6</b></p>	
<p><b>Date:</b> 27/09/21</p>	
<p><b>Direction Photograph Taken:</b> n/a</p>	
<p><b>Description:</b> SA05 water ingress at base of the pit</p>	



<p><b>Site Investigation Photograph 7</b></p>	
<p><b>Date:</b> 27/09/21</p>	
<p><b>Direction Photograph Taken:</b> n/a</p>	
<p><b>Description:</b> SA05 arisings comprising agriculturally disturbed topsoil over alluvium over river terrace deposits.</p>	


<p><b>Site Investigation Photograph 8</b></p>	
<p><b>Date:</b> 28/10/21</p>	
<p><b>Direction Photograph Taken:</b> n/a</p>	
<p><b>Description:</b> SA06 dry pit with soakaway monitoring pipes being installed.</p>	



<p><b>Site Investigation Photograph 9</b></p>	
<p><b>Date:</b> 28/09/21</p>	
<p><b>Direction Photograph Taken:</b> n/a</p>	
<p><b>Description:</b> SA06 with gravel about to be placed in the pit and arisings comprising agriculturally disturbed topsoil over river terrace deposits.</p>	

<p><b>Site Investigation Photograph 10</b></p>	
<p><b>Date:</b> 28/09/21</p>	
<p><b>Direction Photograph Taken:</b> n/a</p>	
<p><b>Description:</b> SA07 dry pit at base.</p>	

<p><b>Site Investigation Photograph 11</b></p>	
<p><b>Date:</b> 28/09/21</p>	
<p><b>Direction Photograph Taken:</b> n/a</p>	
<p><b>Description:</b> SA07 with gravel placed in the pit, soakaway monitoring pipes installed and arisings comprising agriculturally disturbed topsoil over river terrace deposits.</p>	

<p><b>Site Investigation Photograph 12</b></p>	
<p><b>Date:</b> 28/09/21</p>	
<p><b>Direction Photograph Taken:</b> n/a</p>	
<p><b>Description:</b> SA08 with gravel and soakaway monitoring pipes placed in the pit. Arisings comprising of agriculturally disturbed topsoil over river terrace deposits over oxford clay.</p>	



<p><b>Site Investigation Photograph 13</b></p>	
<p><b>Date:</b> 28/08/21</p>	
<p><b>Direction Photograph Taken:</b> n/a</p>	
<p><b>Description:</b> SA09 with water ingress at base of the pit.</p>	

<p><b>Site Investigation Photograph 14</b></p>	
<p><b>Date:</b> 28/09/21</p>	
<p><b>Direction Photograph Taken:</b> n/a</p>	
<p><b>Description:</b> SA09 with gravel and soakaway monitoring pipes installed. Arisings comprising agriculturally disturbed topsoil over alluvium over river terrace deposits.</p>	



<p><b>Site Investigation Photograph 15</b></p>	
<p><b>Date:</b> 17/08/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> Spoil from TP01.</p>	

<p><b>Site Investigation Photograph 16</b></p>	
<p><b>Date:</b> 17/08/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP01 down pit.</p>	



<p><b>Site Investigation Photograph 17</b></p>	
<p><b>Date:</b> 20/08/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> Spoil from TP02.</p>	

<p><b>Site Investigation Photograph 18</b></p>	
<p><b>Date:</b> 20/08/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP02 down pit.</p>	



<b>Site Investigation Photograph 19</b>
<b>Date:</b> 20/08/21
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> Spoil from TP03.



<b>Site Investigation Photograph 20</b>
<b>Date:</b> 20/08/21
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> TP03 down pit.






<p><b>Site Investigation Photograph 21</b></p>	
<p><b>Date:</b> 20/08/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> Spoil from TP04.</p>	

<p><b>Site Investigation Photograph 22</b></p>	
<p><b>Date:</b> 20/08/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP04 down pit.</p>	




<p><b>Site Investigation Photograph 23</b></p>	
<p><b>Date:</b> 20/08/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> Spoil from TP05.</p>	

<p><b>Site Investigation Photograph 24</b></p>	
<p><b>Date:</b> 20/08/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP05 down pit.</p>	




<p><b>Site Investigation Photograph 25</b></p>	
<p><b>Date:</b> 20/08/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> Spoil from TP06.</p>	

<p><b>Site Investigation Photograph 26</b></p>	
<p><b>Date:</b> 20/08/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP06 down pit.</p>	



<p><b>Site Investigation Photograph 27</b></p>	
<p><b>Date:</b> 20/08/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> Spoil from TP07.</p>	

<p><b>Site Investigation Photograph 28</b></p>	
<p><b>Date:</b> 20/08/21</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP07 down pit.</p>	



<p><b>Site Investigation Photograph 29</b></p>	
<p><b>Date:</b> 09/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP201 down pit showing River Terrace Deposits over Oxford Clay Formation.</p>	

<p><b>Site Investigation Photograph 30</b></p>	
<p><b>Date:</b> 09/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP201 spoil pile showing arisings of Oxford Clay Formation.</p>	

<p><b>Site Investigation Photograph 31</b></p>
<p><b>Date:</b> 09/09/22</p>
<p><b>Direction Photograph Taken:</b> n/a.</p>
<p><b>Description:</b> TP202 down pit showing River Terrace Deposits.</p>



<p><b>Site Investigation Photograph 32</b></p>
<p><b>Date:</b> 09/09/22</p>
<p><b>Direction Photograph Taken:</b> n/a.</p>
<p><b>Description:</b> TP202 spoil pile showing arisings of River Terrace Deposits.</p>





<p><b>Site Investigation Photograph 33</b></p>	
<p><b>Date:</b> 06/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP203 down pit showing Cornbrash Limestone at base.</p>	

<p><b>Site Investigation Photograph 34</b></p>	
<p><b>Date:</b> 06/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP203 spoil pile showing River Terrace Deposits and Kellaways Clay Member.</p>	



<p><b>Site Investigation Photograph 35</b></p>	
<p><b>Date:</b> 06/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP204 down pit showing River Terrace Deposits over Oxford Clay Formation.</p>	

<p><b>Site Investigation Photograph 36</b></p>	
<p><b>Date:</b> 06/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP204 spoil pile showing arisings of River Terrace Deposits.</p>	



<p><b>Site Investigation Photograph 37</b></p>	
<p><b>Date:</b> 09/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP205 down pit showing River Terrace Deposits.</p>	

<p><b>Site Investigation Photograph 38</b></p>	
<p><b>Date:</b> 09/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP205 spoil pile showing arisings of River Terrace Deposits.</p>	



<p><b>Site Investigation Photograph 39</b></p>	
<p><b>Date:</b> 08/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP206 down pit showing River Terrace Deposits.</p>	

<p><b>Site Investigation Photograph 40</b></p>	
<p><b>Date:</b> 08/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP206 spoil pile showing arisings of River Terrace Deposits.</p>	



<b>Site Investigation Photograph 41</b>
<b>Date:</b> 06/09/22
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> TP207 down pit showing Cornbrash Limestone Formation.



<b>Site Investigation Photograph 42</b>
<b>Date:</b> 06/09/22
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> TP207 spoil pile showing arisings of Cornbrash Limestone Formation.





<p><b>Site Investigation Photograph 43</b></p>	
<p><b>Date:</b> 07/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP208 down pit showing Head deposits over River Terrace Deposits.</p>	

<p><b>Site Investigation Photograph 44</b></p>	
<p><b>Date:</b> 07/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP208 spoil pile showing arisings of River Terrace Deposits.</p>	



<p><b>Site Investigation Photograph 45</b></p>	
<p><b>Date:</b> 06/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP209 showing River Terrace Deposits over Kellaways Clay Member.</p>	

<p><b>Site Investigation Photograph 46</b></p>	
<p><b>Date:</b> 06/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP209 spoil pile showing arisings of River Terrace Deposits and Kellaways Clay Member.</p>	



<p><b>Site Investigation Photograph 47</b></p>	
<p><b>Date:</b> 06/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP209 showing Head Deposits over Cornbrash Limestone Formation.</p>	

<p><b>Site Investigation Photograph 48</b></p>	
<p><b>Date:</b> 06/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP210 spoil pile showing arisings of Cornbrash Limestone Formation.</p>	



<p><b>Site Investigation Photograph 49</b></p>	
<p><b>Date:</b> 09/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP211 down pit showing River Terrace Deposits.</p>	


<p><b>Site Investigation Photograph 50</b></p>	
<p><b>Date:</b> 09/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP211 spoil pile showing arisings of River Terrace Deposits.</p>	



<p><b>Site Investigation Photograph 51</b></p>	
<p><b>Date:</b> 09/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP212 showing River Terrace Deposits.</p>	


<p><b>Site Investigation Photograph 52</b></p>	
<p><b>Date:</b> 09/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP212 spoil pile showing arisings of River Terrace Deposits.</p>	



<p><b>Site Investigation Photograph 53</b></p>	
<p><b>Date:</b> 06/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP213 down pit showing River Terrace over Kellaways Clay Member and groundwater.</p>	

<p><b>Site Investigation Photograph 54</b></p>	
<p><b>Date:</b> 06/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP213 spoil pile showing arisings of River Terrace Deposits, Kellaways Clay Member and Cornbrash Limestone Formation.</p>	



<p><b>Site Investigation Photograph 55</b></p>	
<p><b>Date:</b> 08/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP214 down pit showing River Terrace Deposits.</p>	

<p><b>Site Investigation Photograph 56</b></p>	
<p><b>Date:</b> 08/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP214 spoil pile showing arisings of River Terrace Deposits.</p>	

<p><b>Site Investigation Photograph 57</b></p>	
<p><b>Date:</b> 08/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP216 down pit showing River Terrace Deposits.</p>	

<p><b>Site Investigation Photograph 58</b></p>	
<p><b>Date:</b> 08/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP216 spoil pile showing arisings of River Terrace Deposits.</p>	



<p><b>Site Investigation Photograph 59</b></p>	
<p><b>Date:</b> 08/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP217 down pit showing River Terrace Deposits and a groundwater strike.</p>	


<p><b>Site Investigation Photograph 60</b></p>	
<p><b>Date:</b> 08/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP217 spoil pile showing arisings of River Terrace Deposits.</p>	



<p><b>Site Investigation Photograph 61</b></p>	
<p><b>Date:</b> 08/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP218 down pit showing River Terrace Deposits.</p>	

<p><b>Site Investigation Photograph 62</b></p>	
<p><b>Date:</b> 08/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP218 spoil pile showing arisings of River Terrace Deposits.</p>	



<p><b>Site Investigation Photograph 63</b></p>	
<p><b>Date:</b> 08/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP219 down pit showing River Terrace Deposits over Kellaways Sand Member.</p>	

<p><b>Site Investigation Photograph 64</b></p>	
<p><b>Date:</b> 08/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP219 spoil pile showing arisings of River Terrace Deposits and Kellaways Sand Member.</p>	



<p><b>Site Investigation Photograph 65</b></p>	
<p><b>Date:</b> 06/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP220 down pit showing River Terrace Deposits over Kellways Clay and Sand Members.</p>	

<p><b>Site Investigation Photograph 66</b></p>	
<p><b>Date:</b> 06/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP220 spoil pile showing arisings of Kellways Clay and Sand Members.</p>	



<p><b>Site Investigation Photograph 67</b></p>	
<p><b>Date:</b> 09/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP222 down pit showing Head Deposits over River Terrace Deposits.</p>	

<p><b>Site Investigation Photograph 68</b></p>	
<p><b>Date:</b> 09/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP222 spoil pile showing arisings of Head Deposits and River Terrace Deposits.</p>	



<b>Site Investigation Photograph 69</b>
<b>Date:</b> 08/09/22
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> TP223 down pit showing Alluvium over River Terrace Deposits and a groundwater strike.



<b>Site Investigation Photograph 70</b>
<b>Date:</b> 08/09/22
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> TP223 spoil pile showing arisings of River Terrace Deposits.





<p><b>Site Investigation Photograph 71</b></p>	
<p><b>Date:</b> 08/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP224 down pit showing alluvium over River Terrace Deposits and a groundwater strike.</p>	

<p><b>Site Investigation Photograph 72</b></p>	
<p><b>Date:</b> 08/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP224 spoil pile showing arisings of Alluvium and River Terrace Deposits.</p>	



<p><b>Site Investigation Photograph 73</b></p>	
<p><b>Date:</b> 05/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP226 down pit showing alluvium over River Terrace Deposits.</p>	

<p><b>Site Investigation Photograph 74</b></p>	
<p><b>Date:</b> 05/09/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> TP226 spoil pile showing arisings of Alluvium and River Terrace Deposits.</p>	



<p><b>Site Investigation Photograph 75</b></p>
<p><b>Date:</b> 05/09/22</p>
<p><b>Direction Photograph Taken:</b> n/a.</p>
<p><b>Description:</b> TP229 down pit showing alluvium over River Terrace Deposits.</p>



<p><b>Site Investigation Photograph 76</b></p>
<p><b>Date:</b> 05/09/22</p>
<p><b>Direction Photograph Taken:</b> n/a.</p>
<p><b>Description:</b> TP229 spoil pile showing arisings of River Terrace Deposits.</p>





<b>Site Investigation Photograph 77</b>
<b>Date:</b> 07/09/22
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> TP230 down pit showing Alluvium over River Terrace Deposits and a groundwater strike.



<b>Site Investigation Photograph 78</b>
<b>Date:</b> 07/09/22
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> TP230 spoil pile showing arisings of River Terrace Deposits.





<p><b>Site Investigation Photograph 79</b></p>
<p><b>Date:</b> 07/09/22</p>
<p><b>Direction Photograph Taken:</b> n/a.</p>
<p><b>Description:</b> TP231 down hole showing Alluvium over River Terrace Deposits and a groundwater strike.</p>



<p><b>Site Investigation Photograph 80</b></p>
<p><b>Date:</b> 07/09/22</p>
<p><b>Direction Photograph Taken:</b> n/a.</p>
<p><b>Description:</b> TP231 spoil pile showing arisings of River Terrace Deposits.</p>





<b>Site Investigation Photograph 81</b>
<b>Date:</b> 07/09/22
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> TP233 down pit showing Alluvium, River Terrace Deposits and groundwater strike.



<b>Site Investigation Photograph 82</b>
<b>Date:</b> 07/09/22
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> TP233 spoil pile showing arisings of River Terrace Deposits.





<b>Site Investigation Photograph 83</b>
<b>Date:</b> 07/09/22
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> TP234 down pit showing Alluvium over River Terrace Deposits and a ground water strike.



<b>Site Investigation Photograph 84</b>
<b>Date:</b> 07/09/22
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> TP234 spoil pile showing arisings of River Terrace Deposits.





**Site Investigation Photograph 85**

**Date:** 30/08/22

**Direction Photograph Taken:** n/a.

**Description:** WS201 1.20 – 2.00m, showing Kellaways Clay Member.



**Site Investigation Photograph 86**

**Date:** 24/8/22

**Direction Photograph Taken:** n/a.

**Description:** WS206 1.20 - 2.00m, showing River Terrace Deposits over Kellaways Clay Member.





**Site Investigation Photograph 87**

**Date:** 24/8/22

**Direction Photograph Taken:** n/a.

**Description:** WS206 2.00 - 3.00m, showing Kellaways Clay Member over Cornbrash Limestone Formation.



**Site Investigation Photograph 88**

**Date:** 24/8/22

**Direction Photograph Taken:** n/a.

**Description:** WS206 3.00 - 4.00m, showing Cornbrash Limestone Formation.





**Site Investigation Photograph 89**

**Date:** 25/8/22

**Direction Photograph Taken:** n/a.

**Description:** WS210 1.20 - 2.00m, showing Alluvium.



**Site Investigation Photograph 90**

**Date:** 25/8/22

**Direction Photograph Taken:** n/a.

**Description:** WS210 2.00 - 3.00m, showing Cornbrash Limestone Formation.





<p><b>Site Investigation Photograph 91</b></p>
<p><b>Date:</b> 25/8/22</p>
<p><b>Direction Photograph Taken:</b> n/a.</p>
<p><b>Description:</b> WS215 1.20 - 2.00m, showing River Terrace Deposits.</p>



<p><b>Site Investigation Photograph 92</b></p>
<p><b>Date:</b> 25/8/22</p>
<p><b>Direction Photograph Taken:</b> n/a.</p>
<p><b>Description:</b> WS215 2.00 - 3.00m, showing River Terrace Deposits.</p>





<b>Site Investigation Photograph 93</b>
<b>Date:</b> 24/8/22
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> WS220 1.20 - 2.00m, showing Alluvium.



<b>Site Investigation Photograph 94</b>
<b>Date:</b> 24/8/22
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> WS220 2.00 - 3.00m, showing River Terrace Deposits.





<b>Site Investigation Photograph 95</b>
<b>Date:</b> 31/8/22
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> WS221 1.20 - 2.00m, showing River Terrace Deposits.



<b>Site Investigation Photograph 96</b>
<b>Date:</b> 25/8/22
<b>Direction Photograph Taken:</b> n/a.
<b>Description:</b> WS222 1.20 - 2.00m, showing River Terrace Deposits.





**Site Investigation Photograph 97**

**Date:** 25/8/22

**Direction Photograph Taken:** n/a.

**Description:** WS222  
2.00 - 2.60m,  
showing River  
Terrace Deposits.



**Site Investigation Photograph 98**

**Date:** 31/8/22

**Direction Photograph Taken:** n/a.

**Description:** WS225  
1.20 - 2.00m,  
showing River  
Terrace Deposits.





**Site Investigation Photograph 99**

**Date:** 23/8/22

**Direction Photograph Taken:** n/a.

**Description:** WS227 1.20 - 2.00m, showing River Terrace Deposits.



**Site Investigation Photograph 100**

**Date:** 23/8/22

**Direction Photograph Taken:** n/a.

**Description:** WS227 2.00 - 2.70m, showing River Terrace Deposits.





**Site Investigation Photograph 101**

**Date:** 5/9/22

**Direction Photograph Taken:** n/a.

**Description:** WS228 0.00 - 1.20m, showing Topsoil over River Terrace Deposits.



**Site Investigation Photograph 102**

**Date:** 2/9/22

**Direction Photograph Taken:** n/a.

**Description:** WS229 1.20 - 2.00m, showing River Terrace Deposits.





**Site Investigation  
Photograph 103**

**Date:** 31/8/22

**Direction  
Photograph Taken:**  
n/a.

**Description:** WS231  
1.20 - 5.00m,  
showing Head  
Deposits over River  
Terrace Deposits.

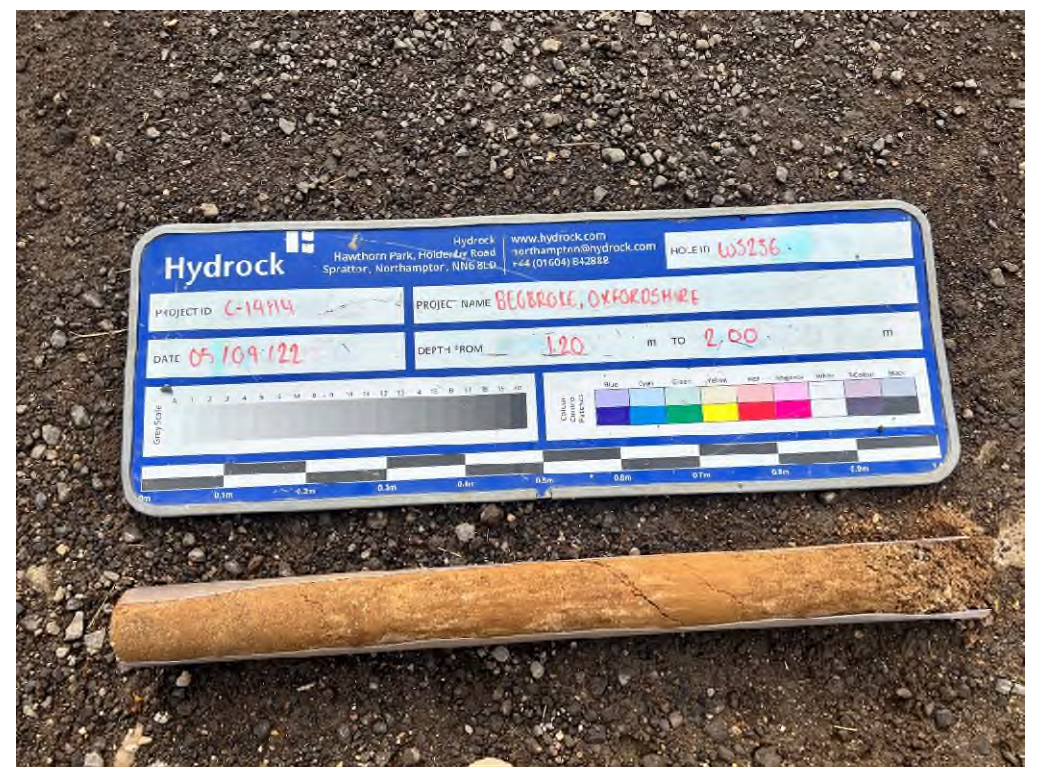


**Site Investigation  
Photograph 104**

**Date:** 5/9/22

**Direction  
Photograph Taken:**  
n/a.

**Description:** WS236  
1.20 - 2.00m,  
showing River  
Terrace Deposits.





<p><b>Site Investigation Photograph 105</b></p>	
<p><b>Date:</b> 31/8/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> WS238 1.20 - 5.00m, showing River Terrace Deposits over Oxford Clay Formation.</p>	

<p><b>Site Investigation Photograph 106</b></p>	
<p><b>Date:</b> 1/9/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> WS241 1.20 - 5.00m, showing Alluvium River Terrace Deposits over Oxford Clay Formation.</p>	



**Site Investigation Photograph 107**

**Date:** 5/9/22

**Direction Photograph Taken:** n/a.

**Description:** WS242 1.20 - 2.00m, showing River Terrace Deposits.



**Site Investigation Photograph 108**

**Date:** 2/9/22

**Direction Photograph Taken:** n/a.

**Description:** WS245 1.20 - 3.00m, showing Alluvium over River Terrace Deposits.





<p><b>Site Investigation Photograph 109</b></p>	
<p><b>Date:</b> 2/9/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> WS246 1.20 - 5.00m, showing Alluvium over River Terrace Deposits over Oxford Clay Formation.</p>	

<p><b>Site Investigation Photograph 110</b></p>	
<p><b>Date:</b> 1/9/22</p>	
<p><b>Direction Photograph Taken:</b> n/a.</p>	
<p><b>Description:</b> WS251 1.20 - 5.00m, showing River Terrace Deposits over Oxford Clay Formation.</p>	



**Site Investigation  
Photograph 111**

**Date: 07/02/23**

**Description: RO301  
showing Alluvium  
over first River  
Terrace Deposits.**



**Site Investigation  
Photograph 112**

**Date: 08/02/23**

**Description: RO301  
showing Kellaways  
Clay over the  
Cornbrash  
Formation.**





**Site Investigation Photograph 113**

**Date:** 08/02/23

**Description:** RO301, Cornbrash Formation over Forest Marble Formation.



**Site Investigation Photograph 114**

**Date:** 09/02/23

**Description:** RO301, Forest Marble Formation.





**Site Investigation Photograph 115**

**Date:** 09/02/23

**Description:** RO301, Forest Marble Formation.



**Site Investigation Photograph 116**

**Date:** 09/02/23

**Description:** RO301, Forest Marble Formation.





**Site Investigation Photograph 117**

**Date:** 09/02/23

**Description:** R0301, Forest Marble Formation.



**Site Investigation Photograph 118**

**Date:**

**Description:** R0301, Forest Marble Formation.





**Site Investigation Photograph 119**

**Date:** 09/02/23

**Description:** RO301 showing White Limestone Formation.



**Site Investigation Photograph 120**

**Date:** 09/02/23

**Description:** RO301 showing White Limestone Formation.





**Site Investigation Photograph 121**

**Date:** 03/02/23

**Description:** R0302 showing First River Terrace Deposits.



**Site Investigation Photograph 122**

**Date:** 03/02/23

**Description:** R0302 showing First River Terrace Deposits over Kellaways Clay.





**Site Investigation Photograph 123**

**Date:** 03/02/23

**Description:** R0302 showing the Cornbrash Formation.



**Site Investigation Photograph 124**

**Date:** 03/02/23

**Description:** R0302 showing Cornbrash Formation over the Forest Marble Formation.





**Site Investigation Photograph 125**

**Date:** 03/02/23

**Description:** R0302 showing Forest Marble Formation.



**Site Investigation Photograph 126**

**Date:** 06/02/23

**Description:** R0302 showing Forest Marble Formation.





**Site Investigation Photograph 127**

**Date:** 06/02/23

**Description:** R0302 showing Forest Marble Formation.



**Site Investigation Photograph 128**

**Date:** 06/02/23

**Description:** R0302 showing Forest Marble Formation.





**Site Investigation Photograph 129**

**Date:** 06/02/23

**Description:** R0302 showing Forest Marble Formation over White Limestone Formation.



**Site Investigation Photograph 130**

**Date:** 06/02/23

**Description:** R0302 showing White Limestone Formation.





**Site Investigation Photograph 131**

**Date:** 24/01/23

**Description:** R0303 showing, Alluvium over First River Terrace Deposits.



**Site Investigation Photograph 132**

**Date:** 24/01/22

**Description:** R0303 showing, First River Terrace Deposits over Kellaways Clay.





**Site Investigation Photograph 133**

**Date:** 24/01/23

**Description:** R0303 showing, Cornbrash Formation.



**Site Investigation Photograph 134**

**Date:** 24/01/23

**Description:** R0303 showing Cornbrash Formation.





**Site Investigation Photograph 135**

**Date:** 24/01/23

**Description:** R0303 showing Cornbrash Formation.



**Site Investigation Photograph 136**

**Date:** 24/01/23

**Description:** R0303 showing Cornbrash Formation.





**Site Investigation Photograph 137**

**Date:** 24/01/23

**Description:** R0303 showing Cornbrash Formation over Forest Marble Formation.



**Site Investigation Photograph 140**

**Date:** 25/01/23

**Description:** R0303 showing Cornbrash Formation.





**Site Investigation Photograph 141**

**Date:** 25/01/23

**Description:** R0303 showing Cornbrash Formation.



**Site Investigation Photograph 30**

**Date:** 25/01/23

**Description:** R0303 showing Cornbrash Formation.





**Site Investigation Photograph 31**

**Date:** 25/01/23

**Description:** R0303 showing Cornbrash Formation over White Limestone Formation



**Site Investigation Photograph 32**

**Date:** 25/01/23

**Description:** R0303 showing White Limestone Formation.





**Site Investigation Photograph 33**

**Date:** 25/01/23

**Description:** R0303 showing White Limestone Formation.



**Site Investigation Photograph 34**

**Date:** 26/01/23

**Description:** R0304 showing, Alluvium over Kellaways Clay Member.





**Site Investigation Photograph 35**

**Date:** 27/01/23

**Description:** R0304 showing Kellaways Clay Member over Cornbrash Limestone Formation.



**Site Investigation Photograph 36**

**Date:** 27/01/23

**Description:** R0304 showing Cornbrash Limestone Formation.





**Site Investigation Photograph 37**

**Date:** 27/01/23

**Description:** R0304 showing Cornbrash Limestone Formation over Forest Marble Formation.



**Site Investigation Photograph 38**

**Date:** 27/01/23

**Description:** R0304 showing Forest Marble Formation.





**Site Investigation Photograph 142**

**Date:** 27/01/23

**Description:** R0304 showing Forest Marble Formation.



**Site Investigation Photograph 143**

**Date:** 27/01/23

**Description:** R0304 showing Forest Marble Formation.

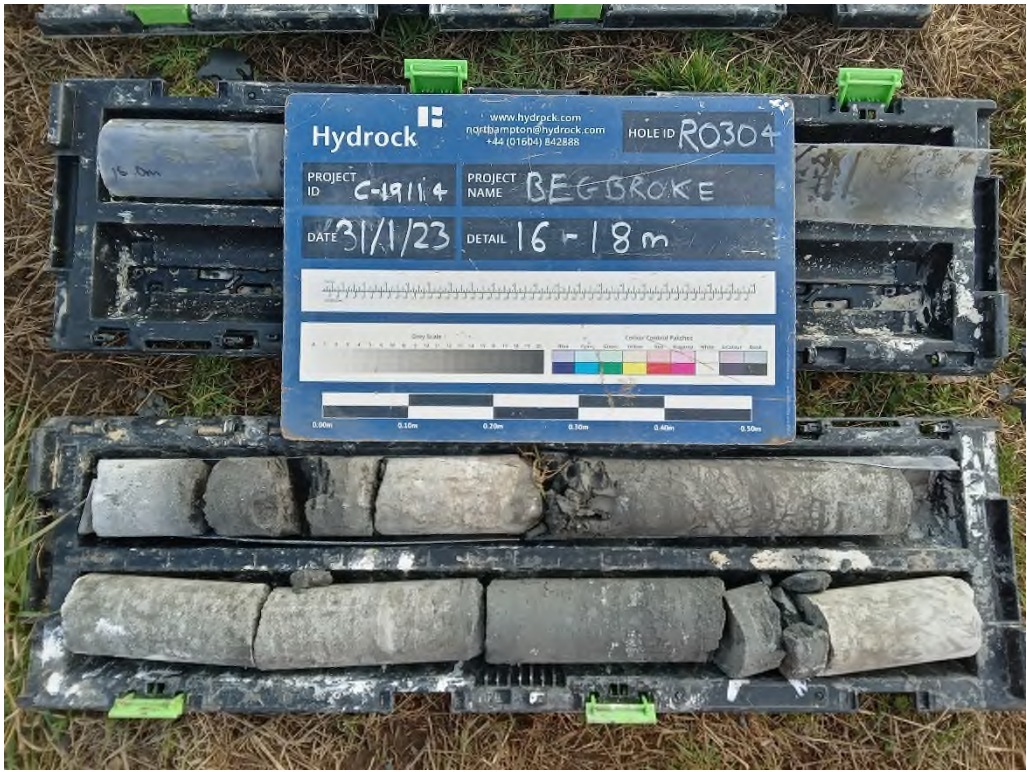




<p><b>Site Investigation Photograph 41</b></p>
<p><b>Date:</b> 31/01/23</p>
<p><b>Description:</b> R0304 showing Forest Marble Formation.</p>



<p><b>Site Investigation Photograph 42</b></p>
<p><b>Date:</b> 31/01/23</p>
<p><b>Description:</b> R0304 showing Forest Marble Formation.</p>





<p><b>Site Investigation Photograph 43</b></p>
<p><b>Date:</b> 31/01/23</p>
<p><b>Description:</b> R0304 showing Forest Marble Formation over the White Limestone Formation.</p>



<p><b>Site Investigation Photograph 44</b></p>
<p><b>Date:</b> 31/01/23</p>
<p><b>Description:</b> R0304 showing White Limestone Formation.</p>





**Site Investigation Photograph 45**

**Date:** 31/01/23

**Description:** R0305 showing River Terrace Deposits over the Oxford Clay Formation.



**Site Investigation Photograph 46**

**Date:** 01/02/23

**Description:** R0305 showing the Oxford Clay Formation.





**Site Investigation Photograph 47**

**Date:** 01/02/23

**Description:** R0305 showing the Oxford Clay Formation.



**Site Investigation Photograph 48**

**Date:** 01/02/23

**Description:** R0305 showing the Oxford Clay Formation.





**Site Investigation Photograph 49**

**Date:** 01/02/23

**Description:** R0305 showing the Oxford Clay Formation.



**Site Investigation Photograph 50**

**Date:** 01/02/23

**Description:** R0305 showing the Oxford Clay Formation.





**Site Investigation Photograph 51**

**Date:** 01/02/23

**Description:** R0305 showing the Oxford Clay Formation.



**Site Investigation Photograph 52**

**Date:** 01/02/23

**Description:** R0305 showing the Kellaways Sand Member.





**Site Investigation Photograph 53**

**Date:** 02/02/23

**Description:** RO305 showing the Kellaways Clay Member.



**Site Investigation Photograph 54**

**Date:** 02/02/23

**Description:** RO305 showing the Kellaways Clay Member over the Cornbrash Limestone Formation.





**Site Investigation Photograph 55**

**Date:** 02/02/23

**Description:** R0305 showing the Cornbrash Limestone Formation.



**Site Investigation Photograph 56**

**Date:** 07/02/23

**Description:** R0306 showing the Alluvium.





**Site Investigation Photograph 57**

**Date:** 07/02/23

**Description:** R0306 showing the Alluvium over the Cornbrash Limestone Formation.



**Site Investigation Photograph 58**

**Date:** 07/02/23

**Description:** R0306 showing the Cornbrash Limestone Formation over the Forest Marble Formation.





**Site Investigation Photograph 59**

**Date:** 08/02/23

**Description:** R0307 showing the River Terrace Deposits.



**Site Investigation Photograph 60**

**Date:** 08/02/23

**Description:** R0307 showing the River Terrace Deposits over the Cornbrash Limestone Formation.





**Site Investigation Photograph 61**

**Date:** 08/02/23

**Description:** R0307 showing the Cornbrash Limestone Formation.



**Site Investigation Photograph 62**

**Date:** 08/02/23

**Description:** R0307 showing the Cornbrash Limestone Formation over the Forest Marble Formation.





**Site Investigation Photograph 63**

**Date:** 06/02/23

**Description:** R0308 showing the River Terrace Deposits.



**Site Investigation Photograph 64**

**Date:** 06/02/23

**Description:** R0308 showing the River Terrace Deposits.





**Site Investigation Photograph 65**

**Date:** 06/02/23

**Description:** R0308 showing the River Terrace Deposits over the Kellaways Clay Member over the Cornbrash Limestone Formation.



**Site Investigation Photograph 66**

**Date:** 06/02/23

**Description:** R0308 showing the Cornbrash Limestone Formation.





**Site Investigation Photograph 65**

**Date:** 07/02/23

**Description:** R0308 showing the Forest Marble Formation.



**Site Investigation Photograph 66**

**Date:** 07/02/23

**Description:** R0308 showing the Forest Marble Formation.





<p><b>Site Investigation Photograph 67</b></p>
<p><b>Date:</b> 09/02/23</p>
<p><b>Description:</b> R0309 showing the River Terrace Deposits.</p>



<p><b>Site Investigation Photograph 68</b></p>
<p><b>Date:</b> 09/02/23</p>
<p><b>Description:</b> R0309 showing the Cornbrash Limestone Formation.</p>





**Site Investigation Photograph 69**

**Date:** 09/02/23

**Description:** R0309 showing the Forest Marble Formation.



**Site Investigation Photograph 70**

**Date:** 01/02/23

**Description:** R0310 showing the River Terrace Deposits over Kellaways Clay Member.





**Site Investigation Photograph 71**

**Date:** 13/02/23

**Description:** R0310 showing the Kellaways Clay Member over the Cornbrash Limestone Formation.



**Site Investigation Photograph 72**

**Date:** 13/02/23

**Description:** R0310 showing the Cornbrash Limestone Formation.





**Site Investigation Photograph 73**

**Date:** 13/02/23

**Description:** R0310 showing the Cornbrash Limestone Formation over the Forest Marble Formation.



**Site Investigation Photograph 74**

**Date:** 10/02/23

**Description:** R0311 showing the River Terrace Deposits.





**Site Investigation Photograph 75**

**Date:** 10/02/23

**Description:** R0311 showing the River Terrace Deposits over the Cornbrash Limestone Formation.



**Site Investigation Photograph 76**

**Date:** 10/02/23

**Description:** R0311 showing the Cornbrash Limestone Formation.





**Site Investigation Photograph 78**

**Date:** 10/02/23

**Description:** R0311 showing the Cornbrash Limestone Formation over the Forest Marble Formation.



**Site Investigation Photograph 79**

**Date:** 09/02/23

**Description:** R0312 showing the River Terrace Deposits over the Kellaways Sand Formation.





**Site Investigation Photograph 80**

**Date:** 09/02/23

**Description:** R0312 showing the Kellaways Sand Member over the Kellaways Clay Member.



**Site Investigation Photograph 81**

**Date:** 09/02/23

**Description:** R0312 showing the Kellaways Sand Member over the Kellaways Clay Member





**Site Investigation Photograph 82**

**Date:** 09/02/23

**Description:** R0312 showing the Cornbrash Limestone Formation.



**Site Investigation Photograph 83**

**Date:** 09/02/23

**Description:** R0312 showing the Cornbrash Limestone Formation over the Forest Marble Formation.





**Site Investigation Photograph 84**

**Date:** 09/02/23

**Description:** R0313 showing the River Terrace Deposits over the Cornbrash Limestone Formation.



**Site Investigation Photograph 85**

**Date:** 09/02/23

**Description:** R0313 showing the River Terrace Deposits over the Cornbrash Limestone Formation.





**Site Investigation Photograph 86**

**Date:** 09/02/23

**Description:** R0313 showing the Cornbrash Limestone Formation over the Forest Marble Formation.



**Site Investigation Photograph 87**

**Date:** 09/02/23

**Description:** R0314 showing the Alluvium over the River Terrace Deposits.





**Site Investigation Photograph 88**

**Date:** 09/02/23

**Description:** R0314 showing the River Terrace Deposits over the Cornbrash Limestone Formation over the Forest Marble Formation.



**Site Investigation Photograph 89**

**Date:** 09/02/23

**Description:** R0314 showing the Cornbrash Limestone Formation over the Forest Marble Formation.





**Site Investigation Photograph 90**

**Date:** 10/02/23

**Description:** R0315 showing the Alluvium.



**Site Investigation Photograph 91**

**Date:** 10/02/23

**Description:** R0315 showing the River Terrace Deposits over the Cornbrash Limestone Formation.





**Site Investigation Photograph 92**

**Date:** 13/02/23

**Description:** R0316 showing the Alluvium.



**Site Investigation Photograph 93**

**Date:** 13/02/23

**Description:** R0316 showing the Kellaways Clay Member over the Cornbrash Limestone Formation.





**Site Investigation Photograph 94**

**Date:** 13/02/23

**Description:** R0316 showing the Cornbrash Limestone Formation.



**Site Investigation Photograph 95**

**Date:** 13/02/23

**Description:** R0316 showing the Cornbrash Limestone Formation over the Forest Marble Formation.





**Site Investigation Photograph 96**

**Date:** 02/02/23

**Description:** R0317 showing the Alluvium over the River Terrace Deposits.



**Site Investigation Photograph 97**

**Date:** 02/02/23

**Description:** R0317 showing the River Terrace Deposits over the Forest Marble Formation.



**Site Investigation Photograph 98**

**Date:** 02/02/23

**Description:** R0317 showing the Forest Marble Formation.



**Site Investigation Photograph 99**

**Date:** 02/02/23

**Description:** R0317 showing the Forest Marble Formation.





**Site Investigation  
Photograph 100**

**Date:** 02/02/23

**Description:** R0317 showing the Forest Marble Formation.



**Site Investigation  
Photograph 101**

**Date:** 02/02/23

**Description:** R0317 showing the Forest Marble Formation.





**Site Investigation Photograph 102**

**Date:** 02/02/23

**Description:** R0317 showing the Forest Marble Formation.



**Site Investigation Photograph 103**

**Date:** 06/02/23

**Description:** R0318 showing the Alluvium over the River Terrace Deposits.



**Site Investigation Photograph 104**

**Date:** 06/02/23

**Description:** R0318 showing the River Terrace Deposits.



**Site Investigation Photograph 105**

**Date:** 06/02/23

**Description:** R0318 showing the River Terrace Deposits.





**Site Investigation Photograph 106**

**Date:** 06/02/23

**Description:** R0318 showing the Forest Marble Formation.



**Site Investigation Photograph 107**

**Date:** 03/02/23

**Description:** R0319 showing the River Terrace Deposits.





**Site Investigation  
Photograph 108**

**Date:** 03/02/23

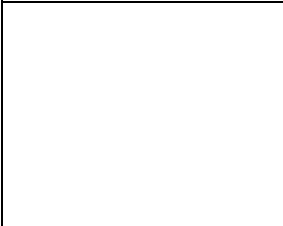


**Description:** R0319 showing the Cornbrash Limestone Formation.

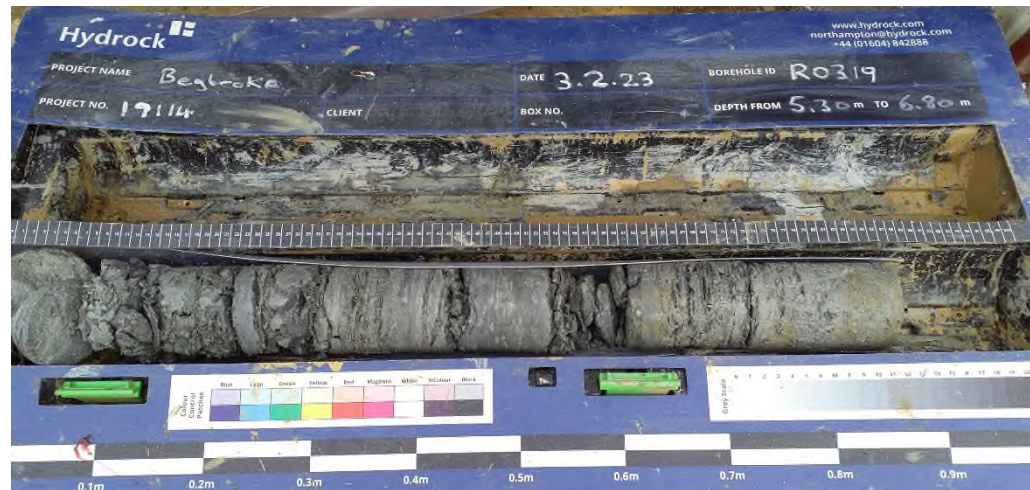


**Site Investigation  
Photograph 109**

**Date:** 03/02/23



**Description:** R0319 showing the Cornbrash Limestone Formation over the Forest Marble Formation.



**Site Investigation Photograph 110**

**Date:** 31/01/23

**Description:** R0320 showing the River Terrace Deposits.



**Site Investigation Photograph 111**

**Date:** 31/01/23

**Description:** R0320 showing the River Terrace Deposits over the Cornbrash Limestone Formation.





**Site Investigation Photograph 112**

**Date:** 31/01/23

**Description:** R0320 showing the Cornbrash Limestone Formation.



**Site Investigation Photograph 113**

**Date:** 30/01/23

**Description:** R0321 showing the River Terrace Deposits.





**Site Investigation Photograph 114**

**Date:** 30/01/23

**Description:** R0321 showing the River Terrace Deposits over the Cornbrash Limestone Formation.



**Site Investigation Photograph 115**

**Date:** 31/01/23

**Description:** R0321 showing the Forest Marble Formation.



**Site Investigation Photograph 116**

**Date:** 31/01/23

**Description:** R0321 showing the Forest Marble Formation.





<p><b>Site Investigation Photograph 117</b></p>
<p><b>Date:</b> 31/01/23</p>
<p><b>Description:</b> Spoil heap from TP301</p>



<p><b>Site Investigation Photograph 118</b></p>
<p><b>Date:</b> 31/01/23</p>
<p><b>Description:</b> TP301 excavation at the surface. Terminated at 2.70m bgl.</p>





Site Investigation Photograph 133
Date: 31/01/23
Description: Spoil heap from TP302



Site Investigation Photograph 134
Date: 31/01/23
Description: TP302 excavation at the surface. Terminated at 1.70m bgl.





<p><b>Site Investigation Photograph 119</b></p>	
<p><b>Date:</b> 31/01/23</p>	
<p><b>Description:</b> TP306 excavation at the surface. Terminated at 1.60m bgl due to ingress of groundwater.</p>	

<p><b>Site Investigation Photograph 120</b></p>	
<p><b>Date:</b> 02/02/23</p>	
<p><b>Description:</b> TP306 excavation at the surface. Terminated at 1.60m bgl due to ingress of groundwater.</p>	



<p><b>Site Investigation Photograph 121</b></p>	
<p><b>Date:</b> 06/02/23</p>	
<p><b>Description:</b> Spoil heap from TP308</p>	

<p><b>Site Investigation Photograph 122</b></p>	
<p><b>Date:</b> 06/02/23</p>	
<p><b>Description:</b> TP308 excavation at the surface. Terminated at 2.50m bgl due to ingress of groundwater.</p>	



<p><b>Site Investigation Photograph 123</b></p>
<p><b>Date:</b> 06/02/23</p>
<p><b>Description:</b> Spoil heap from TP309</p>



<p><b>Site Investigation Photograph 124</b></p>
<p><b>Date:</b> 06/02/23</p>
<p><b>Description:</b> TP309 excavation at the surface. Terminated at 2.20m bgl due to ingress of groundwater.</p>





<p><b>Site Investigation Photograph 125</b></p>
<p><b>Date:</b> 06/02/23</p>
<p><b>Description:</b> Spoil heap from TP311</p>

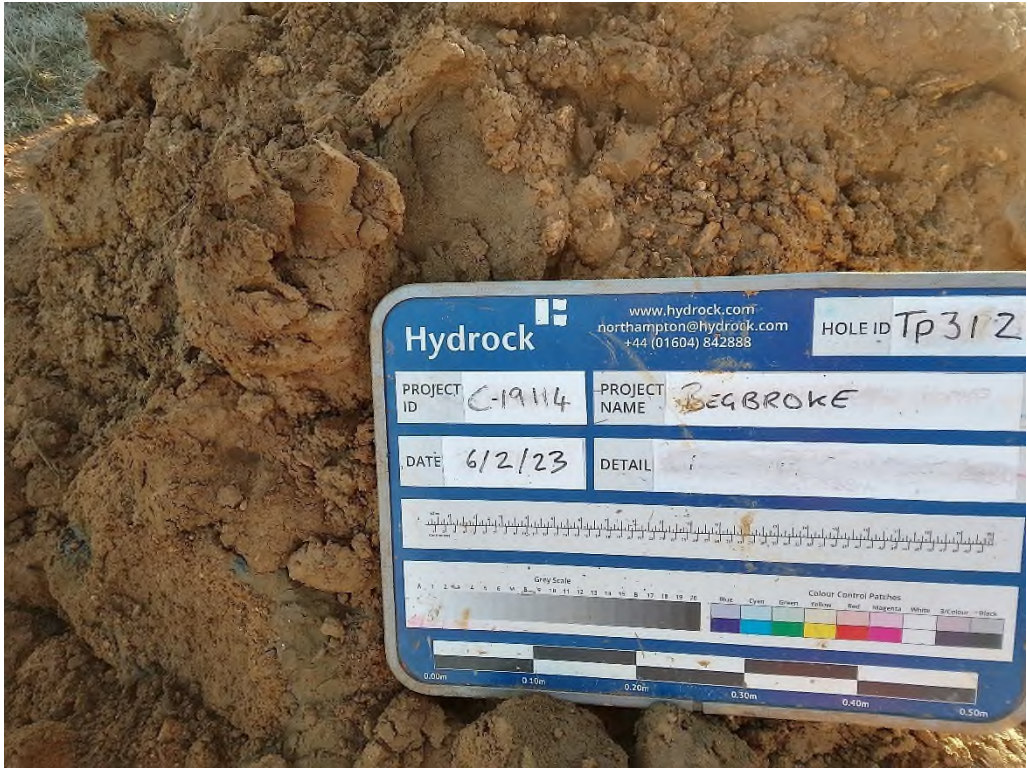


<p><b>Site Investigation Photograph 126</b></p>
<p><b>Date:</b> 06/02/23</p>
<p><b>Description:</b> TP311 excavation at the surface. Terminated at 2.60m bgl due to ingress of groundwater.</p>





<p><b>Site Investigation Photograph 127</b></p>
<p><b>Date:</b> 06/02/23</p>
<p><b>Description:</b> Spoil heap from TP312</p>



<p><b>Site Investigation Photograph 128</b></p>
<p><b>Date:</b> 06/02/23</p>
<p><b>Description:</b> TP312 excavation at the surface. Terminated at 2.70m bgl due to ingress of groundwater.</p>





<p><b>Site Investigation Photograph 129</b></p>
<p><b>Date:</b> 02/02/23</p>
<p><b>Description:</b> Spoil heap from TP313</p>



<p><b>Site Investigation Photograph 130</b></p>
<p><b>Date:</b> 02/02/23</p>
<p><b>Description:</b> TP313 excavation at the surface. Terminated at 2.40m bgl due to ingress of groundwater.</p>







<p><b>Site Investigation Photograph 135</b></p>
<p><b>Date:</b> 06/02/23</p>
<p><b>Description:</b> HP305 dug to 0.30m bgl for environmental testing purposes.</p>



<p><b>Site Investigation Photograph 136</b></p>
<p><b>Date:</b> 06/02/23</p>
<p><b>Description:</b> HP305 dug to 0.30m bgl for environmental testing purposes.</p>



<p><b>Site Investigation Photograph 137</b></p>	
<p><b>Date:</b> 06/02/23</p>	
<p><b>Description:</b> HP312 dug to 0.30m bgl for environmental testing purposes.</p>	

<p><b>Site Investigation Photograph 138</b></p>	
<p><b>Date:</b> 06/02/23</p>	
<p><b>Description:</b> HP312 dug to 0.30m bgl for environmental testing purposes.</p>	



<p><b>Site Investigation Photograph 139</b></p>
<p><b>Date:</b> 07/02/23</p>
<p><b>Description:</b> HP310 dug to 0.30m bgl for environmental testing purposes.</p>



<p><b>Site Investigation Photograph 140</b></p>
<p><b>Date:</b> 07/02/23</p>
<p><b>Description:</b> HP310 dug to 0.30m bgl for environmental testing purposes.</p>





<p><b>Site Investigation Photograph 141</b></p>
<p><b>Date:</b> 07/02/23</p>
<p><b>Description:</b> HP331 dug to 0.30m bgl for environmental testing purposes.</p>



<p><b>Site Investigation Photograph 142</b></p>
<p><b>Date:</b> 07/02/23</p>
<p><b>Description:</b> HP331 dug to 0.30m bgl for environmental testing purposes.</p>





<p><b>Site Investigation Photograph 143</b></p>
<p><b>Date:</b> 08/02/23</p>
<p><b>Description:</b> HP340 dug to 0.30m bgl for environmental testing purposes.</p>



<p><b>Site Investigation Photograph 144</b></p>
<p><b>Date:</b> 08/02/23</p>
<p><b>Description:</b> HP340 dug to 0.30m bgl for environmental testing purposes.</p>





<p><b>Site Investigation Photograph 145</b></p>
<p><b>Date:</b> 08/02/23</p>
<p><b>Description:</b> HP345 dug to 0.30m bgl for environmental testing purposes.</p>



<p><b>Site Investigation Photograph 146</b></p>
<p><b>Date:</b> 08/02/23</p>
<p><b>Description:</b> HP345 dug to 0.30m bgl for environmental testing purposes.</p>





<p><b>Site Investigation Photograph 147</b></p>
<p><b>Date:</b> 08/02/23</p>
<p><b>Description:</b> HP350 dug to 0.30m bgl for environmental testing purposes.</p>



<p><b>Site Investigation Photograph 148</b></p>
<p><b>Date:</b> 08/02/23</p>
<p><b>Description:</b> HP350 dug to 0.30m bgl for environmental testing purposes.</p>



# Appendix D Geotechnical Test Results and Geotechnical Plots



## *Geotechnical Laboratory Test Results*



4041



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7 Woodshots Meadow,  
Croxley Green  
Business Park,  
Watford,  
Herts,  
WD18 8YS

**t:** 01923 225404  
**f:** 01923 237404  
**e:** reception@i2analytical.com

## **Analytical Report Number : 23-19674**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	24/02/2023
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	24/02/2023
<b>Your order number:</b>	PO24302	<b>Analysis completed by:</b>	03/03/2023
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	03/03/2023
<b>Samples Analysed:</b>	5 water samples		

**Signed:**

*Izabela Wójcik*

Izabela Wójcik  
Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :	soils	- 4 weeks from reporting
	leachates	- 2 weeks from reporting
	waters	- 2 weeks from reporting
	asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 23-19674  
 Project / Site name: Begbroke

Your Order No: PO24302

Lab Sample Number	2597758		2597759		2597760		2597761		2597762	
Sample Reference	RO301		RO302		RO303		RO304		RO305	
Sample Number	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Date Sampled	24/02/2023		24/02/2023		24/02/2023		24/02/2023		24/02/2023	
Time Taken	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status							

**General Inorganics**

	pH Units	N/A	ISO 17025	8	7.4	7.3	7.5	7.5
pH (L005B)								
Sulphate as SO4	mg/l	0.045	ISO 17025	1730	49.5	60.8	449	163
Chloride	mg/l	0.15	ISO 17025	490	31	24	110	81
Ammoniacal Nitrogen as NH4	mg/l	0.015	ISO 17025	0.34	< 0.015	< 0.015	0.14	1.3
Nitrate as N	mg/l	0.01	ISO 17025	0.43	8.17	5.26	0.68	0.4
Nitrate as NO3	mg/l	0.05	ISO 17025	1.89	36.2	23.3	3.02	1.79

**Heavy Metals / Metalloids**

	mg/l	0.005	ISO 17025	13	3.2	3.5	8.5	7.7
Magnesium (dissolved)								

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected





4041



Analytical Report Number : 23-19674

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Ammonium as NH4 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
Chloride in water	Determination of Chloride (diissolved) colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260. Accredited matrices: SW, PW, GW.	L082-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture

correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



# TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS  
Tested in Accordance with: BS 1377-2:1990: Clause 4.4 and 5

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 04/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

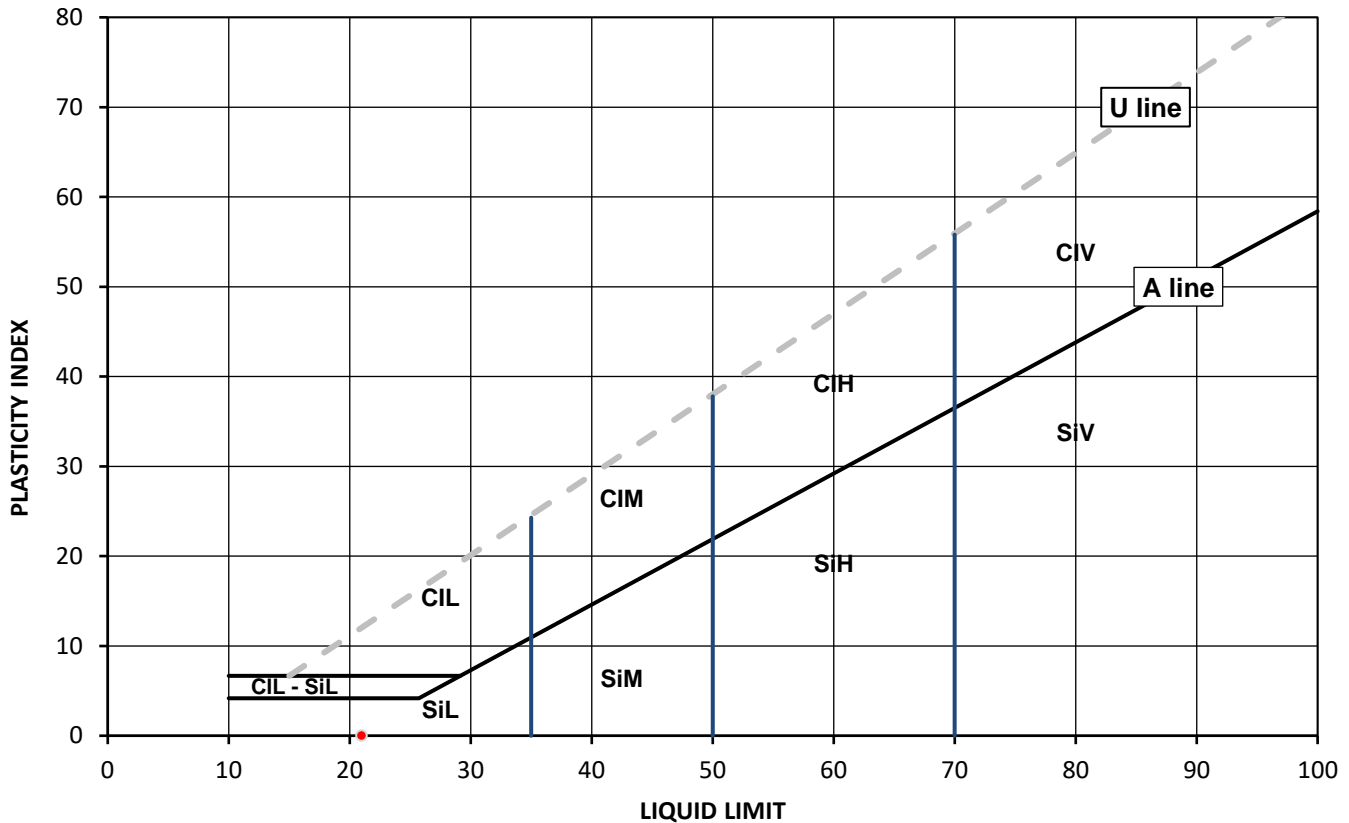
### Test Results:

Laboratory Reference: 2439956  
Hole No.: WS217  
Sample Reference: Not Given  
Sample Description: Yellowish brown clayey gravelly SAND

Depth Top [m]: 2.70  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
4.4	21	NP	NP	38



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt	M	Medium	35 to 50		
		H	High	50 to 70		
		V	Very high	exceeding 70		
		O	Organic	append to classification for organic material ( eg CIHO )		

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks: NP - non plastic

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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Site Address: Begbroke

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Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 05/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

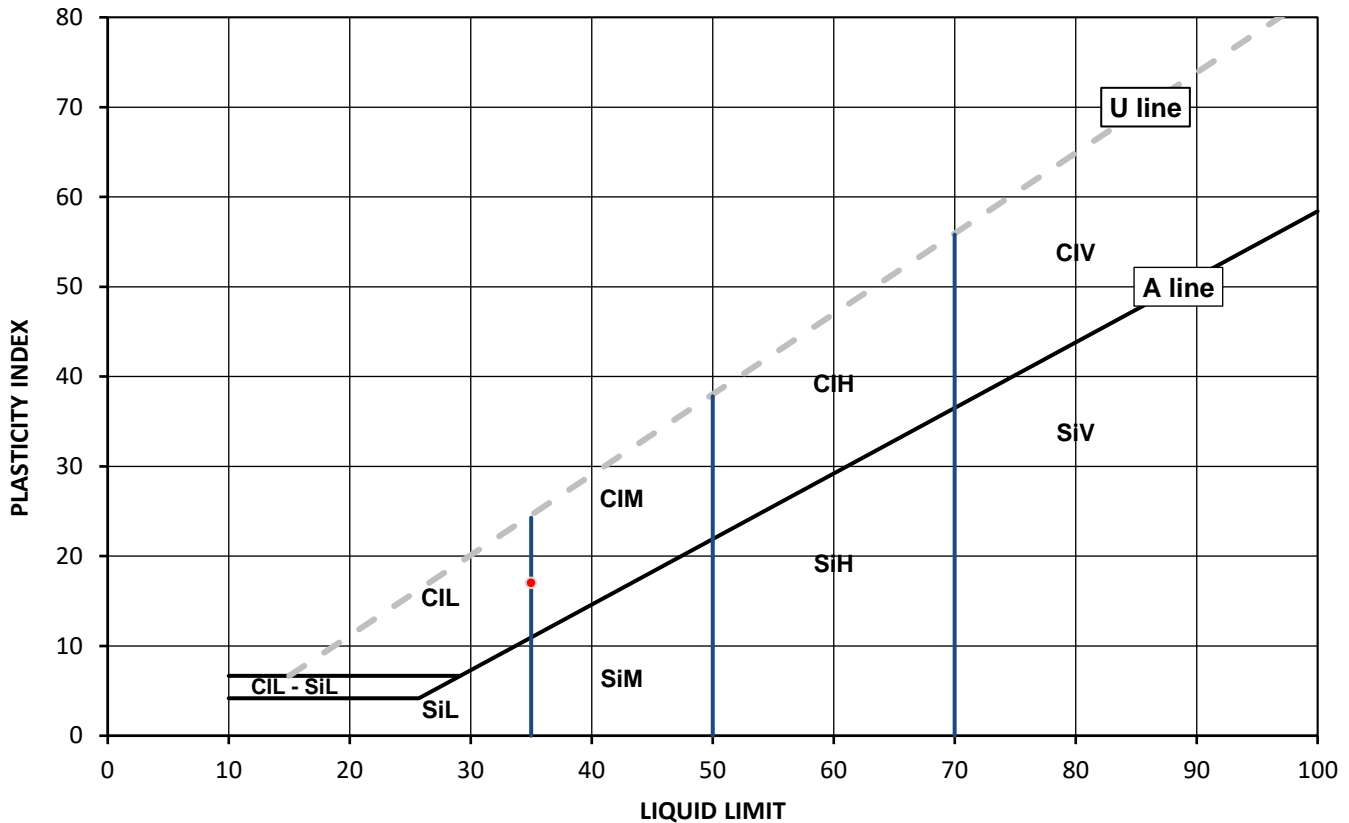
## Test Results:

Laboratory Reference: 2439917  
Hole No.: TP201  
Sample Reference: Not Given  
Sample Description: Orangish brown silty clayey very gravelly SAND

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
9.8	35	18	17	40



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Date Tested: 05/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

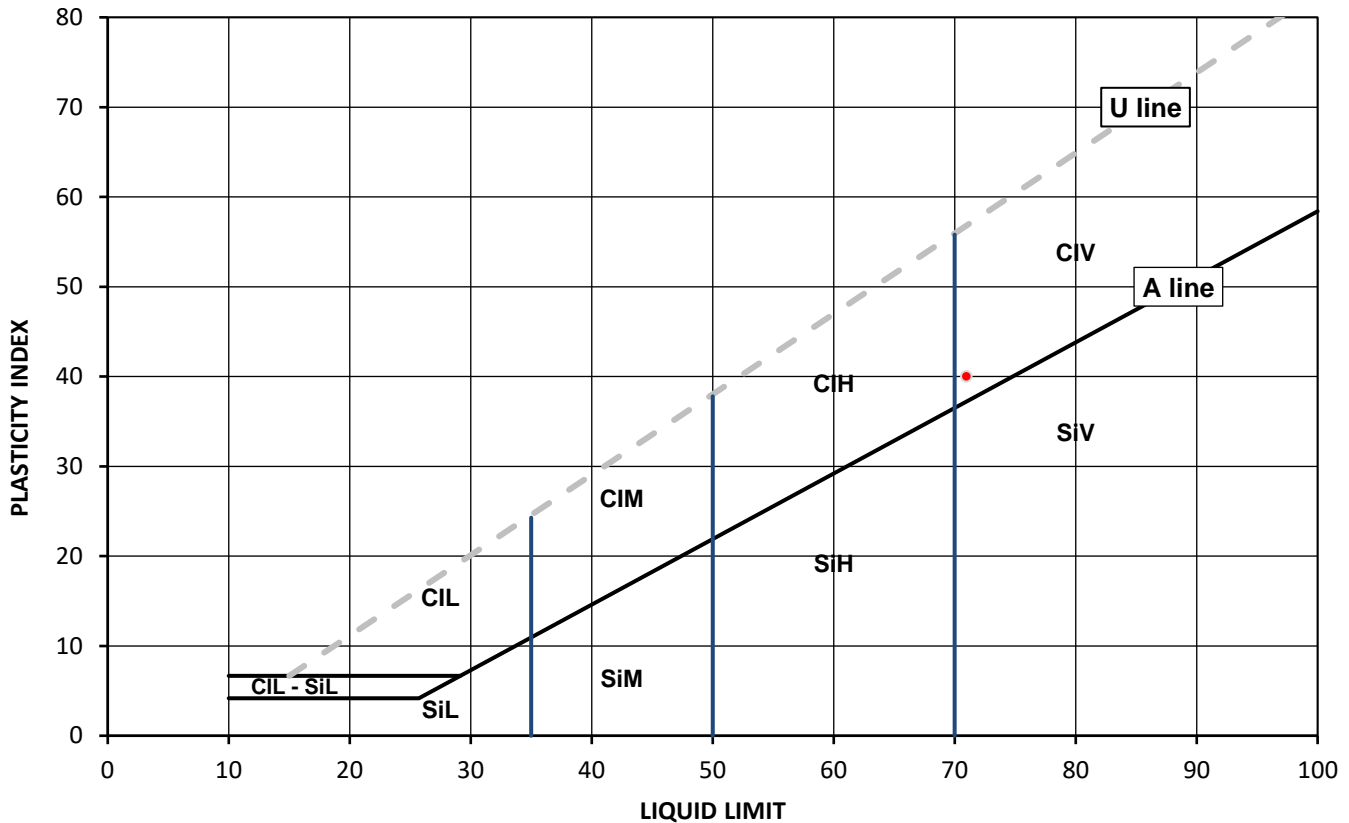
### Test Results:

Laboratory Reference: 2439918  
Hole No.: TP203  
Sample Reference: Not Given  
Sample Description: Brownish grey slightly sandy very silty CLAY

Depth Top [m]: 1.30  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
27	71	31	40	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Environmental Science

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 05/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

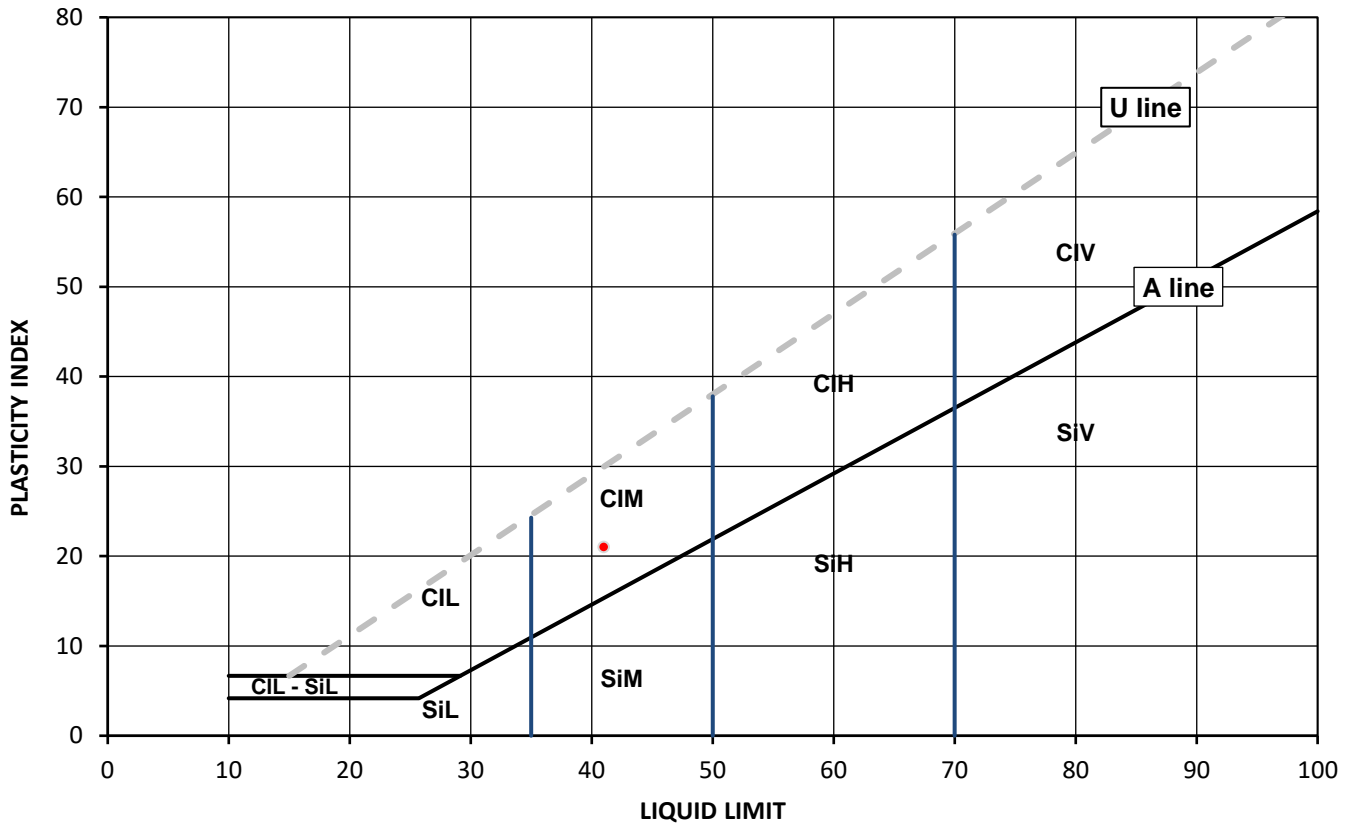
### Test Results:

Laboratory Reference: 2439919  
Hole No.: TP208  
Sample Reference: Not Given  
Sample Description: Orangish brown silty clayey very gravelly SAND

Depth Top [m]: 0.60  
Depth Base [m]: 0.70  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
6.7	41	20	21	38



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 06/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

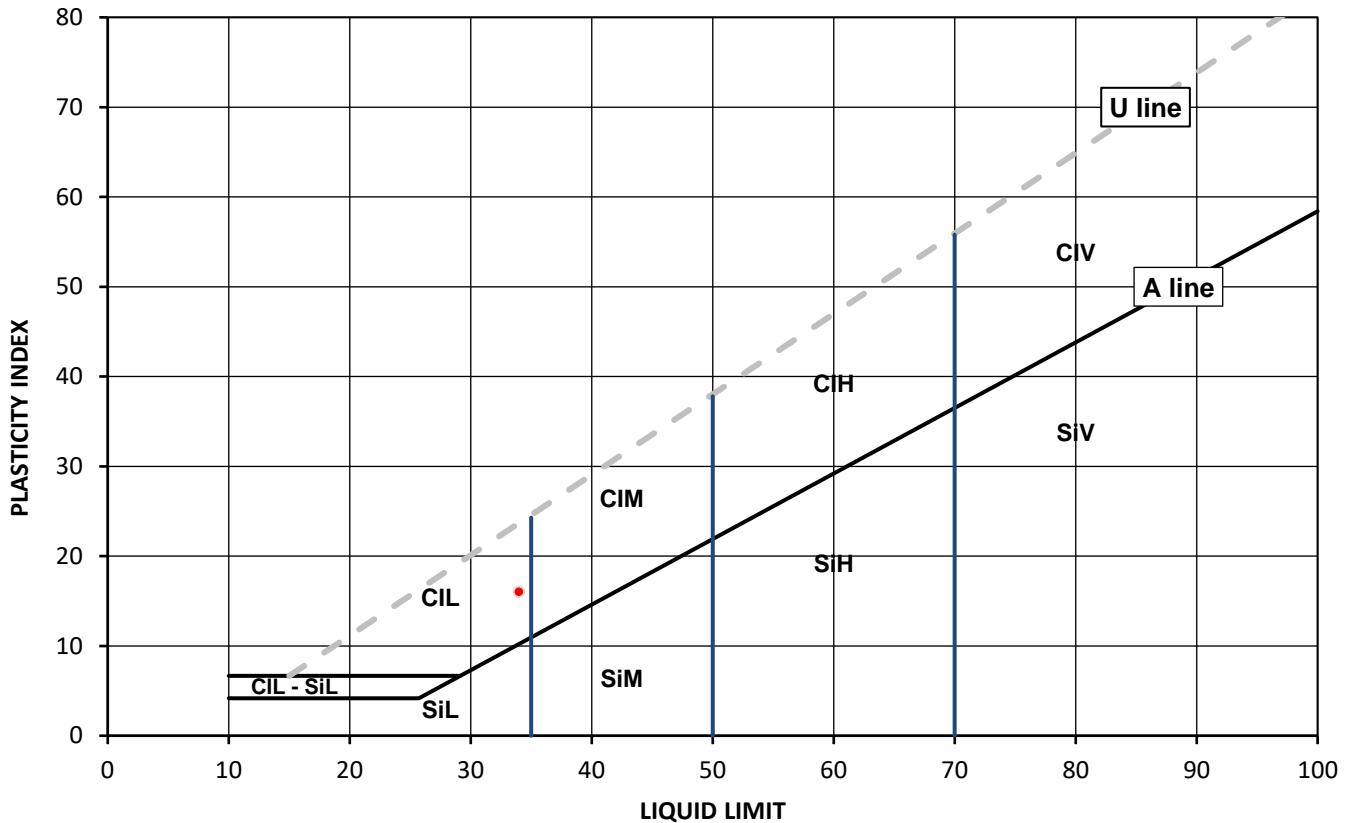
## Test Results:

Laboratory Reference: 2439920  
Hole No.: TP218  
Sample Reference: Not Given  
Sample Description: Yellowish brown sandy silty clayey GRAVEL

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
13	34	18	16	42



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 05/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

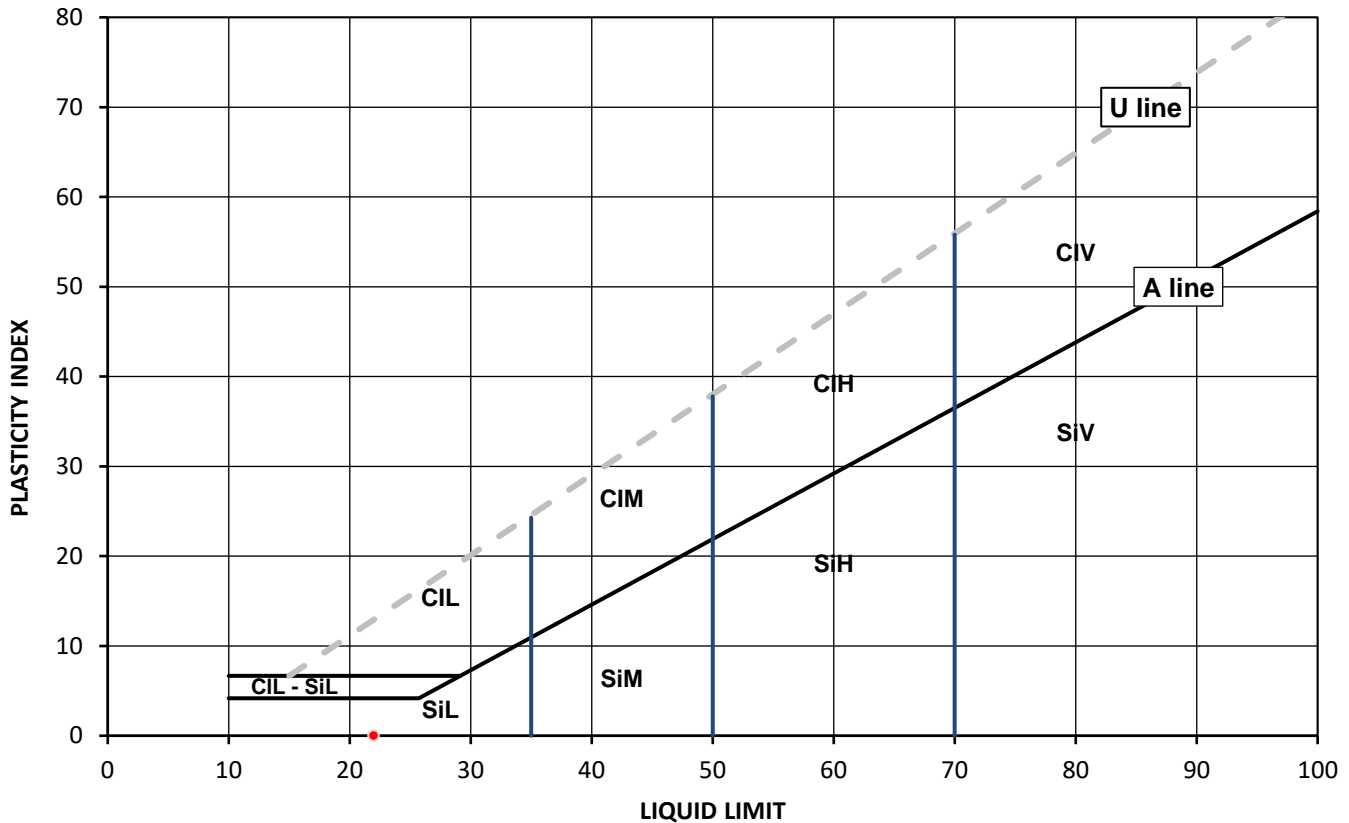
## Test Results:

Laboratory Reference: 2439921  
Hole No.: TP221  
Sample Reference: Not Given  
Sample Description: Orangish brown clayey very gravelly SAND

Depth Top [m]: 2.20  
Depth Base [m]: 2.30  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
8.3	22	NP	NP	46



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks: NP - non plastic

Signed:

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i2 Analytical Ltd  
Unit 8 Harrowden Road  
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Northampton NN4 7EB



Environmental Science

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 05/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

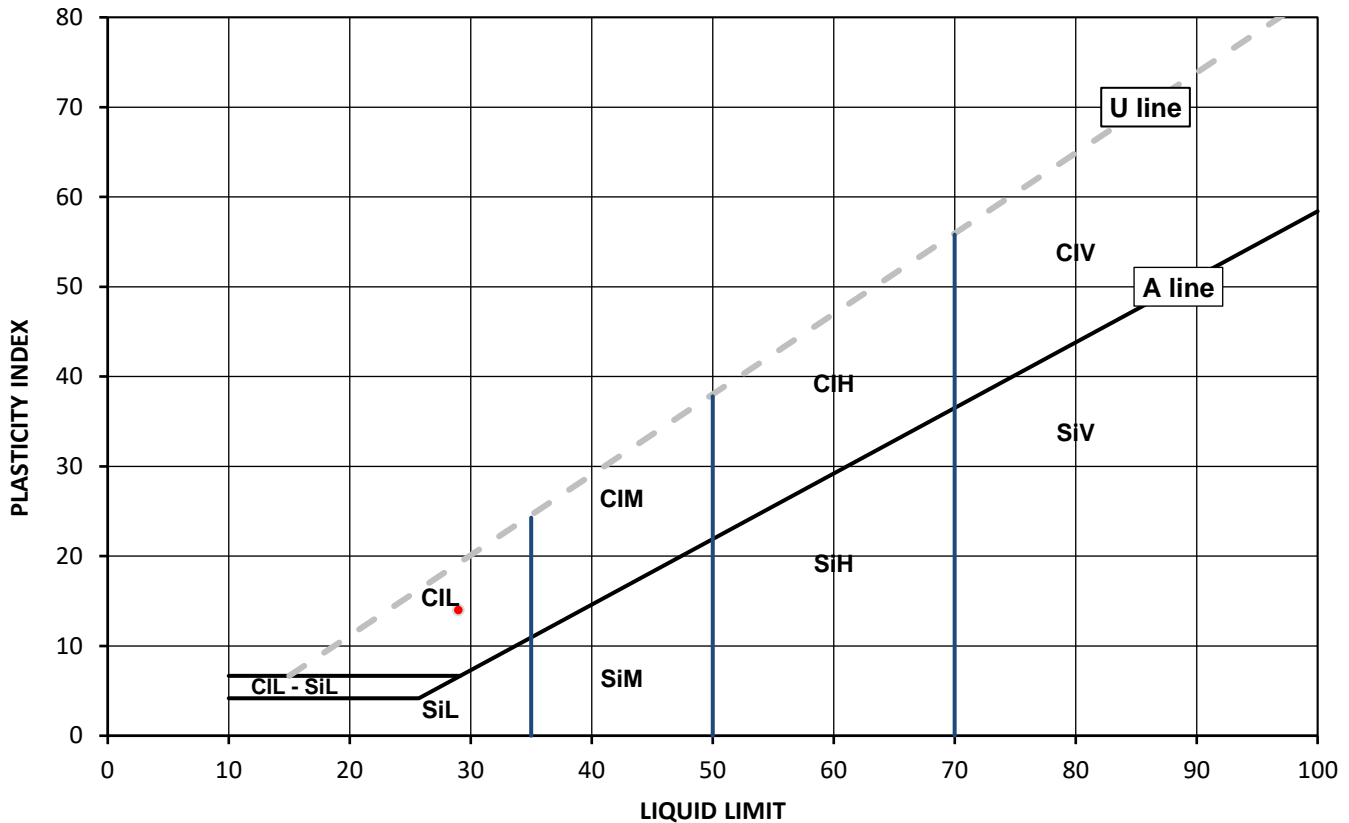
### Test Results:

Laboratory Reference: 2439922  
Hole No.: BH202  
Sample Reference: Not Given  
Sample Description: Yellowish brown slightly gravelly very sandy CLAY

Depth Top [m]: 2.00  
Depth Base [m]: 2.45  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
15	29	15	14	85



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 04/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

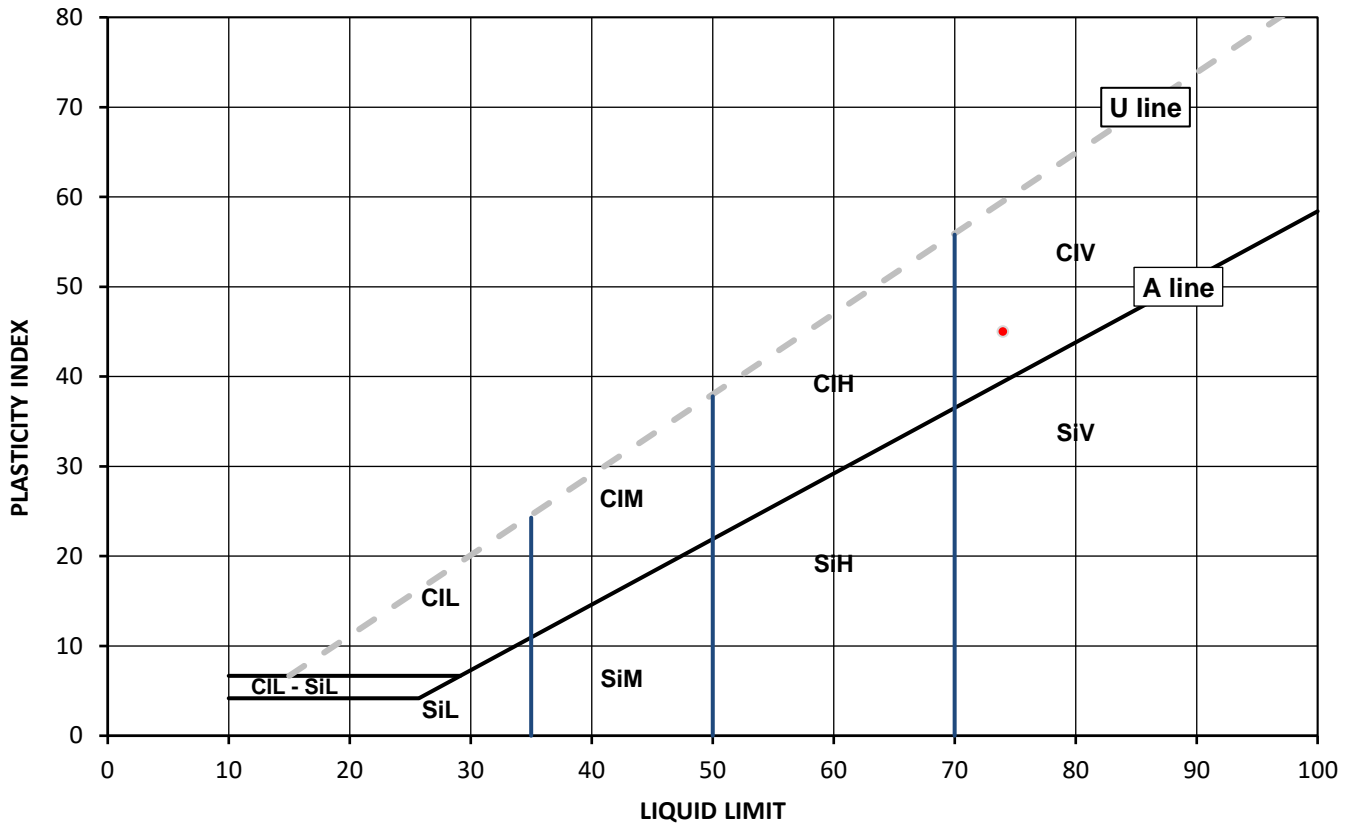
### Test Results:

Laboratory Reference: 2439925  
Hole No.: TP201  
Sample Reference: Not Given  
Sample Description: Grey slightly gravelly CLAY

Depth Top [m]: 2.60  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
29	74	29	45	99



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt	M	Medium	35 to 50		
		H	High	50 to 70		
		V	Very high	exceeding 70		
		O	Organic	append to classification for organic material ( eg CIHO )		

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

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Client Reference: 19114  
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Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 04/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

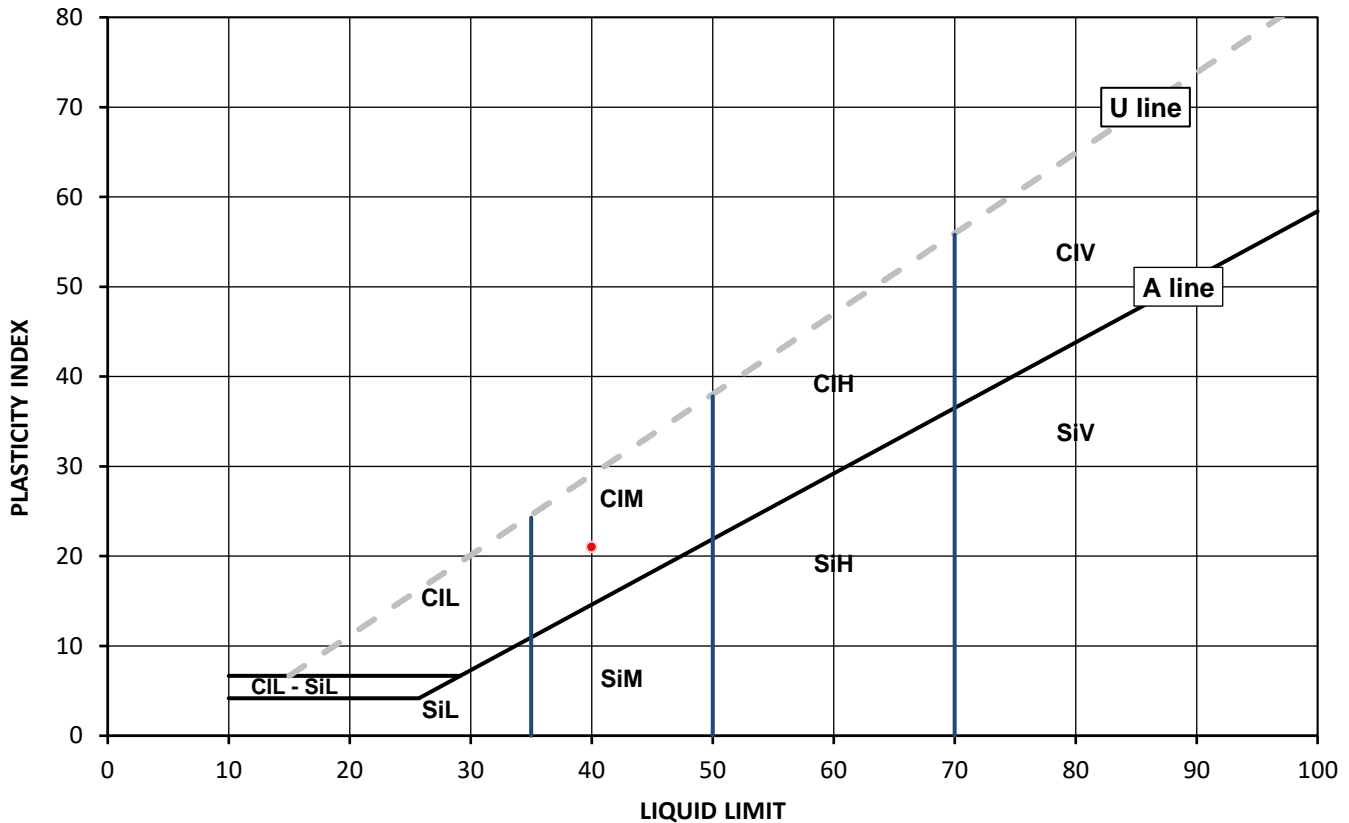
## Test Results:

Laboratory Reference: 2439927  
Hole No.: TP206  
Sample Reference: Not Given  
Sample Description: Brown gravelly sandy CLAY

Depth Top [m]: 0.40  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
12	40	19	21	49



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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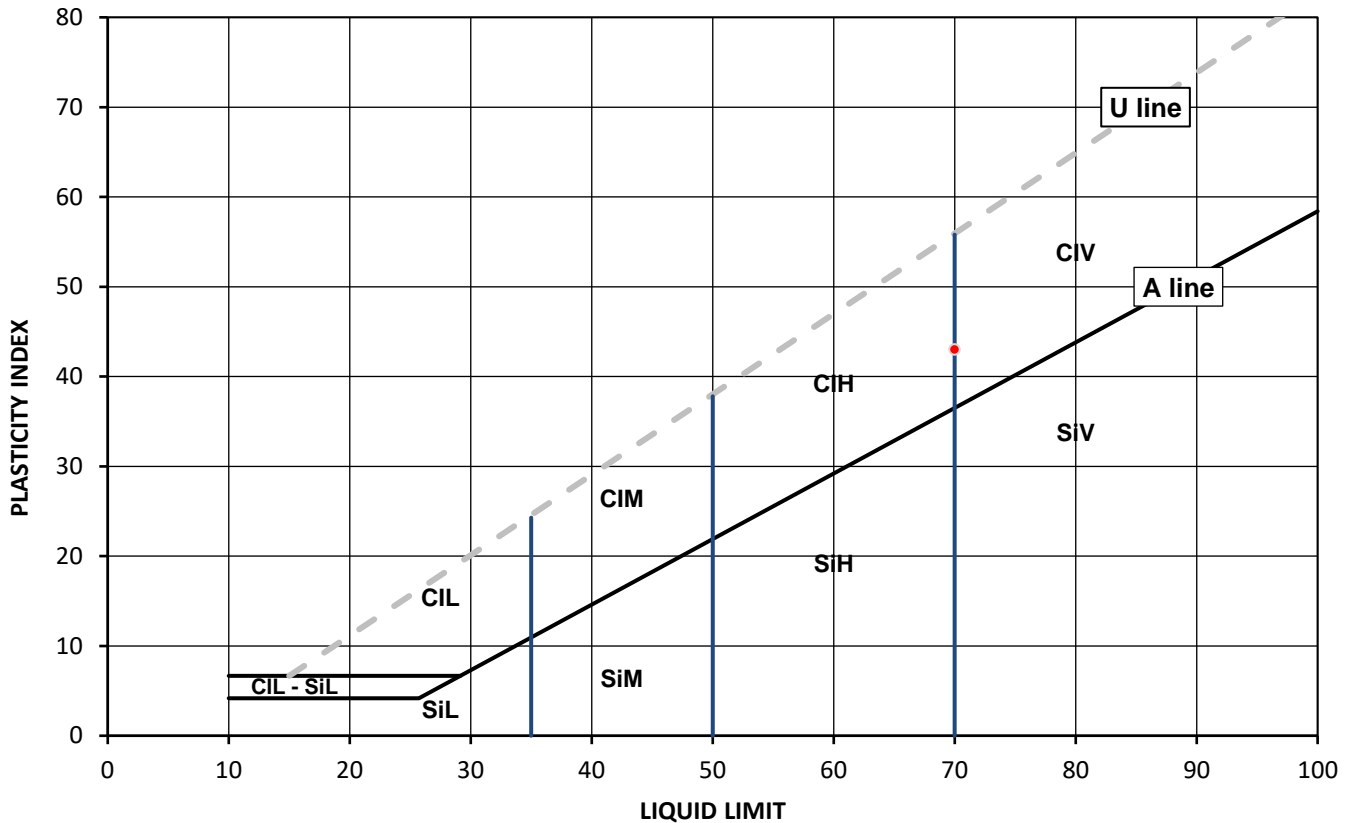
## Test Results:

Laboratory Reference: 2439930  
Hole No.: TP209  
Sample Reference: Not Given  
Sample Description: Brown slightly gravelly CLAY

Depth Top [m]: 3.40  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
27	70	27	43	99



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

*Monika Siewior*

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Sampled By: Not Given

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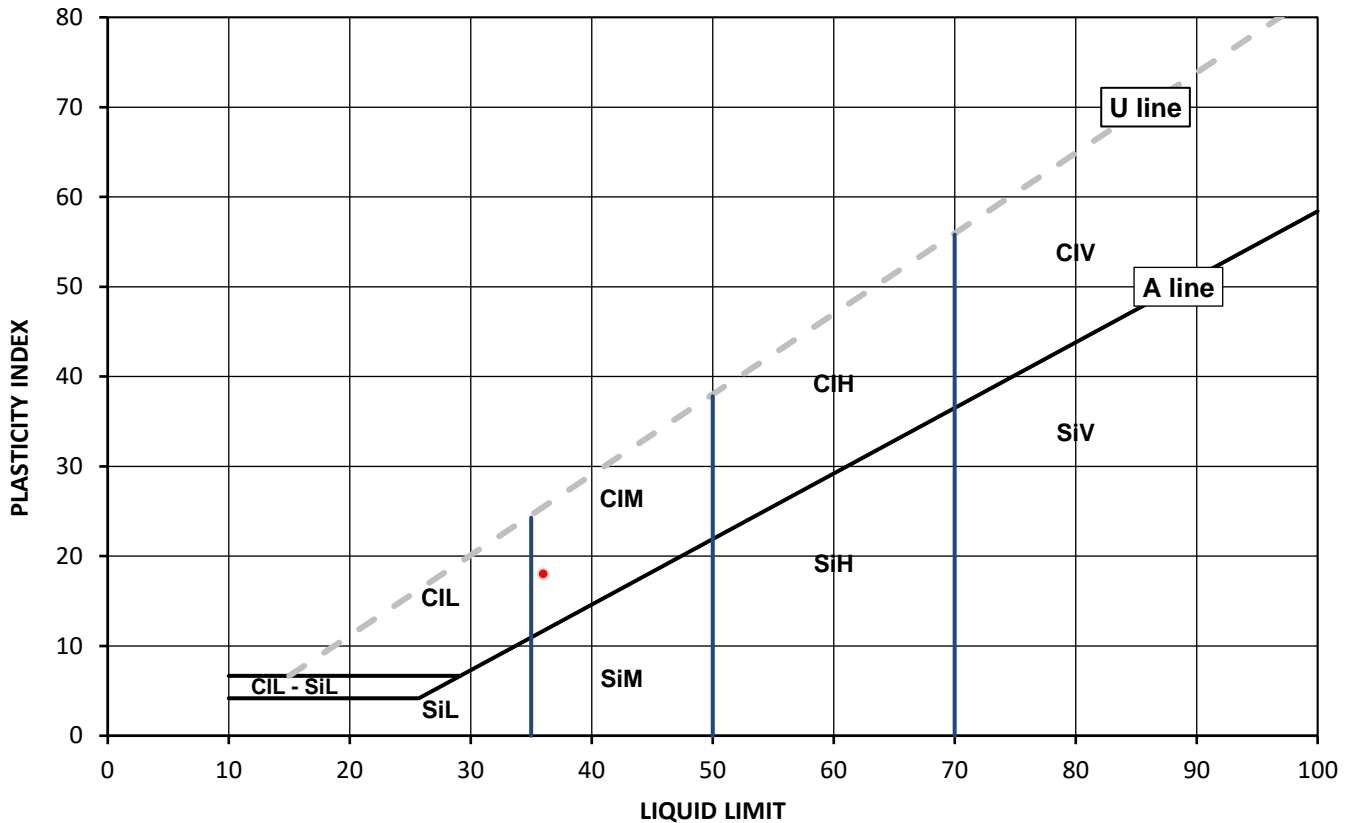
## Test Results:

Laboratory Reference: 2439931  
Hole No.: TP211  
Sample Reference: Not Given  
Sample Description: Brown gravelly sandy CLAY

Depth Top [m]: 0.60  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
12	36	18	18	54



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS  
Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 04/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

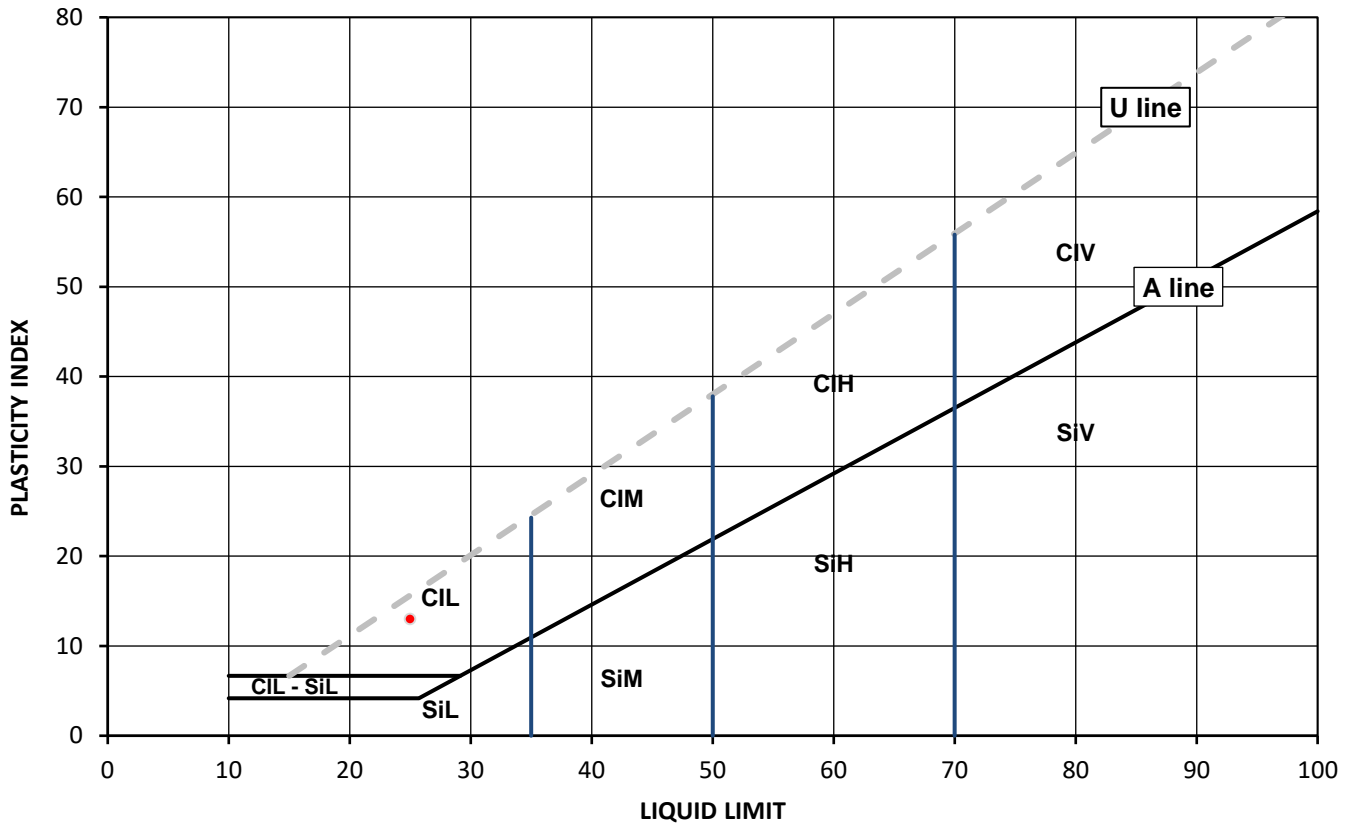
### Test Results:

Laboratory Reference: 2439935  
Hole No.: TP215  
Sample Reference: Not Given  
Sample Description: Brown slightly gravelly very sandy CLAY

Depth Top [m]: 0.80  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
22	25	12	13	84



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

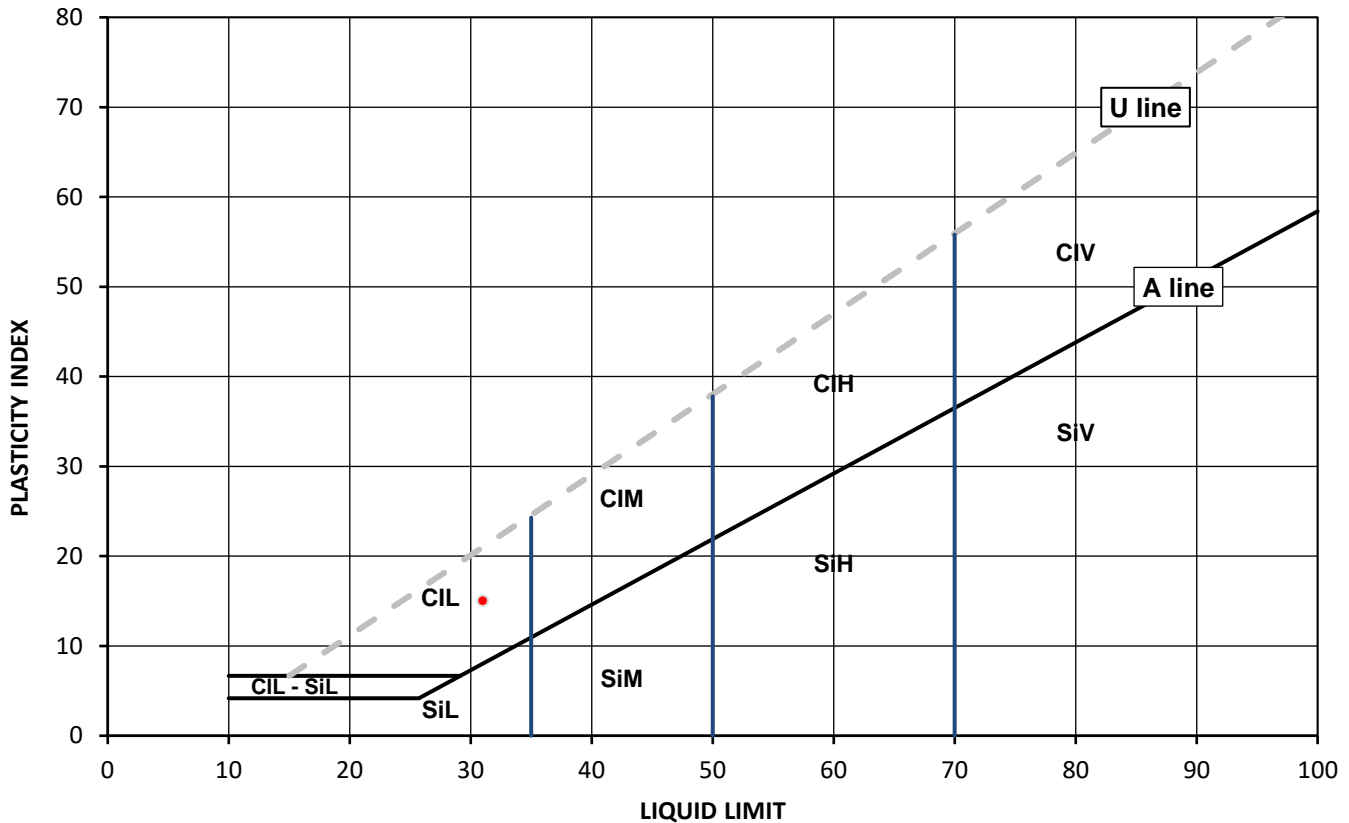
## Test Results:

Laboratory Reference: 2439936  
Hole No.: TP218  
Sample Reference: Not Given  
Sample Description: Yellowish brown slightly gravelly very sandy CLAY

Depth Top [m]: 3.20  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
23	31	16	15	89



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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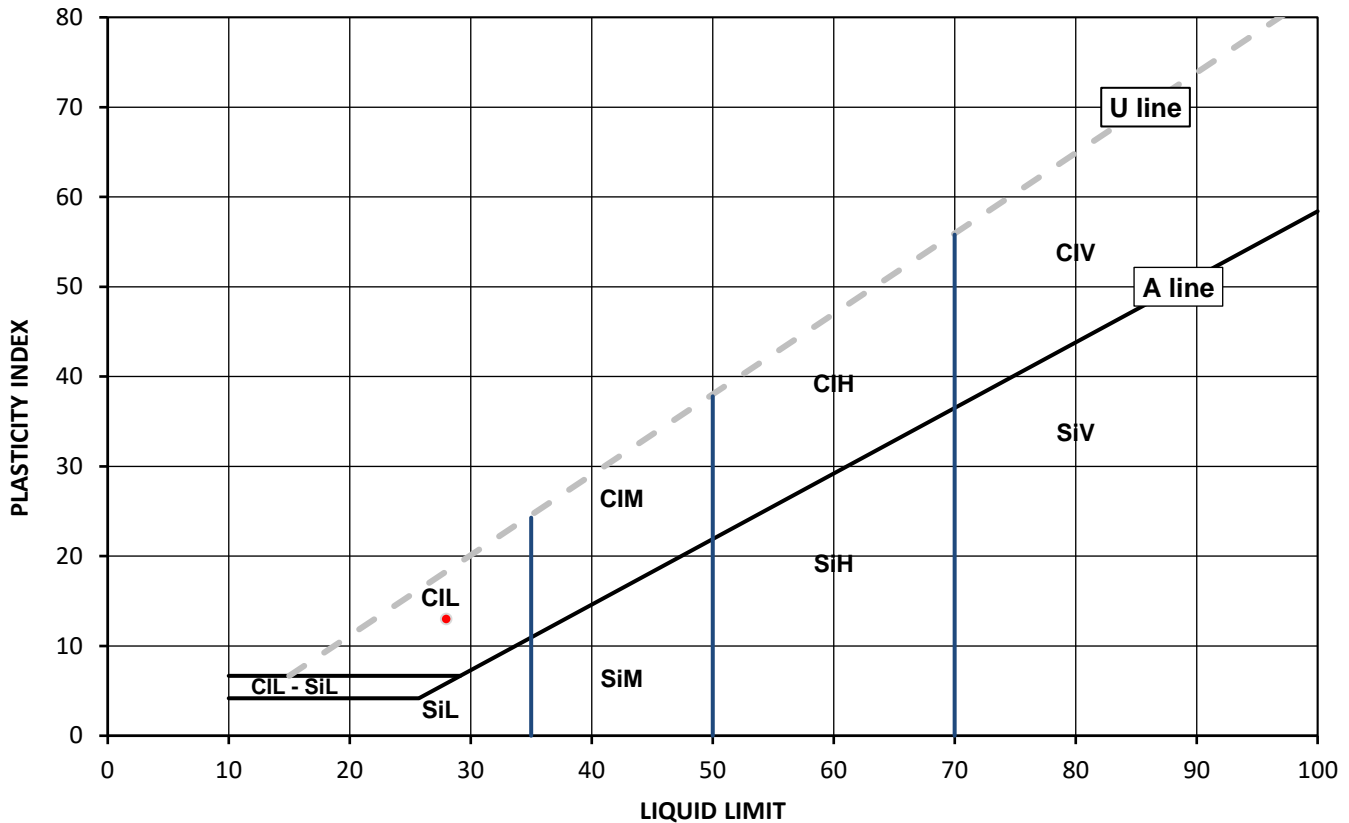
### Test Results:

Laboratory Reference: 2439937  
Hole No.: TP219  
Sample Reference: Not Given  
Sample Description: Brownish grey slightly gravelly very sandy CLAY

Depth Top [m]: 2.30  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
14	28	15	13	99



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Date Sampled: 09/09/2022  
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Date Tested: 06/10/2022  
Sampled By: Not Given

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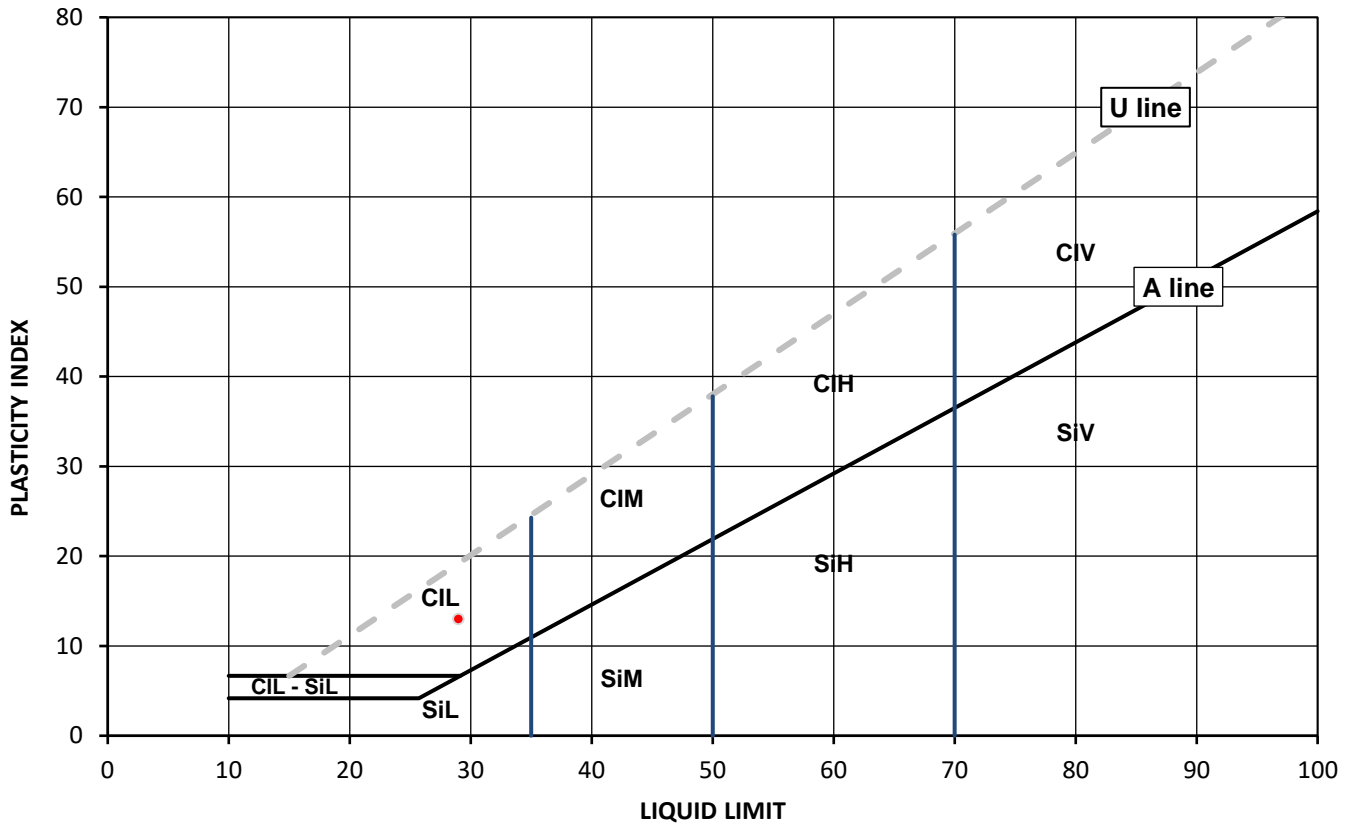
### Test Results:

Laboratory Reference: 2439938  
Hole No.: TP220  
Sample Reference: Not Given  
Sample Description: Grey mottled brown gravelly silty clayey SAND

Depth Top [m]: 2.50  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
18	29	16	13	94



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt	M	Medium			35 to 50
		H	High			50 to 70
		V	Very high			exceeding 70
		O	Organic			append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Sampled By: Not Given

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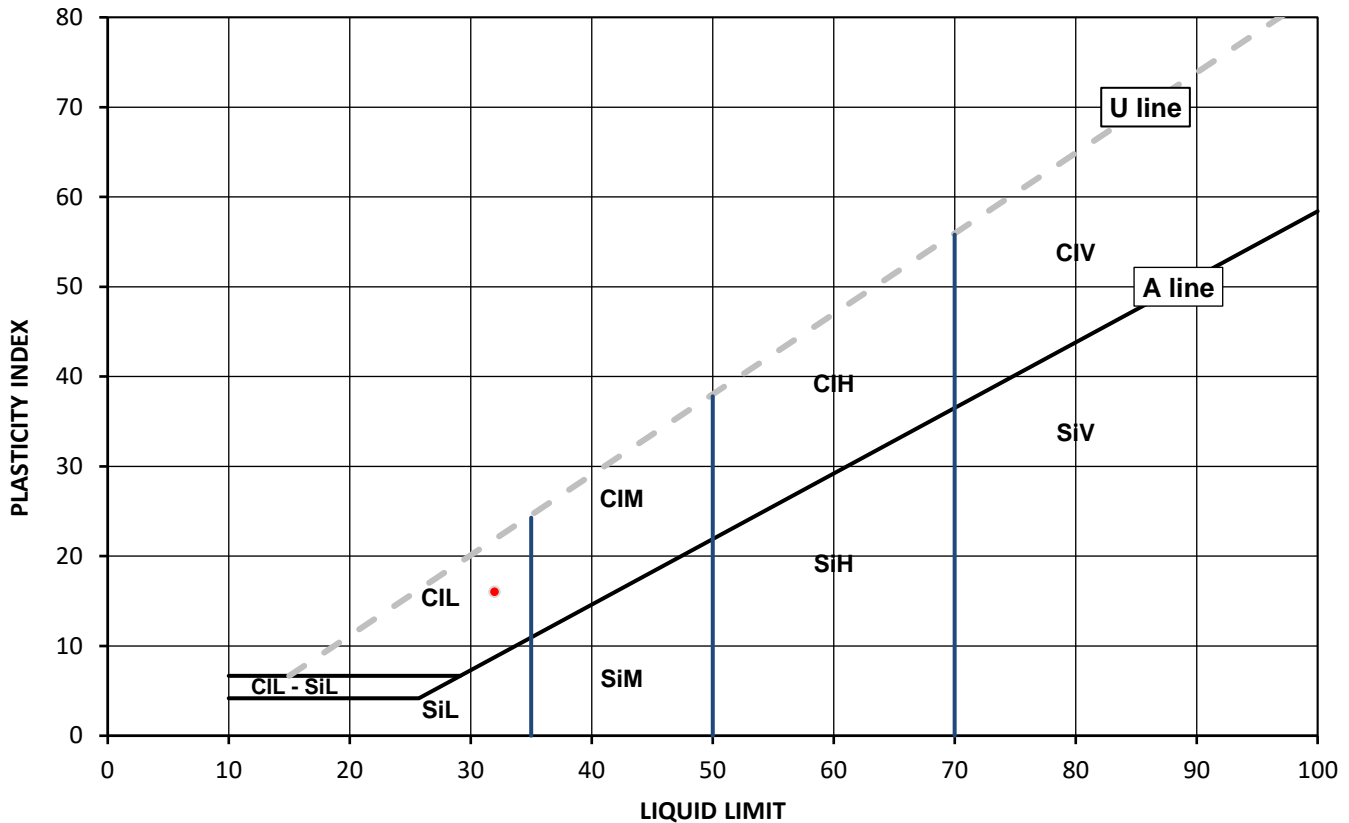
### Test Results:

Laboratory Reference: 2439942  
Hole No.: TP225  
Sample Reference: Not Given  
Sample Description: Yellowish brown gravelly very sandy CLAY

Depth Top [m]: 1.30  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
20	32	16	16	63



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Date Tested: 06/10/2022  
Sampled By: Not Given

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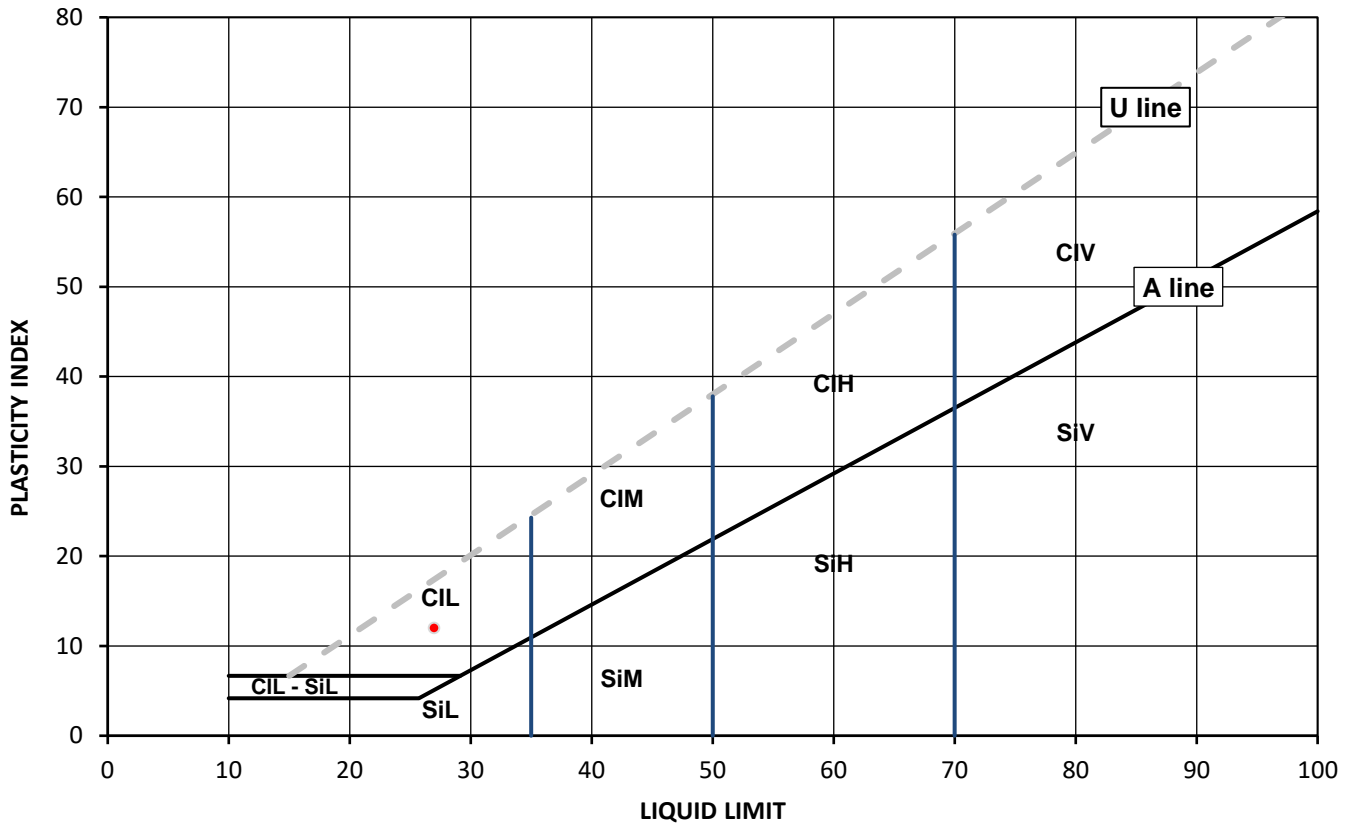
### Test Results:

Laboratory Reference: 2439945  
Hole No.: TP227  
Sample Reference: Not Given  
Sample Description: Yellowish brown clayey very gravelly SAND

Depth Top [m]: 2.20  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
13	27	15	12	36



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Date Tested: 06/10/2022  
Sampled By: Not Given

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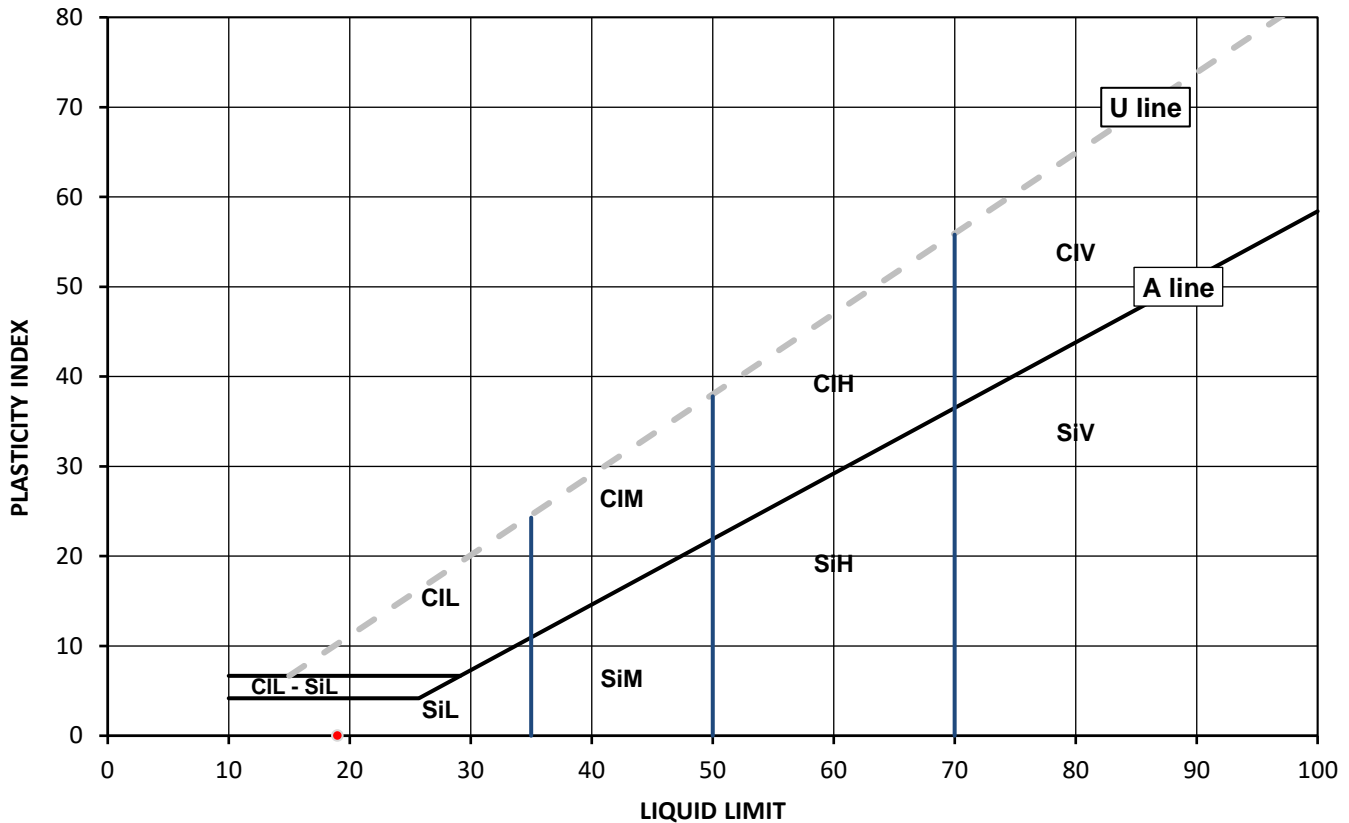
### Test Results:

Laboratory Reference: 2439946  
Hole No.: TP229  
Sample Reference: Not Given  
Sample Description: Yellowish brown slightly clayey gravelly SAND

Depth Top [m]: 1.20  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
5.9	19	NP	NP	43



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks: NP - non plastic

Signed:

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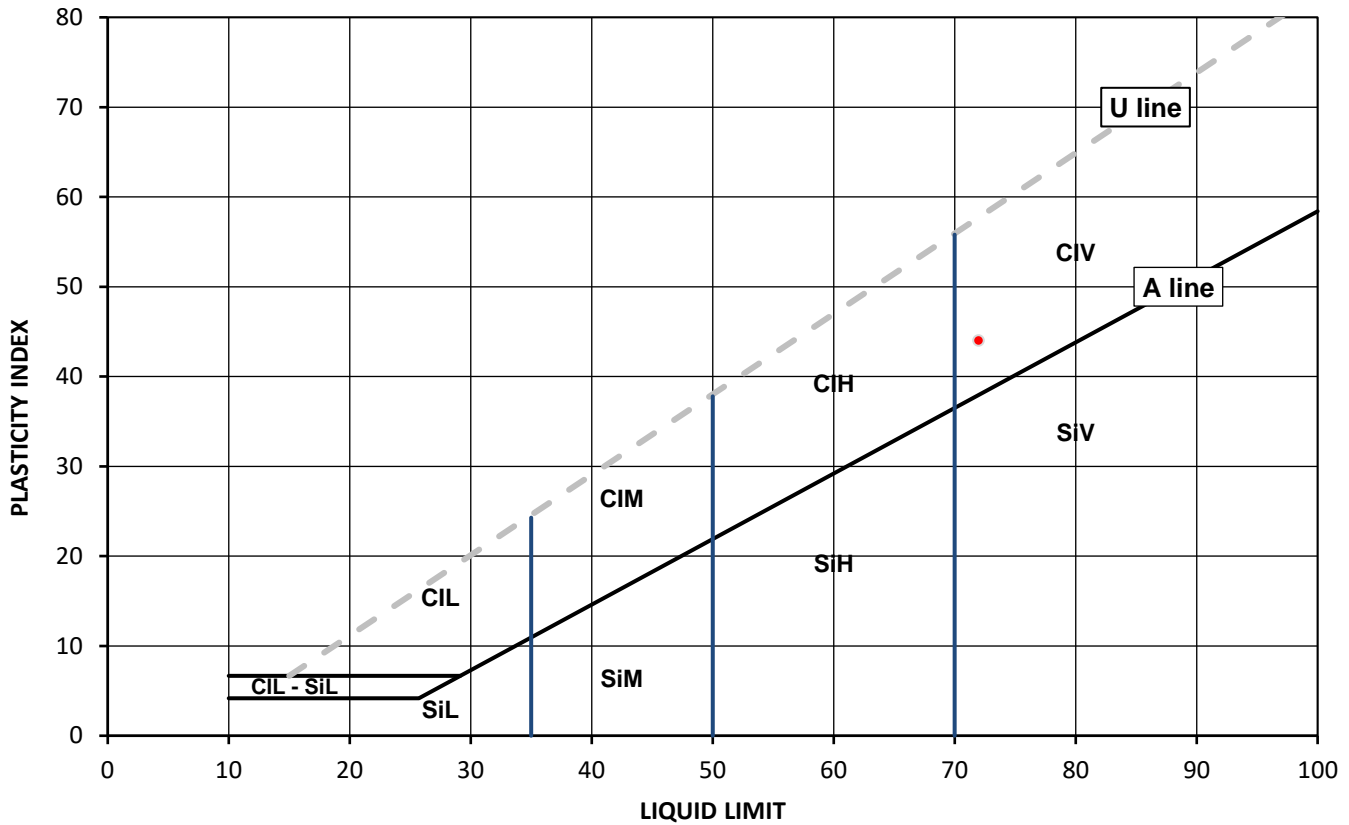
## Test Results:

Laboratory Reference: 2439948  
Hole No.: TP232  
Sample Reference: Not Given  
Sample Description: Brown CLAY

Depth Top [m]: 0.50  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
29	72	28	44	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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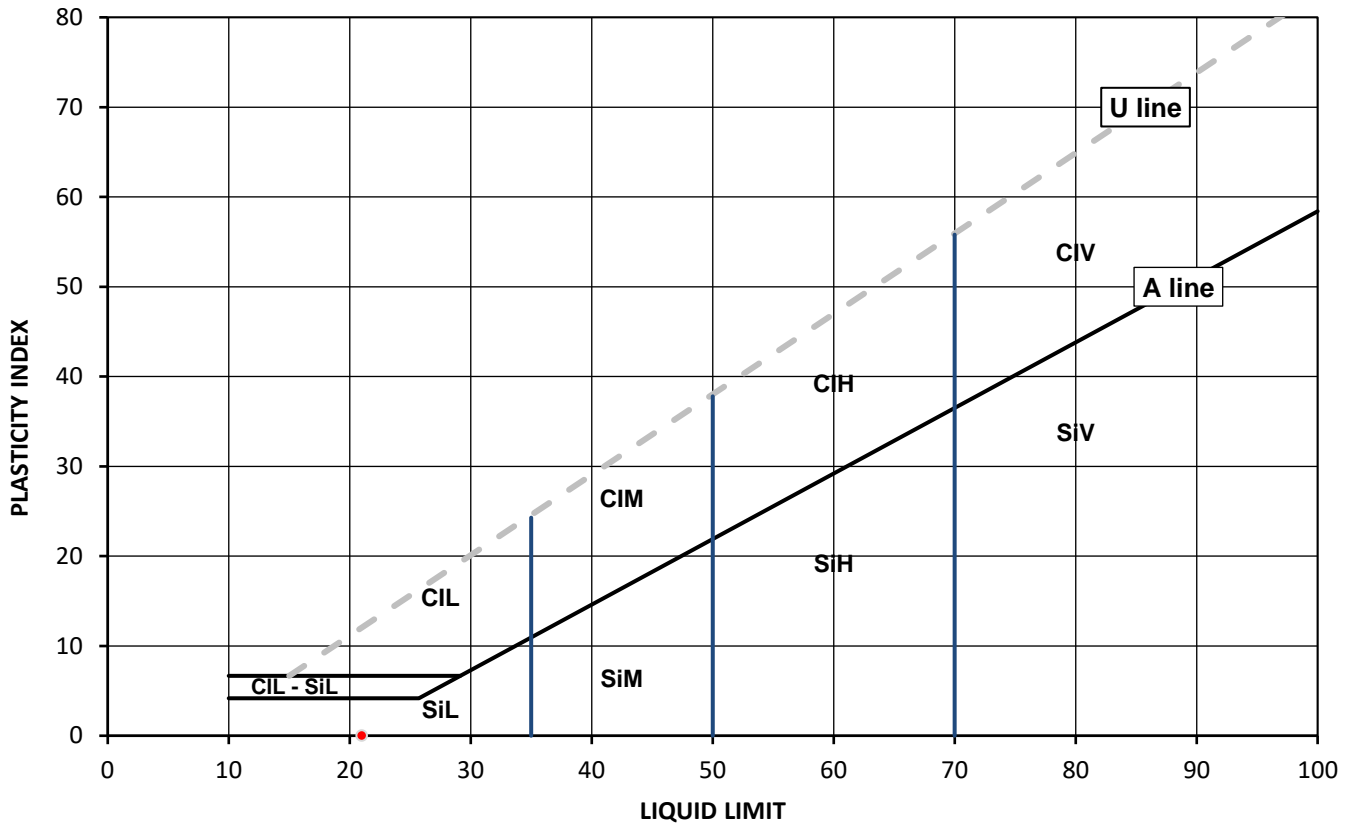
### Test Results:

Laboratory Reference: 2439949  
Hole No.: TP234  
Sample Reference: Not Given  
Sample Description: Yellowish brown clayey very gravelly SAND

Depth Top [m]: 0.70  
Depth Base [m]: 0.90  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
10	21	NP	NP	40



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks: NP - non plastic

Signed:

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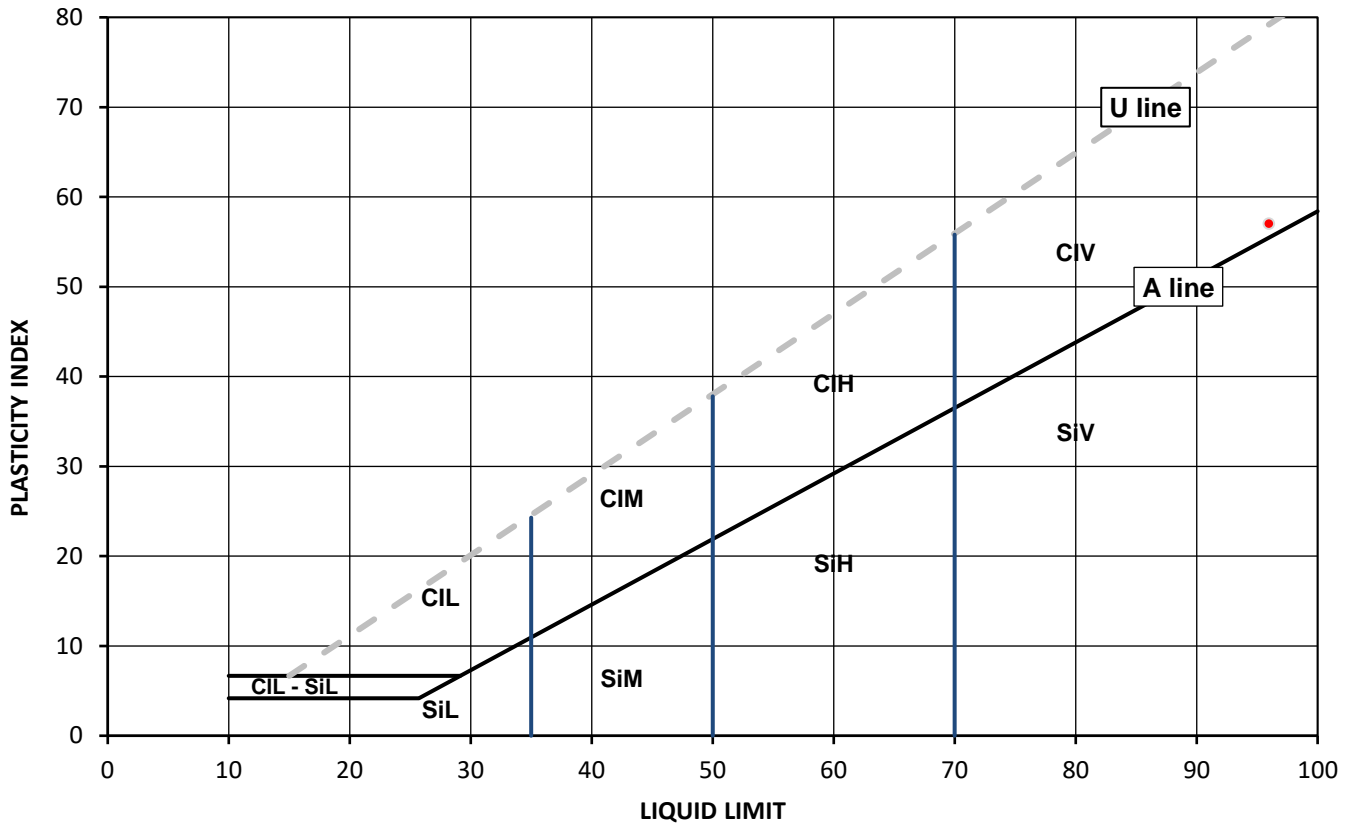
### Test Results:

Laboratory Reference: 2439951  
Hole No.: WS205  
Sample Reference: Not Given  
Sample Description: Brownish grey slightly gravelly CLAY

Depth Top [m]: 1.00  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
38	96	39	57	99



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

*Monika Siewior*

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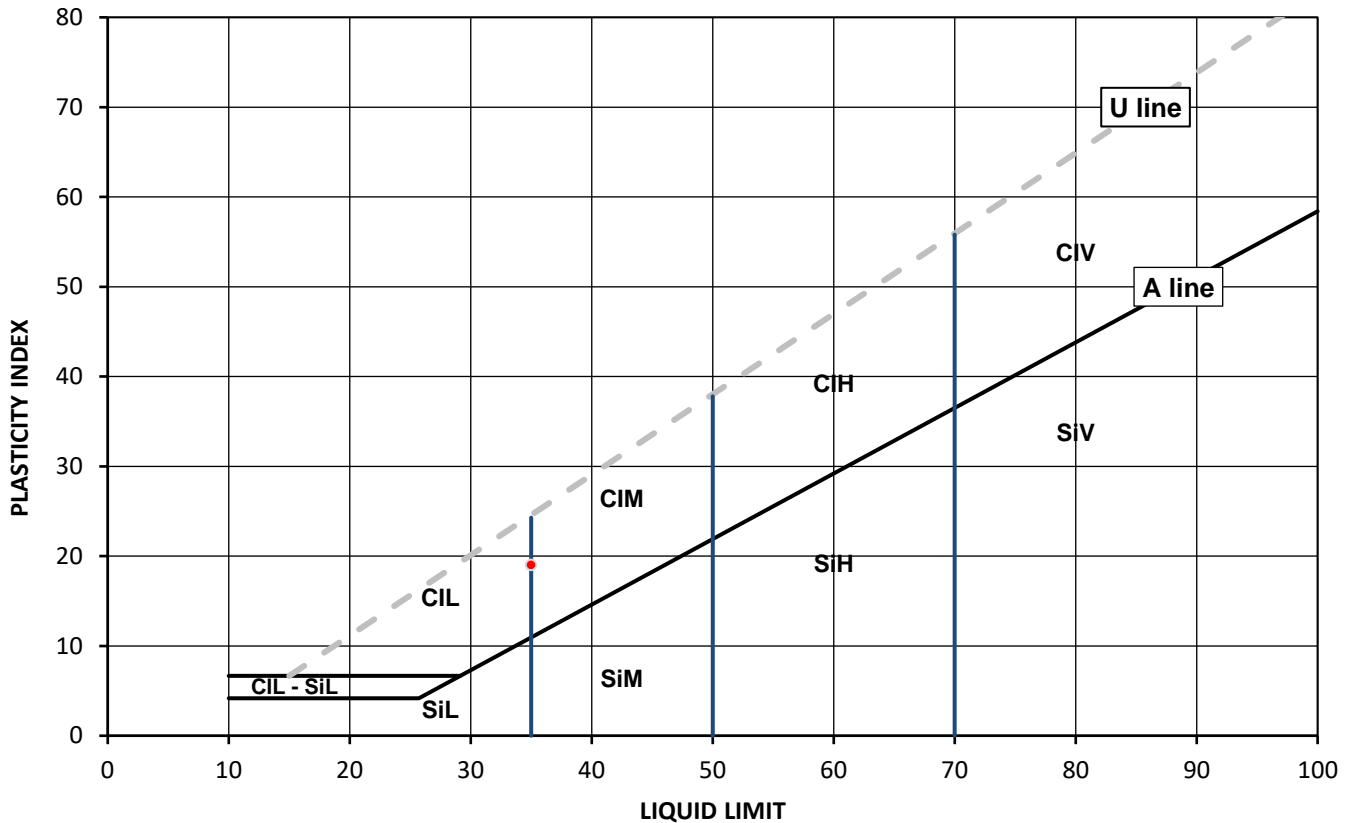
### Test Results:

Laboratory Reference: 2439952  
Hole No.: WS207  
Sample Reference: Not Given  
Sample Description: Greyish brown slightly gravelly sandy CLAY

Depth Top [m]: 0.90  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
22	35	16	19	96



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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DETERMINATION OF LIQUID AND PLASTIC LIMITS  
Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 04/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

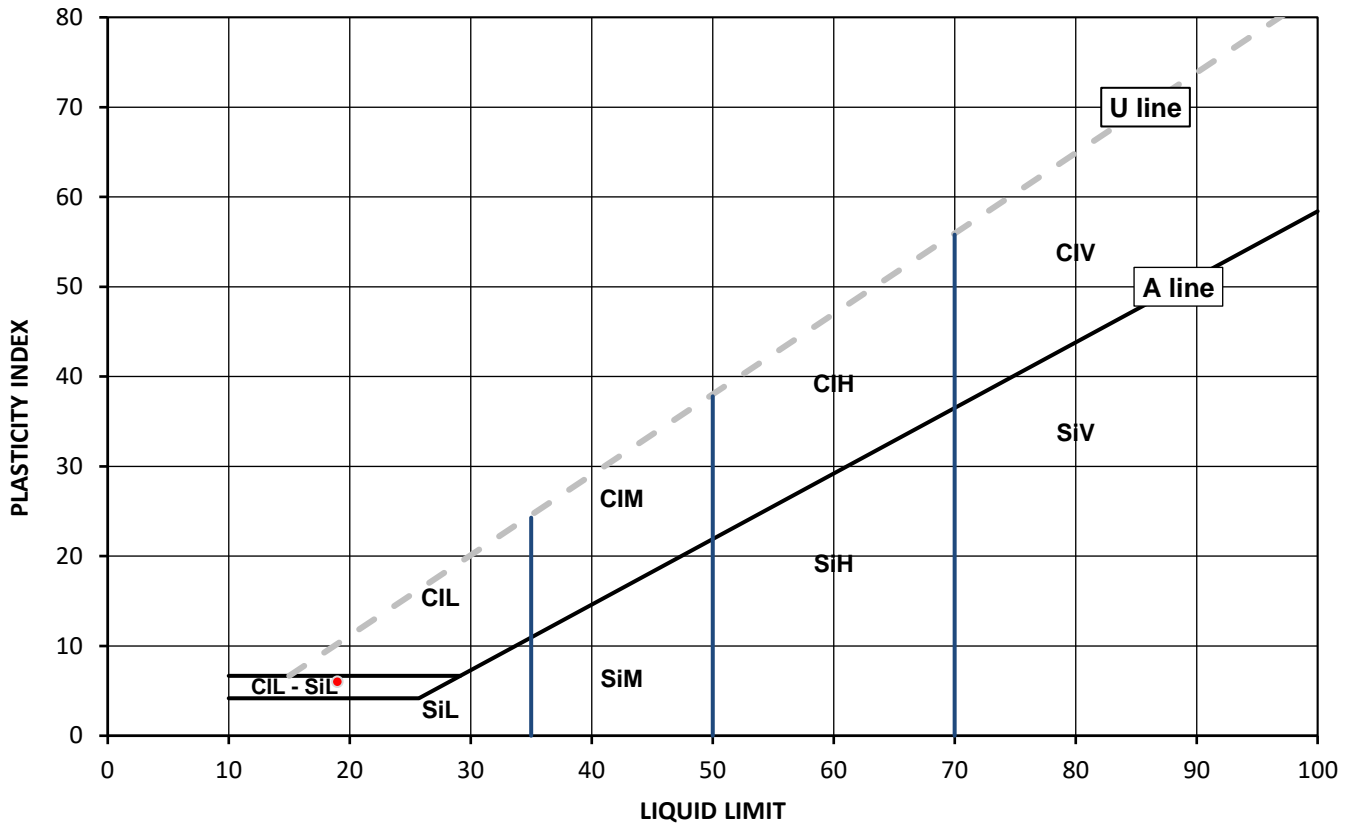
## Test Results:

Laboratory Reference: 2439953  
Hole No.: WS207  
Sample Reference: Not Given  
Sample Description: Brown gravelly slightly clayey SAND

Depth Top [m]: 1.80  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
12	19	13	6	43



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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Job Number: 22-86688  
Date Sampled: 09/09/2022  
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Date Tested: 04/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

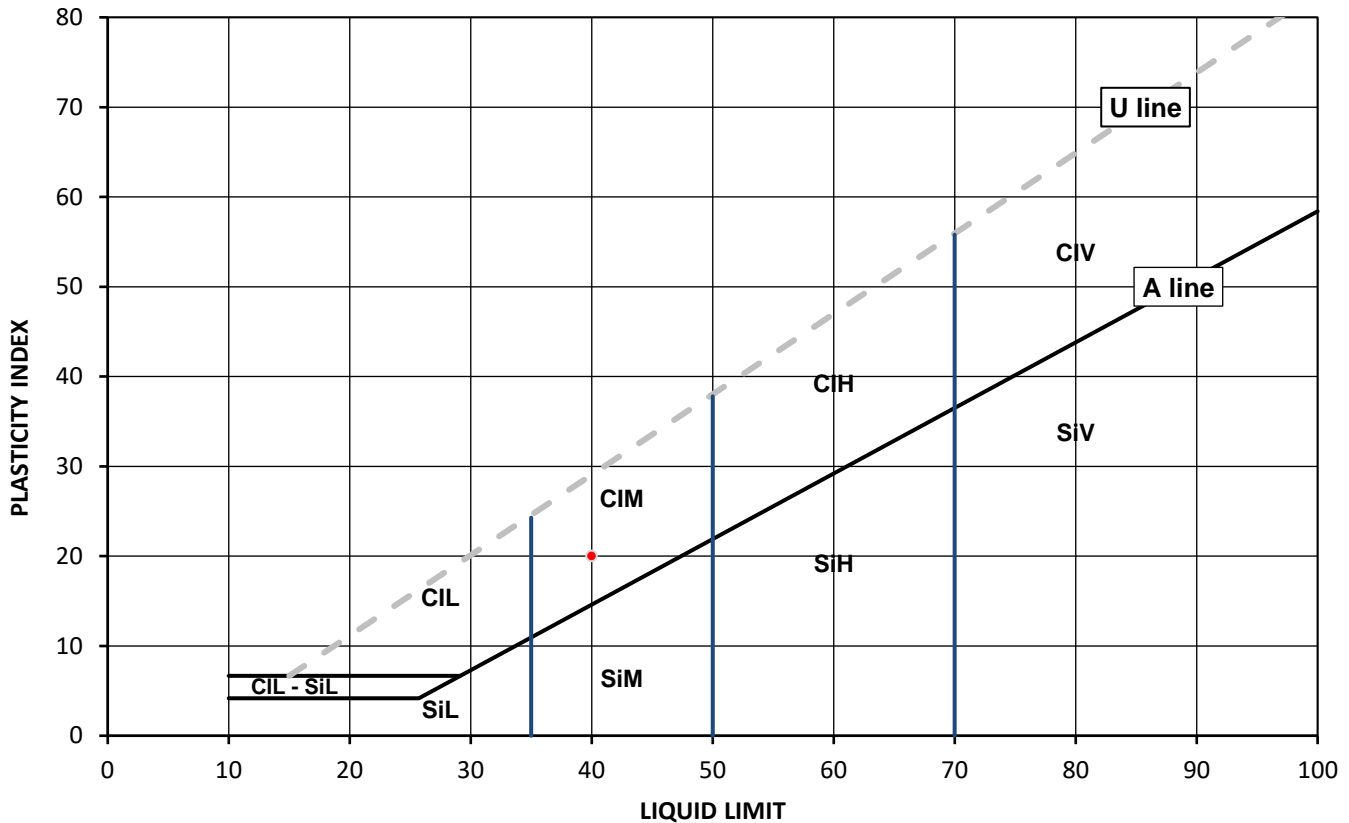
### Test Results:

Laboratory Reference: 2439954  
Hole No.: WS214  
Sample Reference: Not Given  
Sample Description: Yellowish brown very gravelly sandy CLAY

Depth Top [m]: 0.90  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
7.8	40	20	20	35



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Site Address: Begbroke

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Job Number: 22-86688  
Date Sampled: 09/09/2022  
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Date Tested: 04/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

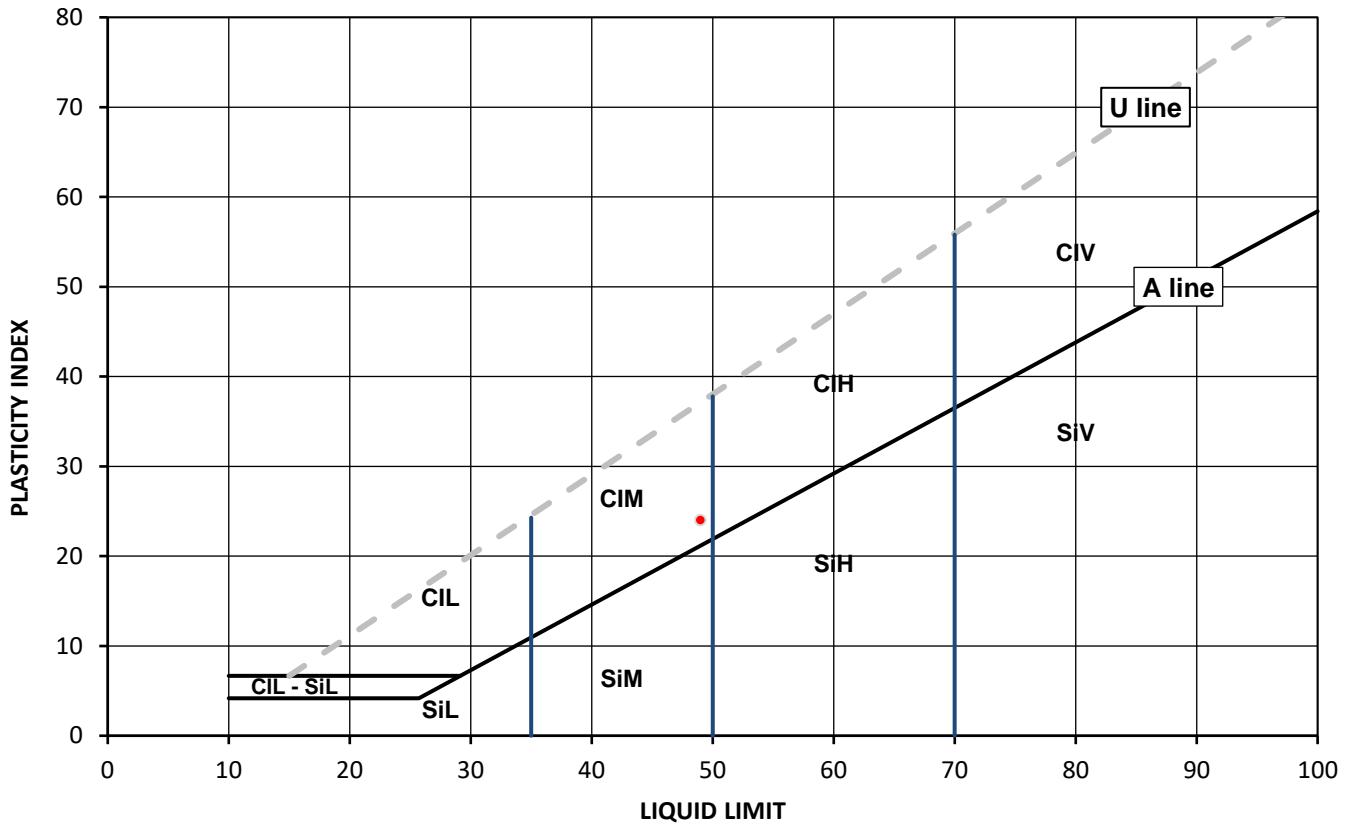
### Test Results:

Laboratory Reference: 2439955  
Hole No.: WS215  
Sample Reference: Not Given  
Sample Description: Yellowish brown gravelly slightly sandy CLAY

Depth Top [m]: 1.60  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
15	49	25	24	58



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	Liquid Limit
Si	Silt	L	below 35
		M	35 to 50
		H	50 to 70
		V	exceeding 70
		O	append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Site Address: Begbroke

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Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 04/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

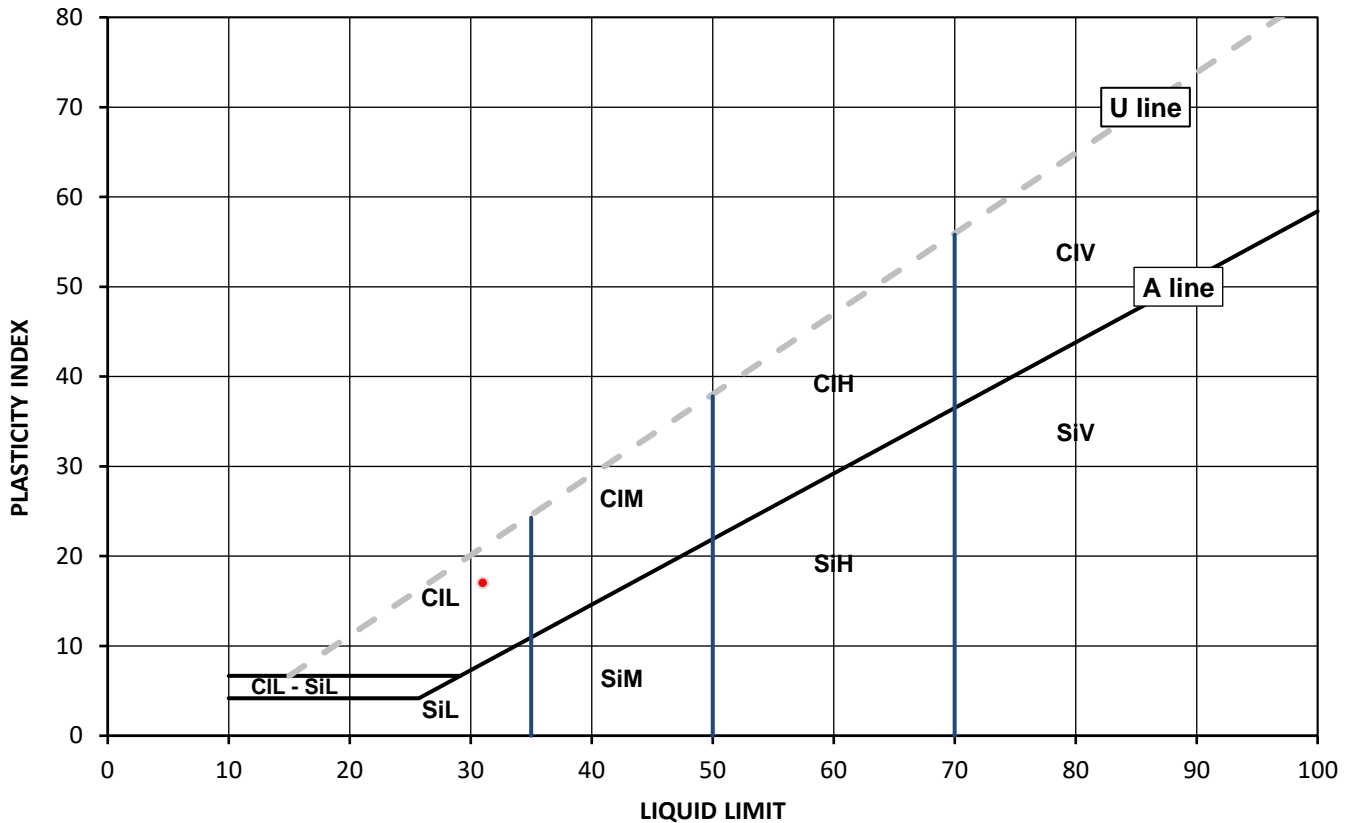
### Test Results:

Laboratory Reference: 2439957  
Hole No.: WS219  
Sample Reference: Not Given  
Sample Description: Yellowish brown very sandy CLAY

Depth Top [m]: 1.10  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
11	31	14	17	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt	M	Medium	35 to 50		
		H	High	50 to 70		
		V	Very high	exceeding 70		
		O	Organic	append to classification for organic material ( eg CIHO )		

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 04/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

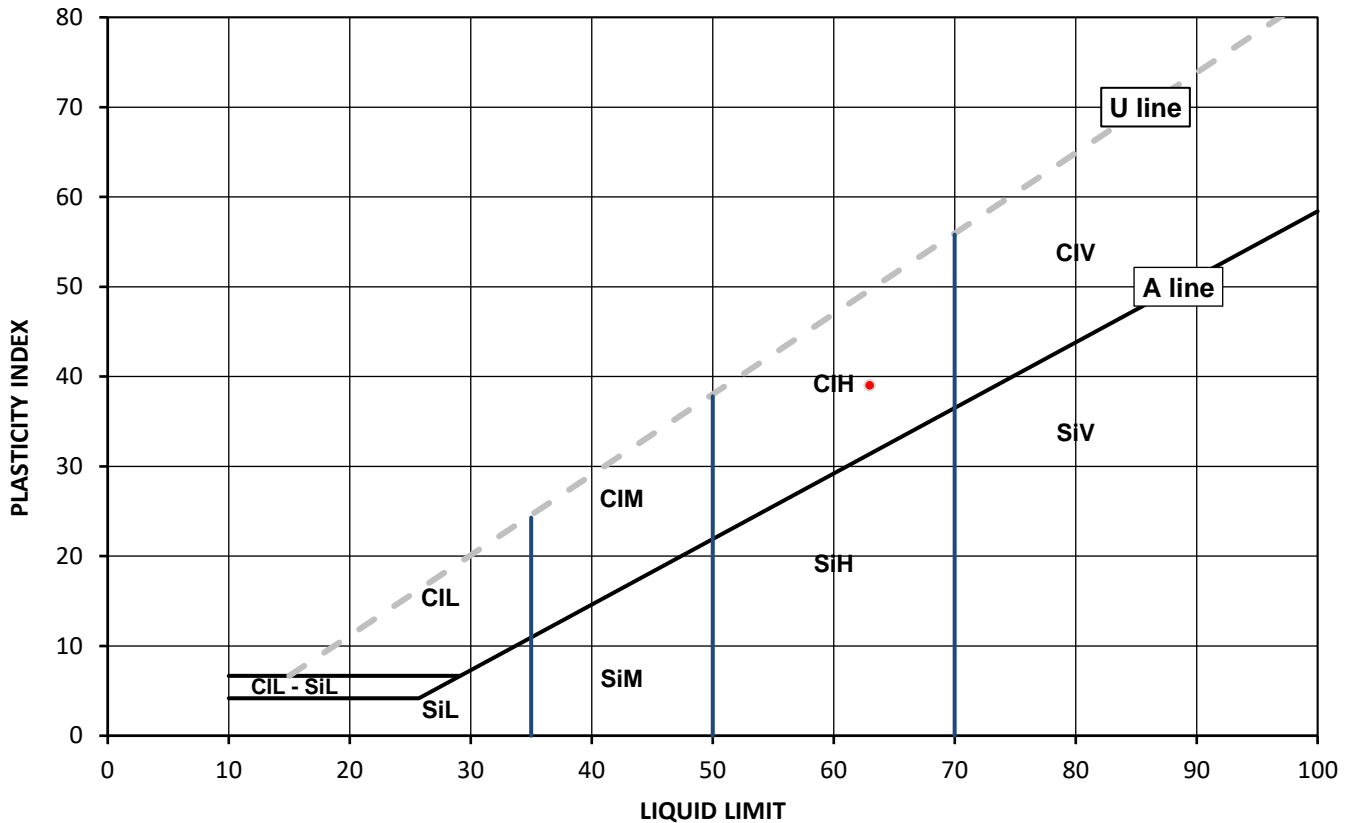
## Test Results:

Laboratory Reference: 2439958  
Hole No.: WS219  
Sample Reference: Not Given  
Sample Description: Yellowish brown to grey CLAY

Depth Top [m]: 2.00  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
26	63	24	39	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 06/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

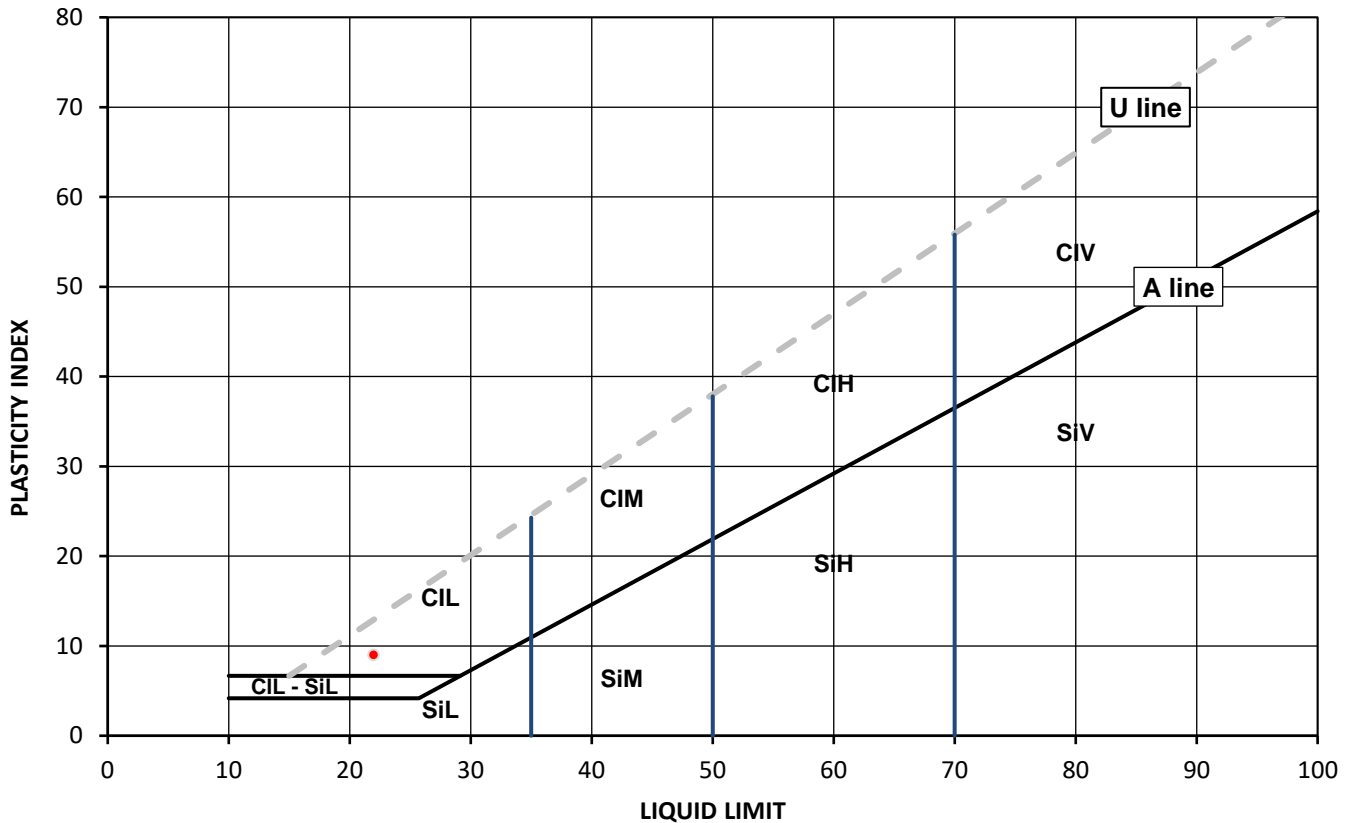
### Test Results:

Laboratory Reference: 2439960  
Hole No.: WS225  
Sample Reference: Not Given  
Sample Description: Yellowish brown gravelly clayey SAND

Depth Top [m]: 1.20  
Depth Base [m]: 2.00  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
6.7	22	13	9	39



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 04/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

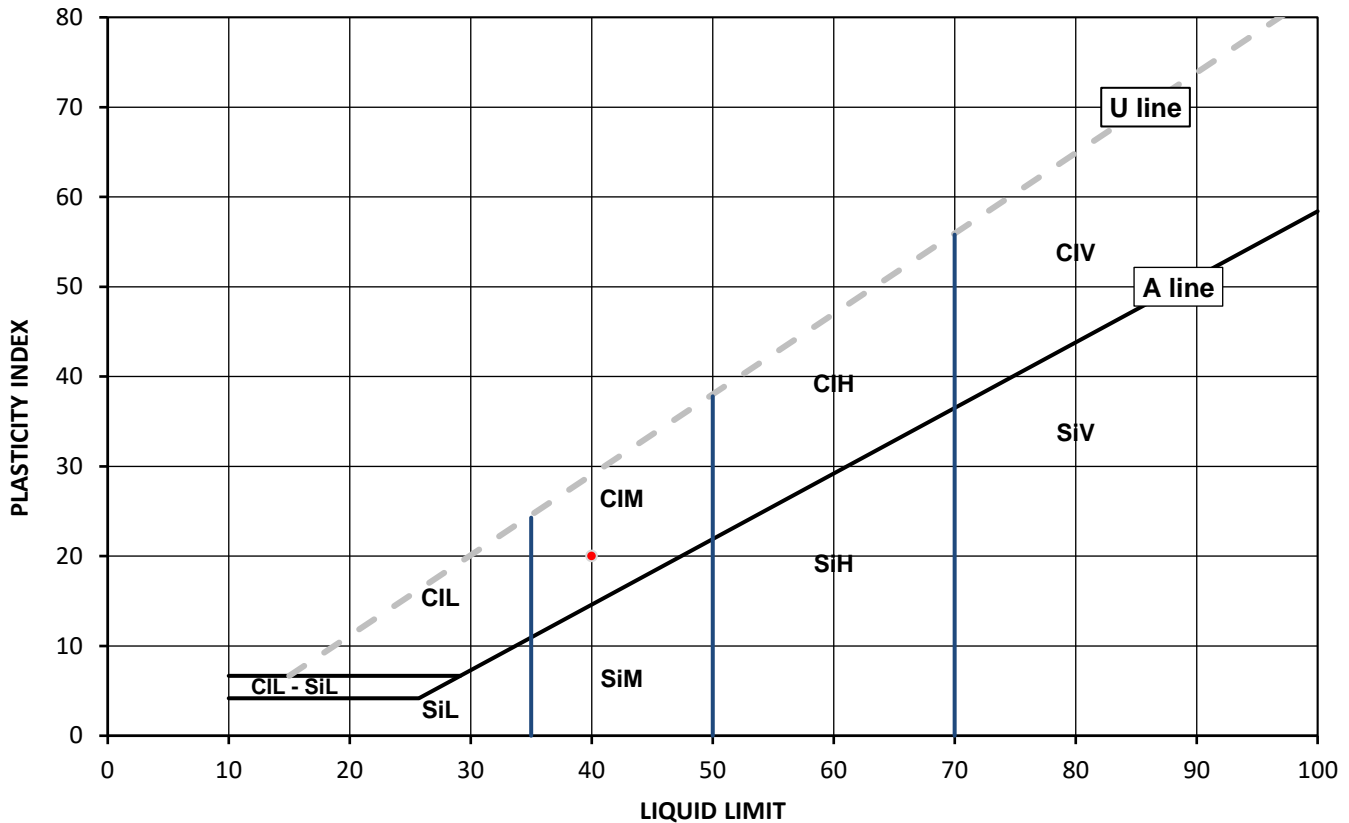
### Test Results:

Laboratory Reference: 2439962  
Hole No.: WS233  
Sample Reference: Not Given  
Sample Description: Yellowish brown to grey slightly gravelly sandy CLAY

Depth Top [m]: 1.60  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
20	40	20	20	99



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 04/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

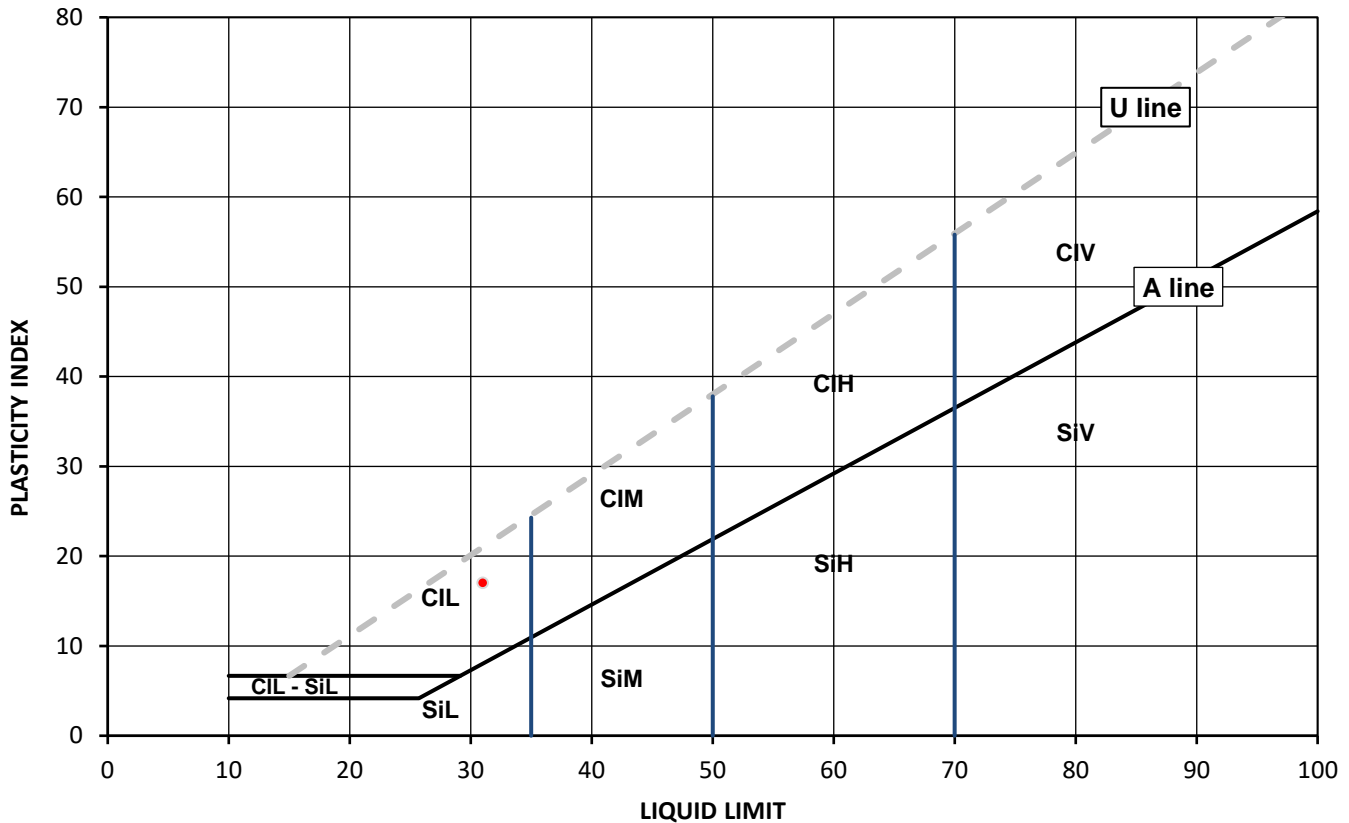
## Test Results:

Laboratory Reference: 2439963  
Hole No.: WS235  
Sample Reference: Not Given  
Sample Description: Grey very sandy CLAY

Depth Top [m]: 1.00  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
19	31	14	17	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	Liquid Limit
Si	Silt	L	below 35
		M	35 to 50
		H	50 to 70
		V	exceeding 70
		O	append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 05/10/2022  
Sampled By: Not Given

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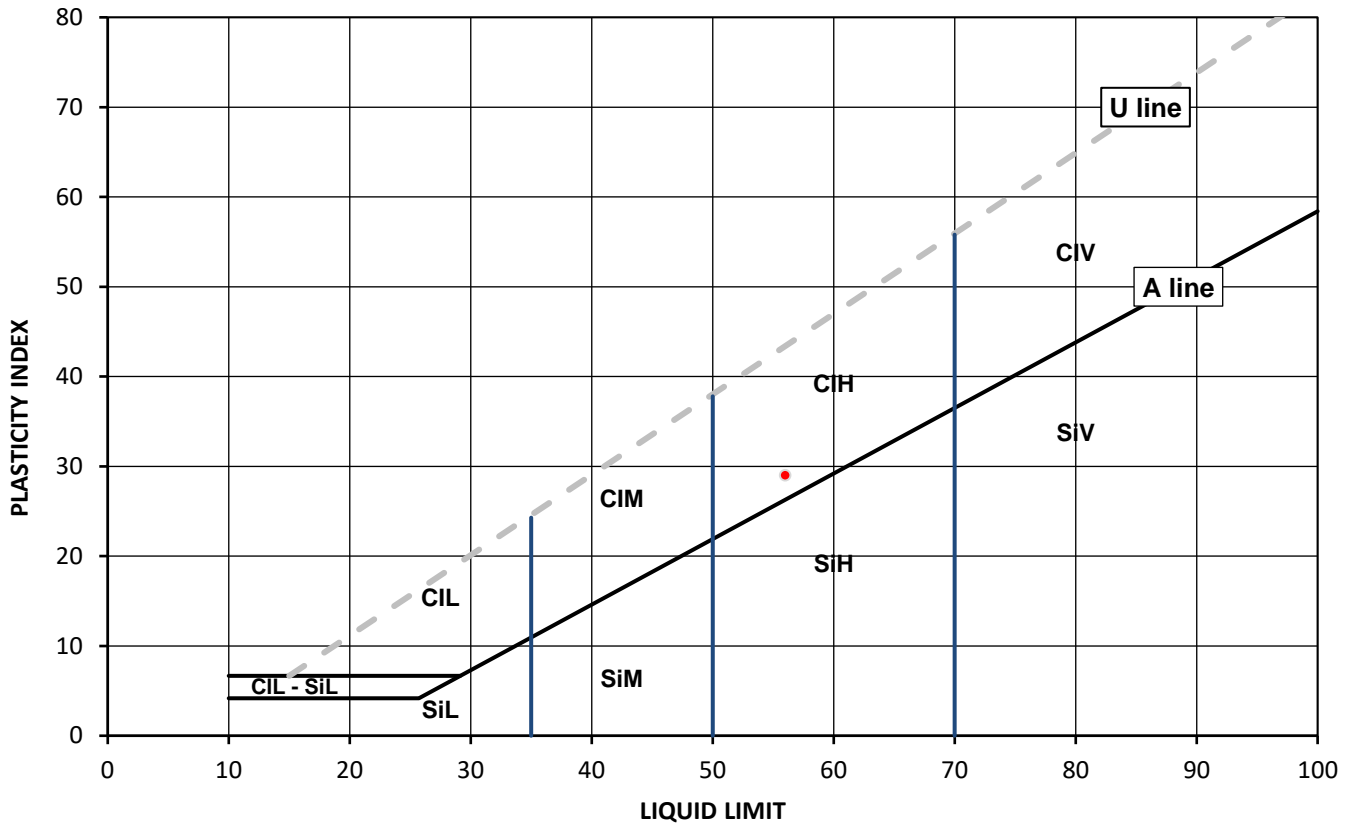
## Test Results:

Laboratory Reference: 2439964  
Hole No.: WS241  
Sample Reference: Not Given  
Sample Description: Yellowish brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 2.80  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
30	56	27	29	90



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt	M	Medium	H	High	35 to 50
		V	Very high	O	Organic	50 to 70
						exceeding 70
						append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Date Sampled: 09/09/2022  
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Date Tested: 04/10/2022  
Sampled By: Not Given

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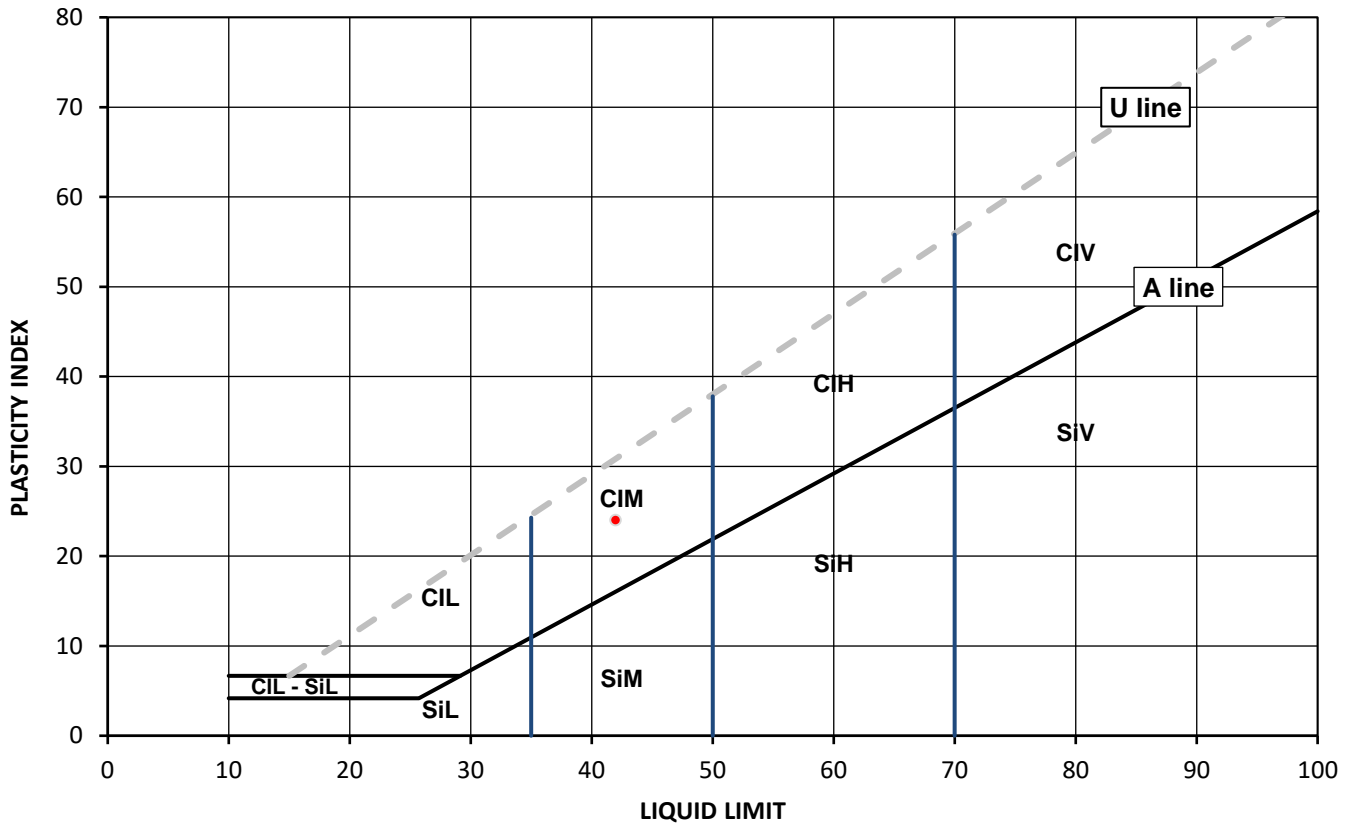
## Test Results:

Laboratory Reference: 2439965  
Hole No.: WS242  
Sample Reference: Not Given  
Sample Description: Brown slightly gravelly sandy CLAY

Depth Top [m]: 1.60  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
23	42	18	24	85



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Site Address: Begbroke

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Job Number: 22-86688  
Date Sampled: Not Given  
Date Received: 26/09/2022  
Date Tested: 06/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

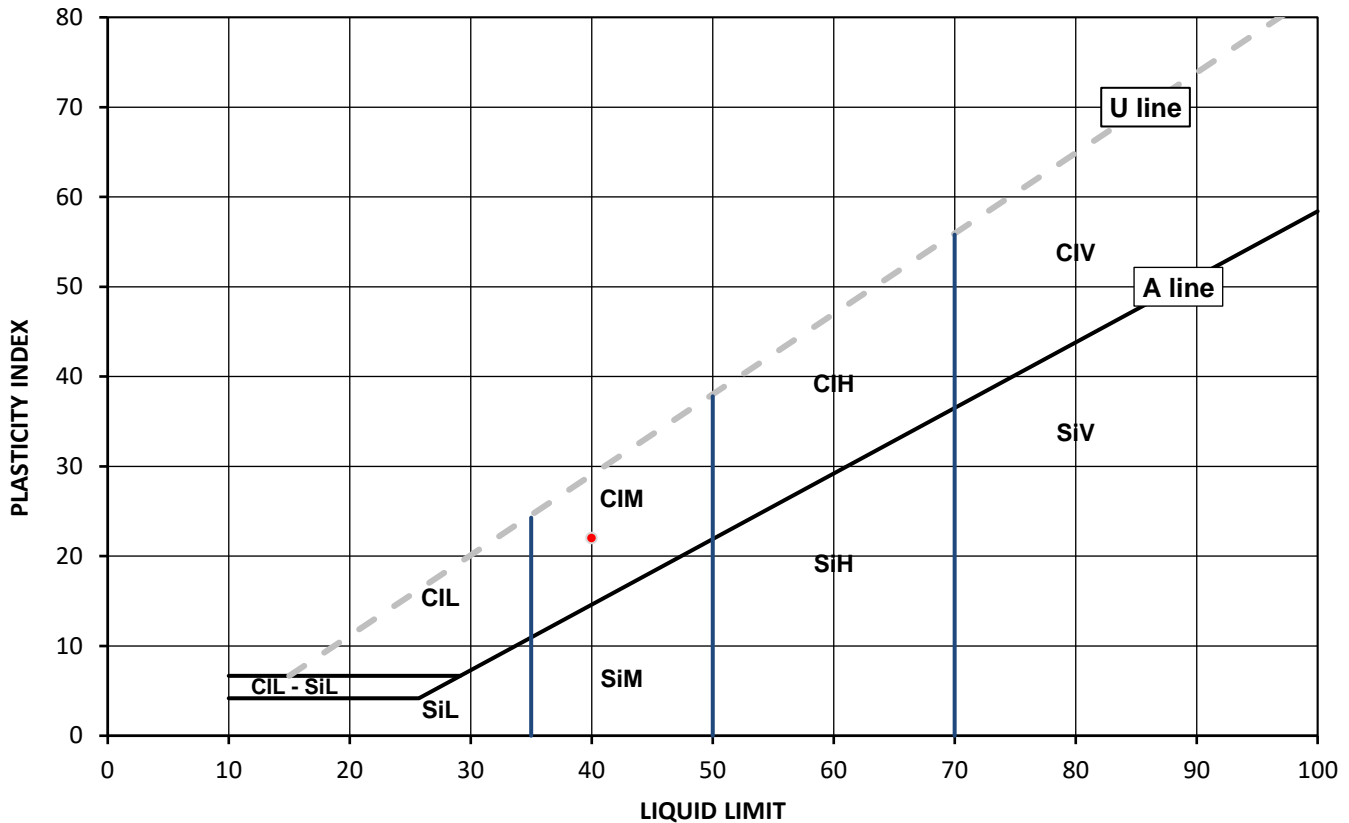
## Test Results:

Laboratory Reference: 2441113  
Hole No.: WS245  
Sample Reference: Not Given  
Sample Description: Brownish grey slightly gravelly sandy CLAY

Depth Top [m]: 1.10  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
34	40	18	22	93



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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 NN6 8LD

Contact: Nathan Thompson  
 Site Address: Begbroke

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

**SUMMARY REPORT****SUMMARY OF CLASSIFICATION TEST RESULTS**

Tested in Accordance with:

Water Content by BS 1377-2:1990: Clause 3.2; Atterberg by BS 1377-2: 1990:  
 Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2:  
 1990: Clause 8.2

i2 Analytical Ltd  
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 Northampton NN4 7EB



Environmental Science

Client Reference: 19114  
 Job Number: 22-86688  
 Date Sampled: 09/09/2022  
 Date Received: 26/09/2022  
 Date Tested: 04/10 - 05/10/2022  
 Sampled By: Not Given

**Test results**

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [ W ] %	Water Content BS EN ISO 17892-2 [ W ] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top m	Depth Base m	Type					% Passing 425um %	WL %	Wp %	Ip %	bulk Mg/m3	dry Mg/m3	PD Mg/m3			
2439922	BH202	Not Given	2.00	2.45	D	Yellowish brown slightly gravelly very sandy CLAY	Atterberg 4 Point	15		85	29	15	14						
2439923	BH202	Not Given	6.30	6.60	D	Greyish brown CLAY		20											
2439917	TP201	Not Given	0.70	Not Given	D	Orangish brown silty clayey very gravelly SAND	Atterberg 4 Point	9.8		40	35	18	17			2.92			
2439924	TP201	Not Given	1.80	Not Given	D	Brown CLAY		30											
2439925	TP201	Not Given	2.60	Not Given	D	Grey slightly gravelly CLAY	Atterberg 4 Point	29		99	74	29	45						
2439918	TP203	Not Given	1.30	Not Given	D	Brownish grey slightly sandy very silty CLAY	Atterberg 4 Point	27		100	71	31	40			2.72			
2439926	TP204	Not Given	0.60	0.70	D	Yellowish brown slightly clayey gravelly SAND		6.4											
2439927	TP206	Not Given	0.40	Not Given	D	Brown gravelly sandy CLAY	Atterberg 4 Point	12		49	40	19	21						
2439928	TP207	Not Given	0.70	Not Given	D	Yellowish brown slightly clayey slightly sandy COBBLES		2.7											
2439919	TP208	Not Given	0.60	0.70	D	Orangish brown silty clayey very gravelly SAND	Atterberg 4 Point	6.7		38	41	20	21			2.92			

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

*Monika Siewior*

Monika Siewior  
 Reporting Specialist  
 for and on behalf of i2 Analytical Ltd

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 NN6 8LD

Contact: Nathan Thompson

Site Address: Begbroke

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

**SUMMARY REPORT****SUMMARY OF CLASSIFICATION TEST RESULTS**

Tested in Accordance with:

Water Content by BS 1377-2:1990: Clause 3.2; Atterberg by BS 1377-2: 1990:  
 Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2:  
 1990: Clause 8.2

i2 Analytical Ltd  
 Unit 8 Harrowden Road  
 Brackmills Industrial Estate  
 Northampton NN4 7EB



Environmental Science

Client Reference: 19114

Job Number: 22-86688

Date Sampled: 09/09/2022

Date Received: 26/09/2022

Date Tested: 04/10/2022

Sampled By: Not Given

**Test results**

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [ W ] %	Water Content BS EN ISO 17892-2 [ W ] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top m	Depth Base m	Type					% Passing 425um	WL %	Wp %	Ip %	bulk Mg/m3	dry Mg/m3	PD Mg/m3			
2439929	TP209	Not Given	0.60	Not Given	D	Brown silty clayey very gravelly SAND	7.0												
2439930	TP209	Not Given	3.40	Not Given	D	Brown slightly gravelly CLAY	27		99	70	27	43							
2439931	TP211	Not Given	0.60	Not Given	D	Brown gravelly sandy CLAY	12		54	36	18	18							
2439932	TP211	Not Given	1.20	Not Given	D	Brown gravelly silty clayey SAND	13												
2439933	TP212	Not Given	0.70	Not Given	D	Brown slightly clayey very gravelly SAND	5.8												
2439934	TP213	Not Given	1.30	Not Given	D	Brown gravelly CLAY	11												
2439935	TP215	Not Given	0.80	Not Given	D	Brown slightly gravelly very sandy CLAY	22		84	25	12	13							
2439920	TP218	Not Given	0.70	Not Given	D	Yellowish brown sandy silty clayey GRAVEL	13		42	34	18	16			2.74				
2439936	TP218	Not Given	3.20	Not Given	D	Yellowish brown slightly gravelly very sandy CLAY	23		89	31	16	15							
2439937	TP219	Not Given	2.30	Not Given	D	Brownish grey slightly gravelly very sandy CLAY	14		99	28	15	13							

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Environmental Science

Client Reference: 19114  
 Job Number: 22-86688  
 Date Sampled: 09/09/2022  
 Date Received: 26/09/2022  
 Date Tested: 04/10 - 06/10/2022  
 Sampled By: Not Given

**Test results**

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [ W ] %	Water Content BS EN ISO 17892-2 [ W ] %	Atterberg				Density			Total Porosity# %	
		Reference	Depth Top m	Depth Base m	Type					% Passing 425um	WL %	Wp %	Ip %	bulk Mg/m3	dry Mg/m3	PD Mg/m3		
2439938	TP220	Not Given	2.50	Not Given	D	Grey mottled brown gravelly silty clayey SAND	Atterberg 4 Point	18		94	29	16	13					
2439939	TP221	Not Given	0.70	Not Given	D	Brown clayey gravelly SAND		6.4										
2439921	TP221	Not Given	2.20	2.30	D	Orangish brown clayey very gravelly SAND	Atterberg 4 Point	8.3		46	22	NP	NP			2.83		
2439940	TP223	Not Given	1.20	Not Given	D	Yellowish brown slightly clayey silty SAND and GRAVEL		7.8										
2439941	TP224	Not Given	0.90	Not Given	D	Yellowish brown slightly gravelly sandy CLAY		9.8										
2439942	TP225	Not Given	1.30	Not Given	D	Yellowish brown gravelly very sandy CLAY	Atterberg 4 Point	20		63	32	16	16					
2441113	WS245	Not Given	1.10	Not Given	D	Brownish grey slightly gravelly sandy CLAY	Atterberg 4 Point	34		93	40	18	22					
2439944	TP226	Not Given	1.40	Not Given	D	Greyish brown CLAY		28										
2439945	TP227	Not Given	2.20	Not Given	D	Yellowish brown clayey very gravelly SAND	Atterberg 4 Point	13		36	27	15	12					
2439946	TP229	Not Given	1.20	Not Given	D	Yellowish brown slightly clayey gravelly SAND	Atterberg 4 Point	5.9		43	19	NP	NP					

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Environmental Science

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 Sampled By: Not Given

**Test results**

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [ W ] %	Water Content BS EN ISO 17892-2 [ W ] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top m	Depth Base m	Type					% Passing 425um	WL %	Wp %	Ip %	bulk Mg/m3	dry Mg/m3	PD Mg/m3			
2439947	TP230	Not Given	1.00	Not Given	D	Brownish grey gravelly SAND	7.7												
2439948	TP232	Not Given	0.50	Not Given	D	Brown CLAY	29		100	72	28	44							
2439949	TP234	Not Given	0.70	0.90	D	Yellowish brown clayey very gravelly SAND	10		40	21	NP	NP							
2439950	WS201	Not Given	1.70	Not Given	D	Brownish grey CLAY with fragments of chalk	28												
2439951	WS205	Not Given	1.00	Not Given	D	Brownish grey slightly gravelly CLAY	38		99	96	39	57							
2439952	WS207	Not Given	0.90	Not Given	D	Greyish brown slightly gravelly sandy CLAY	22		96	35	16	19							
2439953	WS207	Not Given	1.80	Not Given	D	Brown gravelly slightly clayey SAND	12		43	19	13	6							
2439954	WS214	Not Given	0.90	Not Given	D	Yellowish brown very gravelly sandy CLAY	7.8		35	40	20	20							
2439955	WS215	Not Given	1.60	Not Given	D	Yellowish brown gravelly slightly sandy CLAY	15		58	49	25	24							
2439956	WS217	Not Given	2.70	Not Given	D	Yellowish brown clayey gravelly SAND	4.4		38	21	NP	NP							

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Comments:

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Site Address: Begbroke

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

# SUMMARY REPORT

## SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

Water Content by BS 1377-2:1990: Clause 3.2; Atterberg by BS 1377-2: 1990: Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2: 1990: Clause 8.2

i2 Analytical Ltd  
Unit 8 Harrowden Road  
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Environmental Science

Client Reference: 19114

Job Number: 22-86688

Date Sampled: 09/09/2022

Date Received: 26/09/2022

Date Tested: 04/10 - 06/10/2022

Sampled By: Not Given

### Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [ W ] %	Water Content BS EN ISO 17892-2 [ W ] %	Atterberg				Density			Total Porosity# %
		Reference	Depth Top m	Depth Base m	Type					% Passing 425um	WL %	Wp %	Ip %	bulk Mg/m3	dry Mg/m3	PD Mg/m3	
2439957	WS219	Not Given	1.10	Not Given	D	Yellowish brown very sandy CLAY	Atterberg 4 Point	11		100	31	14	17				
2439958	WS219	Not Given	2.00	Not Given	D	Yellowish brown to grey CLAY	Atterberg 4 Point	26		100	63	24	39				
2439959	WS219	Not Given	3.20	4.00	D	Grey CLAY		24									
2439960	WS225	Not Given	1.20	2.00	D	Yellowish brown gravelly clayey SAND	Atterberg 4 Point	6.7		39	22	13	9				
2439961	WS227	Not Given	2.00	Not Given	D	Yellowish brown very gravelly SAND		7.5									
2439962	WS233	Not Given	1.60	Not Given	D	Yellowish brown to grey slightly gravelly sandy CLAY	Atterberg 4 Point	20		99	40	20	20				
2439963	WS235	Not Given	1.00	Not Given	D	Grey very sandy CLAY	Atterberg 4 Point	19		100	31	14	17				
2439964	WS241	Not Given	2.80	Not Given	D	Yellowish brown slightly gravelly slightly sandy CLAY	Atterberg 4 Point	30		90	56	27	29				
2439965	WS242	Not Given	1.60	Not Given	D	Brown slightly gravelly sandy CLAY	Atterberg 4 Point	23		85	42	18	24				

Note: # Non accredited; NP - Non plastic

Comments:

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**SUMMARY REPORT****DETERMINATION OF WATER CONTENT**

Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

i2 Analytical Ltd  
 Unit 8 Harrowden Road  
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Environmental Science

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 Date Tested: 04/10 - 06/10/2022  
 Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

**Test results**

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC %	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2439922	BH202	Not Given	2.00	2.45	D	Yellowish brown slightly gravelly very sandy CLAY		15	Sample was quartered, oven dried at 106 °C			
2439923	BH202	Not Given	6.30	6.60	D	Greyish brown CLAY		20	Sample was quartered, oven dried at 109 °C			
2439917	TP201	Not Given	0.70	Not Given	D	Orangish brown silty clayey very gravelly SAND		9.8	Sample was quartered, oven dried at 106 °C			
2439924	TP201	Not Given	1.80	Not Given	D	Brown CLAY		30	Sample was quartered, oven dried at 107.5 °C			
2439925	TP201	Not Given	2.60	Not Given	D	Grey slightly gravelly CLAY		29	Sample was quartered, oven dried at 107.5 °C			
2439918	TP203	Not Given	1.30	Not Given	D	Brownish grey slightly sandy very silty CLAY		27	Sample was quartered, oven dried at 106.6 °C			
2439926	TP204	Not Given	0.60	0.70	D	Yellowish brown slightly clayey gravelly SAND		6.4	Sample was quartered, oven dried at 109 °C			
2439927	TP206	Not Given	0.40	Not Given	D	Brown gravelly sandy CLAY		12	Sample was quartered, oven dried at 107.5 °C			
2439928	TP207	Not Given	0.70	Not Given	D	Yellowish brown slightly clayey slightly sandy COBBLES		2.7	Sample was quartered, oven dried at 109 °C			
2439919	TP208	Not Given	0.60	0.70	D	Orangish brown silty clayey very gravelly SAND		6.7	Sample was quartered, oven dried at 109 °C			

Comments:

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**SUMMARY REPORT****DETERMINATION OF WATER CONTENT**

Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

i2 Analytical Ltd  
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Environmental Science

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Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

**Test results**

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC %	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2439929	TP209	Not Given	0.60	Not Given	D	Brown silty clayey very gravelly SAND		7.0	Sample was quartered, oven dried at 107.2 °C			
2439930	TP209	Not Given	3.40	Not Given	D	Brown slightly gravelly CLAY		27	Sample was quartered, oven dried at 107.5 °C			
2439931	TP211	Not Given	0.60	Not Given	D	Brown gravelly sandy CLAY		12	Sample was quartered, oven dried at 107.5 °C			
2439932	TP211	Not Given	1.20	Not Given	D	Brown gravelly silty clayey SAND		13	Sample was quartered, oven dried at 106 °C			
2439933	TP212	Not Given	0.70	Not Given	D	Brown slightly clayey very gravelly SAND		5.8	Sample was quartered, oven dried at 109 °C			
2439934	TP213	Not Given	1.30	Not Given	D	Brown gravelly CLAY		11	Sample was quartered, oven dried at 107.5 °C			
2439935	TP215	Not Given	0.80	Not Given	D	Brown slightly gravelly very sandy CLAY		22	Sample was quartered, oven dried at 107.5 °C			
2439920	TP218	Not Given	0.70	Not Given	D	Yellowish brown sandy silty clayey GRAVEL		13	Sample was quartered, oven dried at 106.1 °C			
2439936	TP218	Not Given	3.20	Not Given	D	Yellowish brown slightly gravelly very sandy CLAY		23	Sample was quartered, oven dried at 107.5 °C			
2439937	TP219	Not Given	2.30	Not Given	D	Brownish grey slightly gravelly very sandy CLAY		14	Sample was quartered, oven dried at 107.5 °C			

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Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

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**Test results**

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC %	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2439938	TP220	Not Given	2.50	Not Given	D	Grey mottled brown gravelly silty clayey SAND		18	Sample was quartered, oven dried at 106 °C			
2439939	TP221	Not Given	0.70	Not Given	D	Brown clayey gravelly SAND		6.4	Sample was quartered, oven dried at 108 °C			
2439921	TP221	Not Given	2.20	2.30	D	Orangish brown clayey very gravelly SAND		8.3	Sample was quartered, oven dried at 109 °C			
2439940	TP223	Not Given	1.20	Not Given	D	Yellowish brown slightly clayey silty SAND and GRAVEL		7.8	Sample was quartered, oven dried at 109 °C			
2439941	TP224	Not Given	0.90	Not Given	D	Yellowish brown slightly gravelly sandy CLAY		9.8	Sample was quartered, oven dried at 109 °C			
2439942	TP225	Not Given	1.30	Not Given	D	Yellowish brown gravelly very sandy CLAY		20	Sample was quartered, oven dried at 107.5 °C			
2441113	WS245	Not Given	1.10	Not Given	D	Brownish grey slightly gravelly sandy CLAY		34	Sample was quartered, oven dried at 109 °C			
2439944	TP226	Not Given	1.40	Not Given	D	Greyish brown CLAY		28	Sample was quartered, oven dried at 106 °C			
2439945	TP227	Not Given	2.20	Not Given	D	Yellowish brown clayey very gravelly SAND		13	Sample was quartered, oven dried at 106 °C			
2439946	TP229	Not Given	1.20	Not Given	D	Yellowish brown slightly clayey gravelly SAND		5.9	Sample was quartered, oven dried at 109 °C			

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**Test results**

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC %	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2439947	TP230	Not Given	1.00	Not Given	D	Brownish grey gravelly SAND		7.7	Sample was quartered, oven dried at 107.5 °C			
2439948	TP232	Not Given	0.50	Not Given	D	Brown CLAY		29	Sample was quartered, oven dried at 109 °C			
2439949	TP234	Not Given	0.70	0.90	D	Yellowish brown clayey very gravelly SAND		10	Sample was quartered, oven dried at 109 °C			
2439950	WS201	Not Given	1.70	Not Given	D	Brownish grey CLAY with fragments of chalk		28	Sample was quartered, oven dried at 107.6 °C			
2439951	WS205	Not Given	1.00	Not Given	D	Brownish grey slightly gravelly CLAY		38	Sample was quartered, oven dried at 107.6 °C			
2439952	WS207	Not Given	0.90	Not Given	D	Greyish brown slightly gravelly sandy CLAY		22	Sample was quartered, oven dried at 107.6 °C			
2439953	WS207	Not Given	1.80	Not Given	D	Brown gravelly slightly clayey SAND		12	Sample was quartered, oven dried at 107.6 °C			
2439954	WS214	Not Given	0.90	Not Given	D	Yellowish brown very gravelly sandy CLAY		7.8	Sample was quartered, oven dried at 107.6 °C			
2439955	WS215	Not Given	1.60	Not Given	D	Yellowish brown gravelly slightly sandy CLAY		15	Sample was quartered, oven dried at 107.6 °C			
2439956	WS217	Not Given	2.70	Not Given	D	Yellowish brown clayey gravelly SAND		4.4	Sample was quartered, oven dried at 107.6 °C			

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Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

**Test results**

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC %	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2439957	WS219	Not Given	1.10	Not Given	D	Yellowish brown very sandy CLAY		11	Sample was quartered, oven dried at 107.5 °C			
2439958	WS219	Not Given	2.00	Not Given	D	Yellowish brown to grey CLAY		26	Sample was quartered, oven dried at 107.5 °C			
2439959	WS219	Not Given	3.20	4.00	D	Grey CLAY		24	Sample was quartered, oven dried at 109 °C			
2439960	WS225	Not Given	1.20	2.00	D	Yellowish brown gravelly clayey SAND		6.7	Sample was quartered, oven dried at 107.8 °C			
2439961	WS227	Not Given	2.00	Not Given	D	Yellowish brown very gravelly SAND		7.5	Sample was quartered, oven dried at 109 °C			
2439962	WS233	Not Given	1.60	Not Given	D	Yellowish brown to grey slightly gravelly sandy CLAY		20	Sample was quartered, oven dried at 107.5 °C			
2439963	WS235	Not Given	1.00	Not Given	D	Grey very sandy CLAY		19	Sample was quartered, oven dried at 106 °C			
2439964	WS241	Not Given	2.80	Not Given	D	Yellowish brown slightly gravelly slightly sandy CLAY		30	Sample was quartered, oven dried at 106 °C			
2439965	WS242	Not Given	1.60	Not Given	D	Brown slightly gravelly sandy CLAY		23	Sample was quartered, oven dried at 107.5 °C			

Comments:

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Signed:

*Monika Siewior*

Monika Siewior  
 Reporting Specialist  
 for and on behalf of i2 Analytical Ltd



# TEST CERTIFICATE

## DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

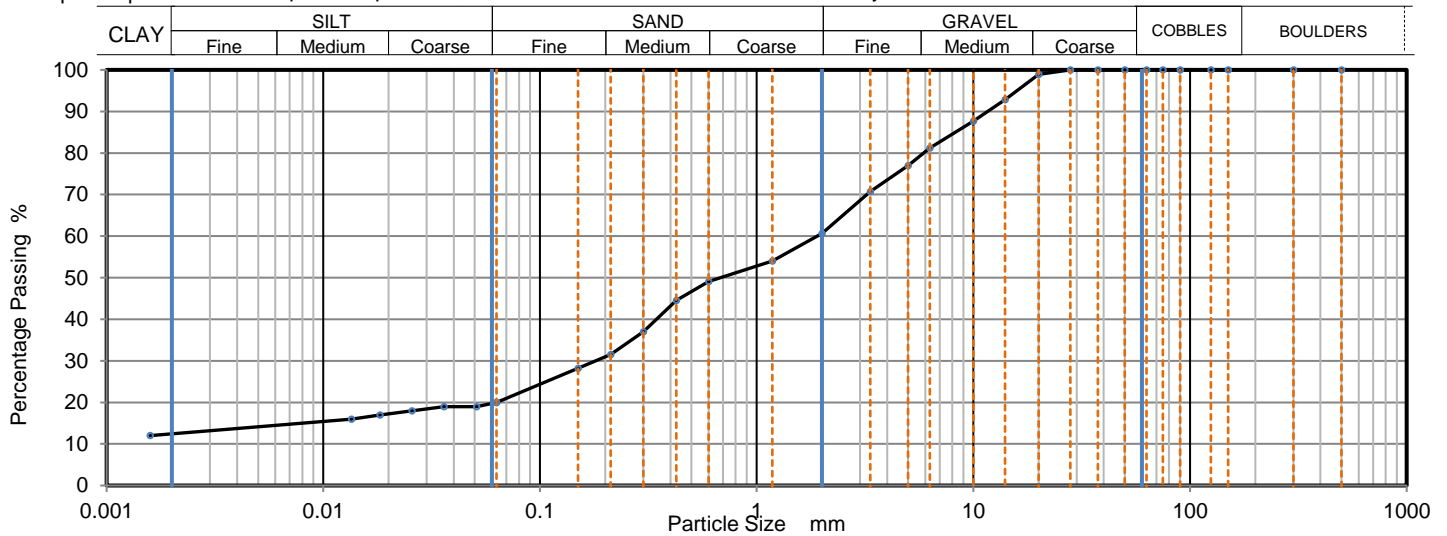
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 05/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439917  
Hole No.: TP201  
Sample Reference: Not Given  
Sample Description: Orangish brown silty clayey very gravelly SAND  
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0630	20
300	100	0.0509	19
150	100	0.0360	19
125	100	0.0256	18
90	100	0.0182	17
75	100	0.0135	16
63	100	0.0016	12
50	100		
37.5	100		
28	100		
20	99		
14	93		
10	88		
6.3	81		
5	77		
3.35	71		
2	61	Particle density (measured) 2.92 Mg/m <sup>3</sup>	
1.18	54		
0.6	49		
0.425	45		
0.3	37		
0.212	32		
0.15	28		
0.063	20		

Sample Proportions	% dry mass
Very coarse	0
Gravel	39
Sand	40
Silt	9
Clay	12

Grading Analysis	
D100	mm 28
D60	mm 1.9
D30	mm 0.181
D10	mm
Uniformity Coefficient	> 1200
Curvature Coefficient	

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Remarks:

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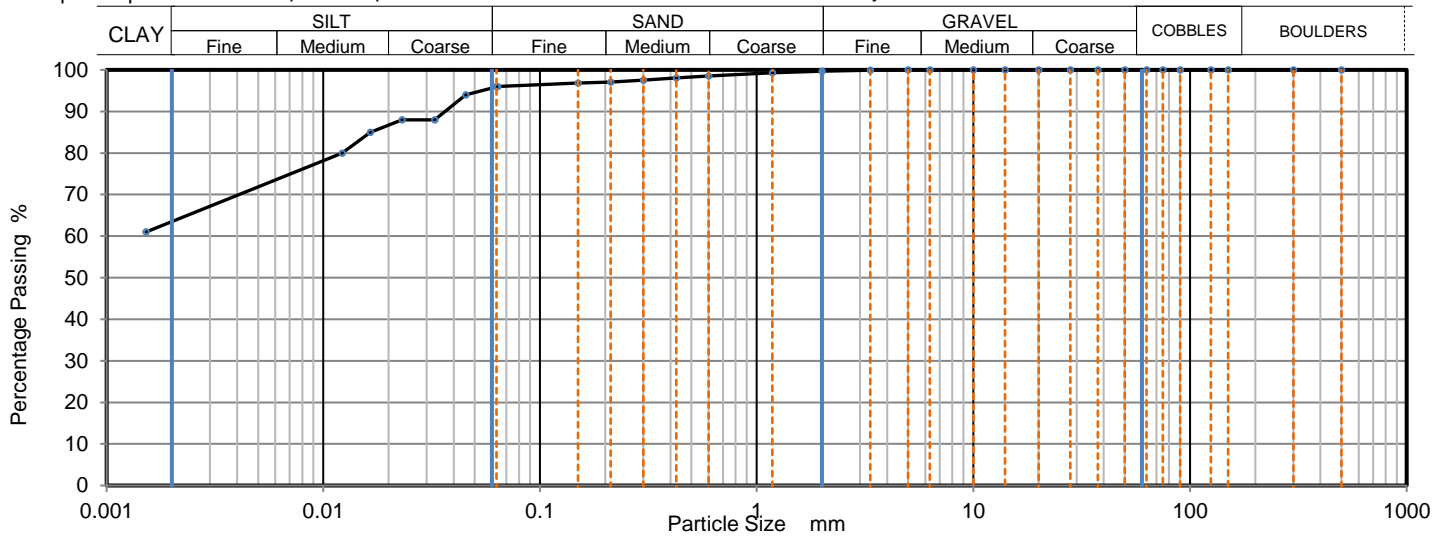
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Date Tested: 05/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439918  
Hole No.: TP203  
Sample Reference: Not Given  
Sample Description: Brownish grey slightly sandy very silty CLAY  
Sample Preparation: Sample was quartered, oven dried at 106.6 °C and broken down by hand.

Depth Top [m]: 1.30  
Depth Base [m]: Not Given  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0638	96
300	100	0.0455	94
150	100	0.0326	88
125	100	0.0231	88
90	100	0.0164	85
75	100	0.0122	80
63	100	0.0015	61
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100	Particle density (measured) 2.72 Mg/m <sup>3</sup>	
1.18	99		
0.6	99		
0.425	98		
0.3	98		
0.212	97		
0.15	97		
0.063	96		

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	3
Silt	34
Clay	63

Grading Analysis		
D100	mm	5
D60	mm	
D30	mm	
D10	mm	
Uniformity Coefficient		N/A
Curvature Coefficient		

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Remarks:

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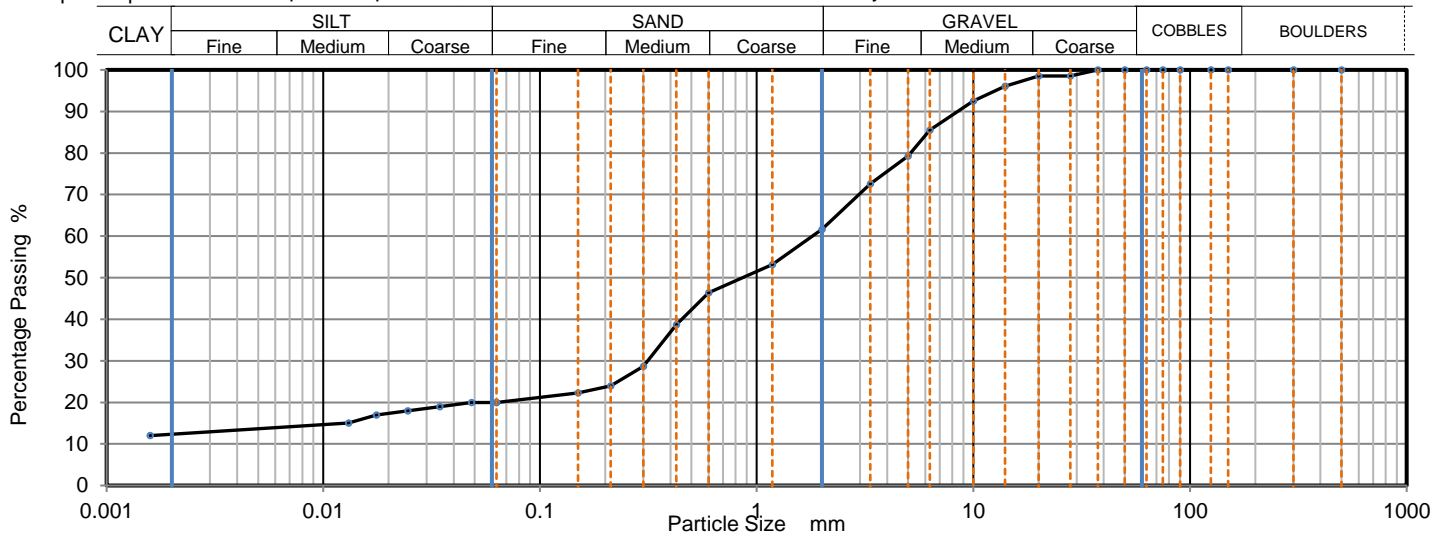
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Date Tested: 05/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439919  
Hole No.: TP208  
Sample Reference: Not Given  
Sample Description: Orangish brown silty clayey very gravelly SAND  
Sample Preparation: Sample was quartered, oven dried at 109.0 °C and broken down by hand.

Depth Top [m]: 0.60  
Depth Base [m]: 0.70  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0630	20
300	100	0.0483	20
150	100	0.0344	19
125	100	0.0245	18
90	100	0.0176	17
75	100	0.0131	15
63	100	0.0016	12
50	100		
37.5	100		
28	99		
20	99		
14	96		
10	93		
6.3	86		
5	79		
3.35	73		
2	62	Particle density (measured) 2.92 Mg/m <sup>3</sup>	
1.18	53		
0.6	46		
0.425	39		
0.3	29		
0.212	24		
0.15	22		
0.063	20		

Sample Proportions	% dry mass
Very coarse	0
Gravel	38
Sand	41
Silt	9
Clay	12

Grading Analysis		
D100	mm	37.5
D60	mm	1.81
D30	mm	0.314
D10	mm	
Uniformity Coefficient		> 1100
Curvature Coefficient		

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

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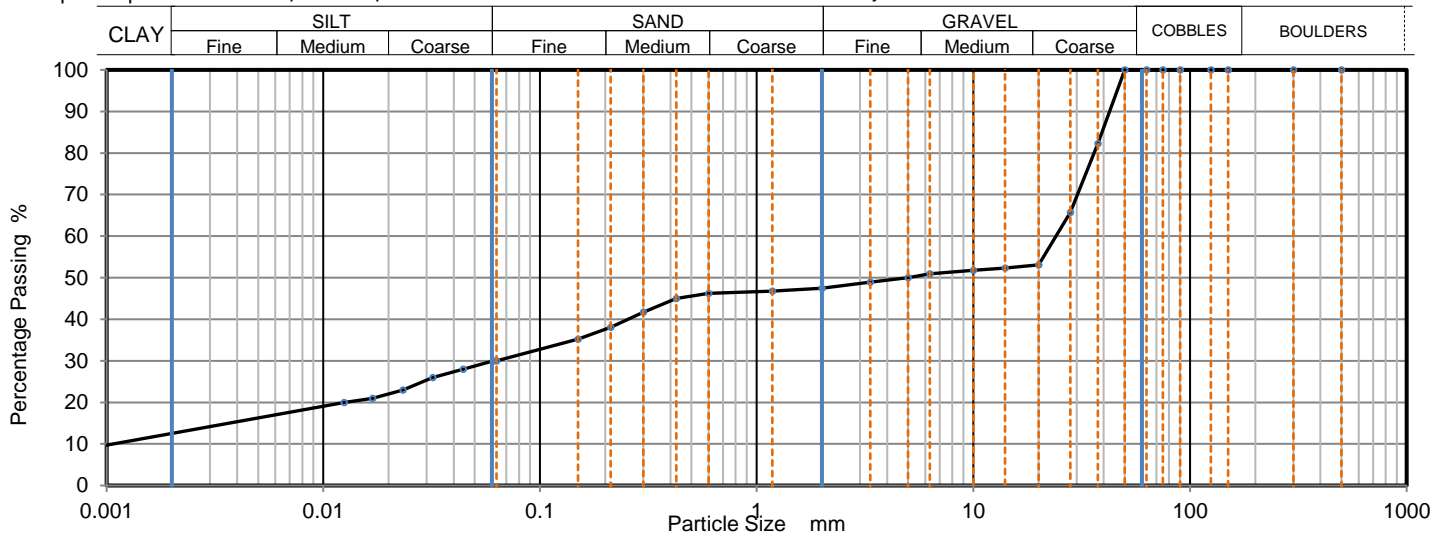
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 06/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439920  
Hole No.: TP218  
Sample Reference: Not Given  
Sample Description: Yellowish brown sandy silty clayey GRAVEL  
Sample Preparation: Sample was quartered, oven dried at 106.1 °C and broken down by hand.

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0608	30
300	100	0.0441	28
150	100	0.0320	26
125	100	0.0233	23
90	100	0.0168	21
75	100	0.0125	20
63	100	0.0008	9
50	100		
37.5	82		
28	66		
20	53		
14	52		
10	52		
6.3	51		
5	50		
3.35	49		
2	48	Particle density (measured) 2.74 Mg/m <sup>3</sup>	
1.18	47		
0.6	46		
0.425	45		
0.3	42		
0.212	38		
0.15	35		
0.063	30		

Sample Proportions	% dry mass
Very coarse	0
Gravel	53
Sand	17
Silt	17
Clay	13

Grading Analysis		
D100	mm	50
D60	mm	24.1
D30	mm	0.0573
D10	mm	0.00103
Uniformity Coefficient		23000
Curvature Coefficient		0.13

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

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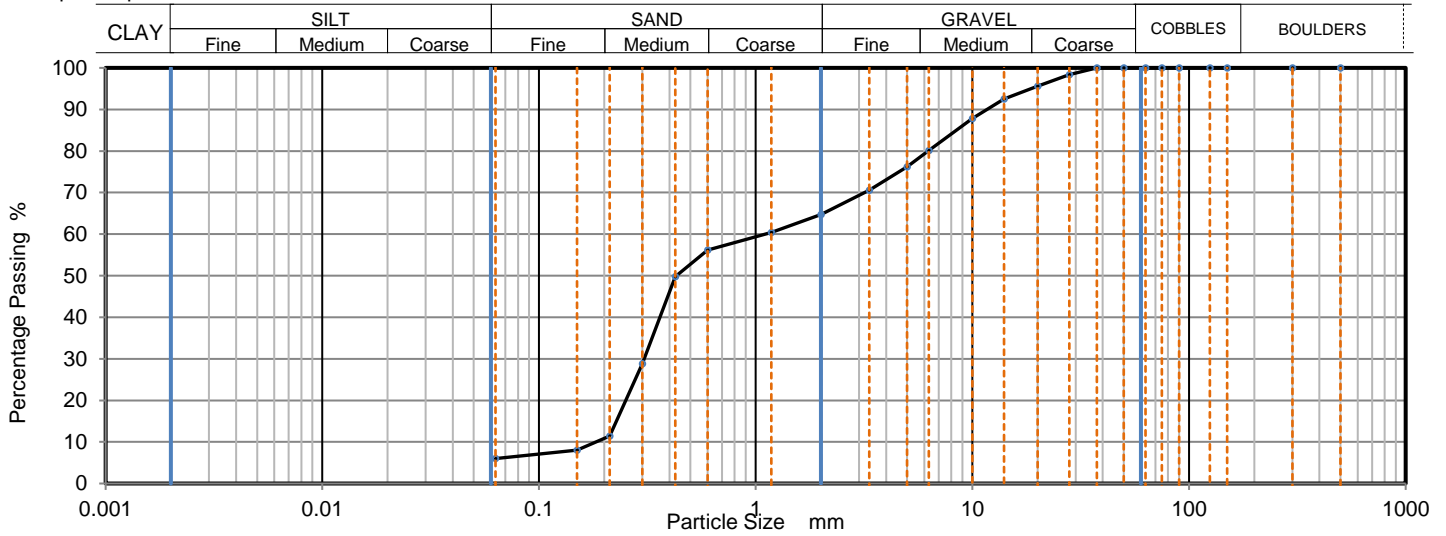
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Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 05/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439921  
Hole No.: TP221  
Sample Reference: Not Given  
Sample Description: Orangish brown clayey very gravelly SAND  
Sample Preparation: Sample was quartered, oven dried at 109.0 °C and broken down by hand.

Depth Top [m]: 2.20  
Depth Base [m]: 2.30  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	98		
20	96		
14	93		
10	88		
6.3	80		
5	76		
3.35	71		
2	65		
1.18	60		
0.6	56		
0.425	50		
0.3	29		
0.212	11		
0.15	8		
0.063	6		

Sample Proportions	% dry mass
Very coarse	0
Gravel	35
Sand	59
Fines <0.063mm	6

Grading Analysis		
D100	mm	37.5
D60	mm	1.11
D30	mm	0.306
D10	mm	0.183
Uniformity Coefficient		6.1
Curvature Coefficient		0.46

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

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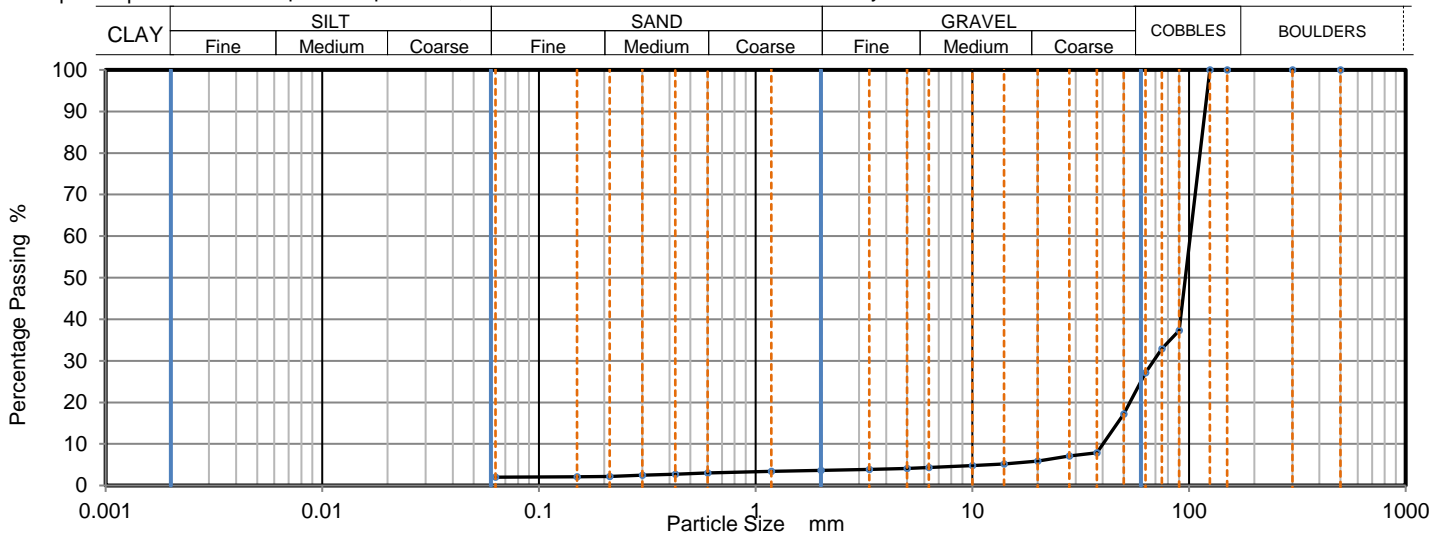
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 05/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439928  
Hole No.: TP207  
Sample Reference: Not Given  
Sample Description: Yellowish brown slightly clayey slightly sandy COBBLES  
Sample Preparation: Sample was quartered, oven dried at 109.0 °C and broken down by hand.

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	37		
75	33		
63	27		
50	17		
37.5	8		
28	7		
20	6		
14	5		
10	5		
6.3	4		
5	4		
3.35	4		
2	4		
1.18	3		
0.6	3		
0.425	3		
0.3	3		
0.212	2		
0.15	2		
0.063	2		

Sample Proportions	% dry mass
Very coarse	73
Gravel	23
Sand	2
Fines <0.063mm	2

Grading Analysis	
D100	mm 125
D60	mm 101
D30	mm 68.7
D10	mm 40
Uniformity Coefficient	2.5
Curvature Coefficient	1.2

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

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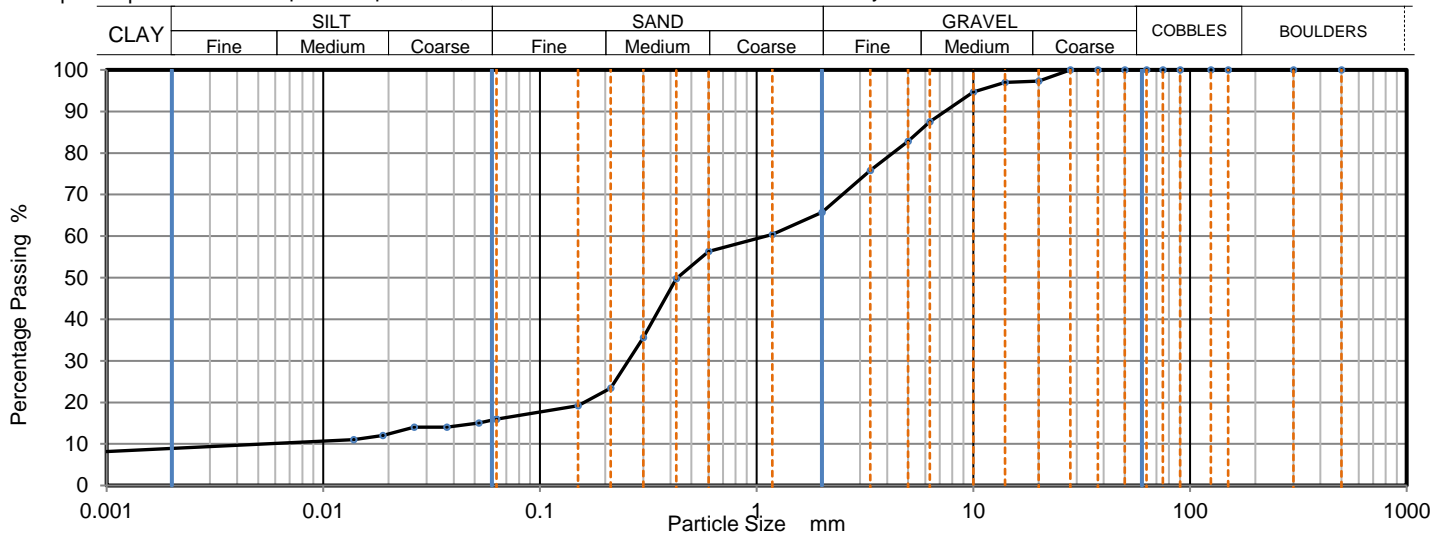
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 06/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439929  
Hole No.: TP209  
Sample Reference: Not Given  
Sample Description: Brown silty clayey very gravelly SAND  
Sample Preparation: Sample was quartered, oven dried at 107.2 °C and broken down by hand.

Depth Top [m]: 0.60  
Depth Base [m]: Not Given  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0630	16
300	100	0.0522	15
150	100	0.0371	14
125	100	0.0263	14
90	100	0.0188	12
75	100	0.0138	11
63	100	0.009	8
50	100		
37.5	100		
28	100		
20	97		
14	97		
10	95		
6.3	88		
5	83		
3.35	76	Particle density (assumed)	
2	66	2.65 Mg/m <sup>3</sup>	
1.18	60		
0.6	56		
0.425	50		
0.3	36		
0.212	23		
0.15	19		
0.063	16		

Sample Proportions	% dry mass
Very coarse	0
Gravel	34
Sand	49
Silt	8
Clay	9

Grading Analysis		
D100	mm	28
D60	mm	1.1
D30	mm	0.256
D10	mm	0.00626
Uniformity Coefficient		180
Curvature Coefficient		9.5

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

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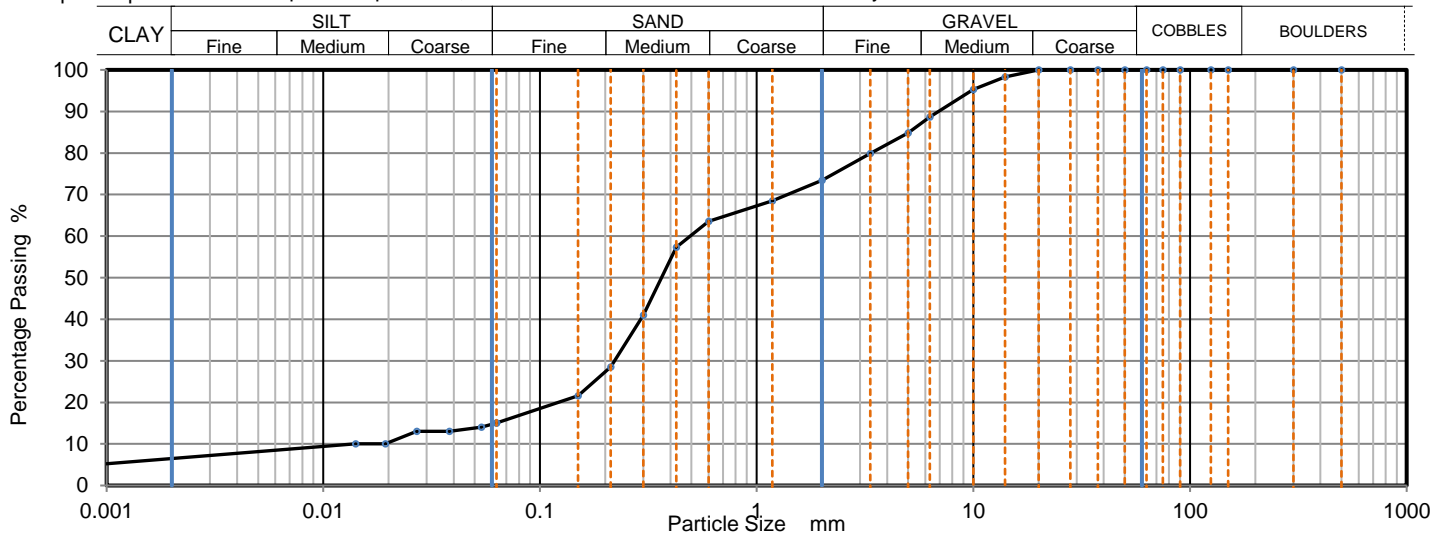
Client Reference: 19114  
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Date Sampled: 09/09/2022  
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Date Tested: 06/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439932  
Hole No.: TP211  
Sample Reference: Not Given  
Sample Description: Brown gravelly silty clayey SAND  
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 1.20  
Depth Base [m]: Not Given  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0630	15
300	100	0.0537	14
150	100	0.0382	13
125	100	0.0270	13
90	100	0.0193	10
75	100	0.0141	10
63	100	0.009	5
50	100		
37.5	100		
28	100		
20	100		
14	98		
10	95		
6.3	89		
5	85		
3.35	80		
2	73	Particle density (assumed) 2.65 Mg/m <sup>3</sup>	
1.18	69		
0.6	64		
0.425	57		
0.3	41		
0.212	29		
0.15	22		
0.063	15		

Sample Proportions	% dry mass
Very coarse	0
Gravel	27
Sand	58
Silt	9
Clay	6

Grading Analysis		
D100	mm	20
D60	mm	0.492
D30	mm	0.221
D10	mm	
Uniformity Coefficient		N/A
Curvature Coefficient		

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Remarks:

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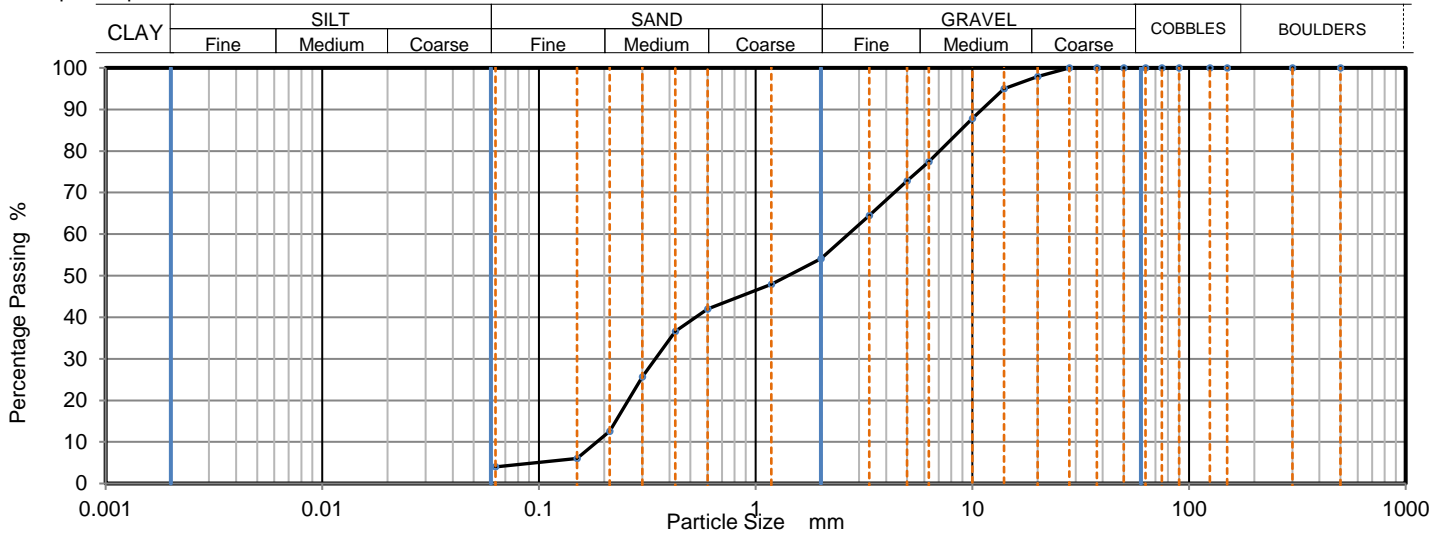
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Date Received: 26/09/2022  
Date Tested: 06/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439933  
Hole No.: TP212  
Sample Reference: Not Given  
Sample Description: Brown slightly clayey very gravelly SAND  
Sample Preparation: Sample was quartered, oven dried at 109.0 °C and broken down by hand.

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	98		
14	95		
10	88		
6.3	77		
5	73		
3.35	65		
2	54		
1.18	48		
0.6	42		
0.425	37		
0.3	26		
0.212	13		
0.15	6		
0.063	4		

Sample Proportions	% dry mass
Very coarse	0
Gravel	46
Sand	50
Fines <0.063mm	4

Grading Analysis		
D100	mm	28
D60	mm	2.68
D30	mm	0.344
D10	mm	0.185
Uniformity Coefficient		14
Curvature Coefficient		0.24

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

### Remarks:

### Signed:

*Monika Siewior*

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

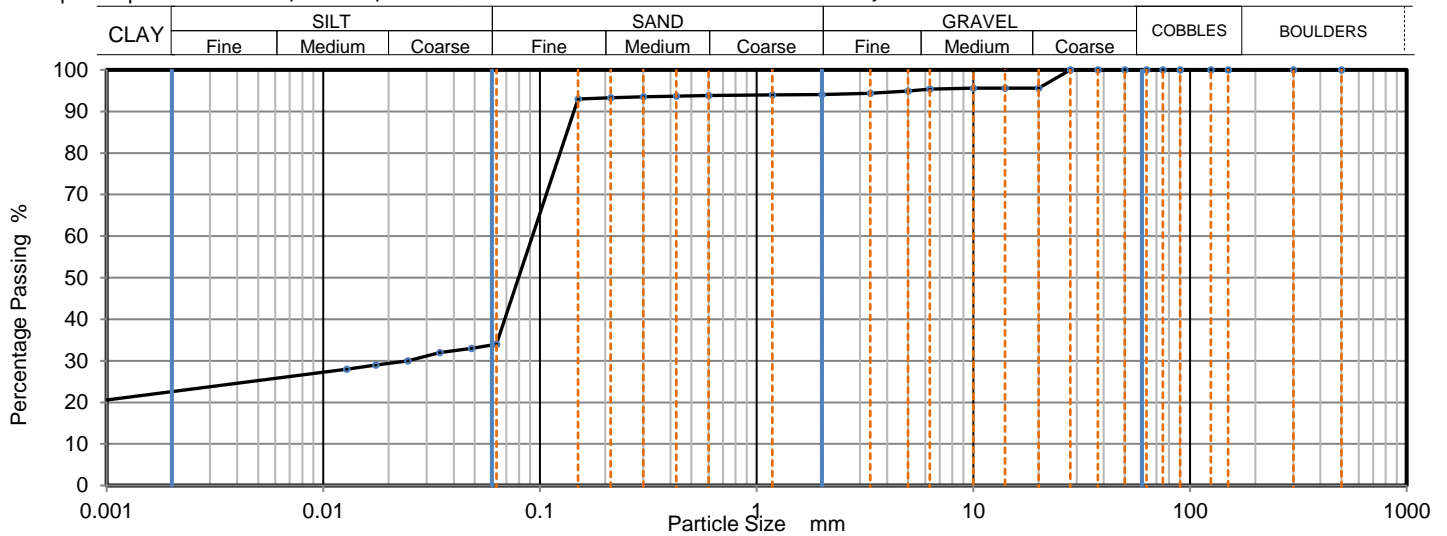
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 06/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439938  
Hole No.: TP220  
Sample Reference: Not Given  
Sample Description: Grey mottled brown gravelly silty clayey SAND  
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 2.50  
Depth Base [m]: Not Given  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0630	34
300	100	0.0483	33
150	100	0.0344	32
125	100	0.0245	30
90	100	0.0174	29
75	100	0.0128	28
63	100	0.0008	20
50	100		
37.5	100		
28	100		
20	96		
14	96		
10	96		
6.3	95		
5	95		
3.35	94		
2	94	Particle density (assumed) 2.65 Mg/m3	
1.18	94		
0.6	94		
0.425	94		
0.3	94		
0.212	93		
0.15	93		
0.063	34		

Sample Proportions	% dry mass
Very coarse	0
Gravel	6
Sand	60
Silt	11
Clay	23

Grading Analysis		
D100	mm	28
D60	mm	0.0924
D30	mm	0.0213
D10	mm	
Uniformity Coefficient		> 110
Curvature Coefficient		

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Remarks:

Signed:

*Monika Siewior*

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

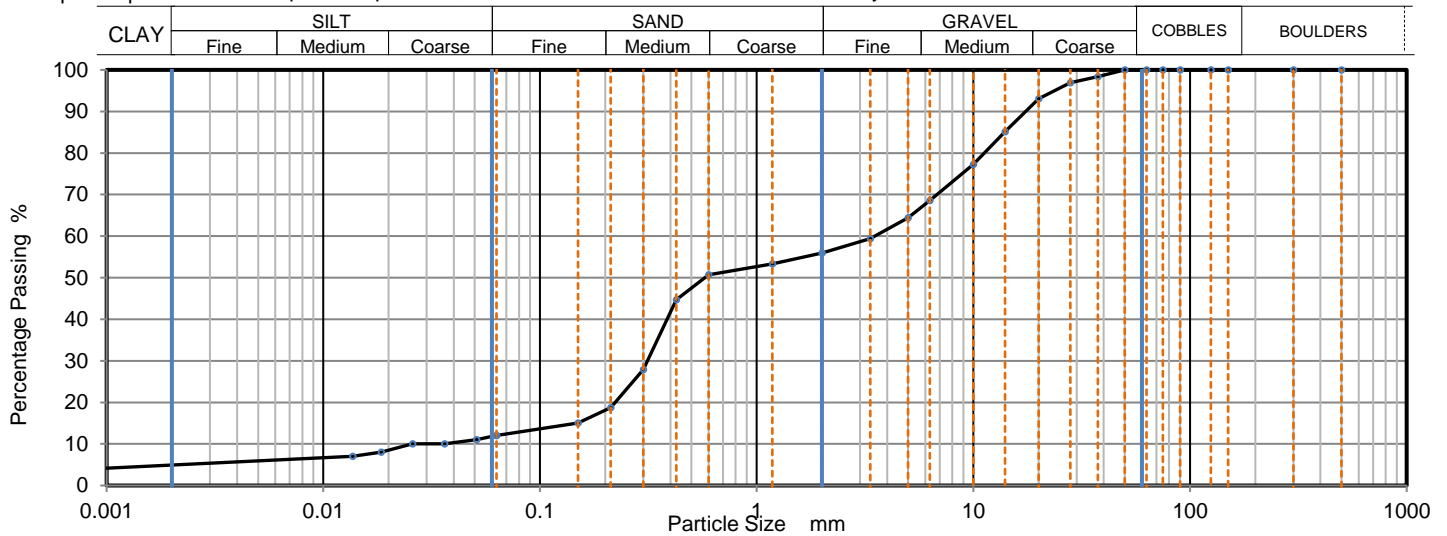
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 05/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439940  
Hole No.: TP223  
Sample Reference: Not Given  
Sample Description: Yellowish brown slightly clayey silty SAND and GRAVEL  
Sample Preparation: Sample was quartered, oven dried at 109.0 °C and broken down by hand.

Depth Top [m]: 1.20  
Depth Base [m]: Not Given  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0630	12
300	100	0.0509	11
150	100	0.0363	10
125	100	0.0258	10
90	100	0.0185	8
75	100	0.0136	7
63	100	0.009	4
50	100		
37.5	98		
28	97		
20	93		
14	85		
10	77		
6.3	69		
5	64		
3.35	59		
2	56	Particle density (assumed) 2.65 Mg/m3	
1.18	53		
0.6	51		
0.425	45		
0.3	28		
0.212	19		
0.15	15		
0.063	12		

Sample Proportions	% dry mass
Very coarse	0
Gravel	44
Sand	44
Silt	7
Clay	5

Grading Analysis		
D100	mm	50
D60	mm	3.5
D30	mm	0.313
D10	mm	0.0339
Uniformity Coefficient		100
Curvature Coefficient		0.82

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

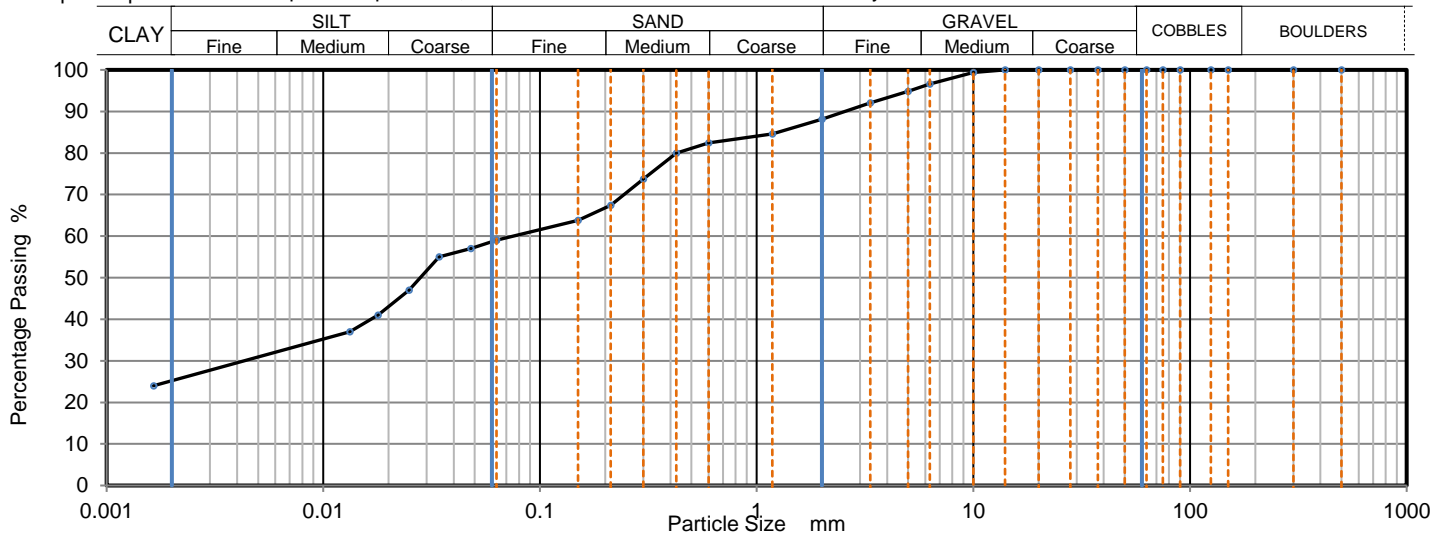
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 04/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439943  
Hole No.: TP226  
Sample Reference: Not Given  
Sample Description: Brown gravelly very sandy very clayey SILT  
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 0.80  
Depth Base [m]: Not Given  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0630	59
300	100	0.0480	57
150	100	0.0342	55
125	100	0.0248	47
90	100	0.0179	41
75	100	0.0132	37
63	100	0.0016	24
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	99		
6.3	97		
5	95		
3.35	92		
2	88	Particle density (assumed) 2.65 Mg/m3	
1.18	85		
0.6	82		
0.425	80		
0.3	74		
0.212	67		
0.15	64		
0.063	59		

Sample Proportions	% dry mass
Very coarse	0
Gravel	12
Sand	29
Silt	34
Clay	25

Grading Analysis		
D100	mm	14
D60	mm	0.0727
D30	mm	0.00427
D10	mm	
Uniformity Coefficient		> 44
Curvature Coefficient		

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

### Remarks:

### Signed:

*Monika Siewior*

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

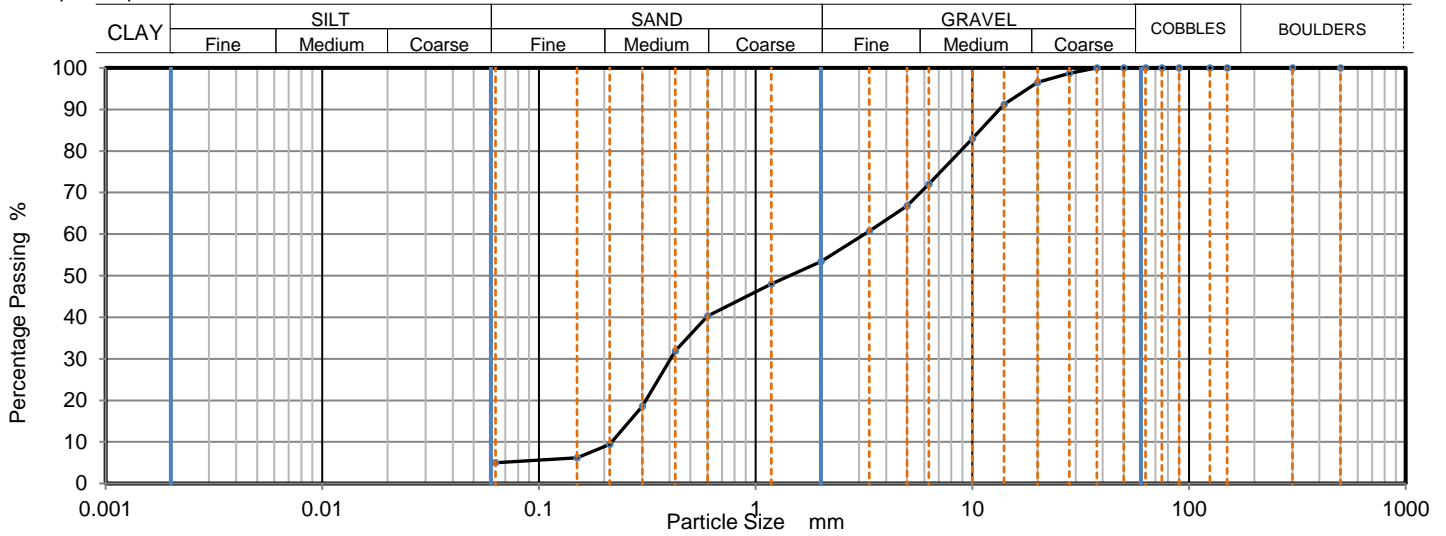
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 06/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439945  
Hole No.: TP227  
Sample Reference: Not Given  
Sample Description: Yellowish brown clayey very gravelly SAND  
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 2.20  
Depth Base [m]: Not Given  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	99		
20	97		
14	91		
10	83		
6.3	72		
5	67		
3.35	61		
2	53		
1.18	48		
0.6	40		
0.425	32		
0.3	19		
0.212	9		
0.15	6		
0.063	5		

Sample Proportions	% dry mass
Very coarse	0
Gravel	47
Sand	48
Fines <0.063mm	5

Grading Analysis		
D100	mm	37.5
D60	mm	3.18
D30	mm	0.404
D10	mm	0.217
Uniformity Coefficient		15
Curvature Coefficient		0.24

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

*Monika Siewior*

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

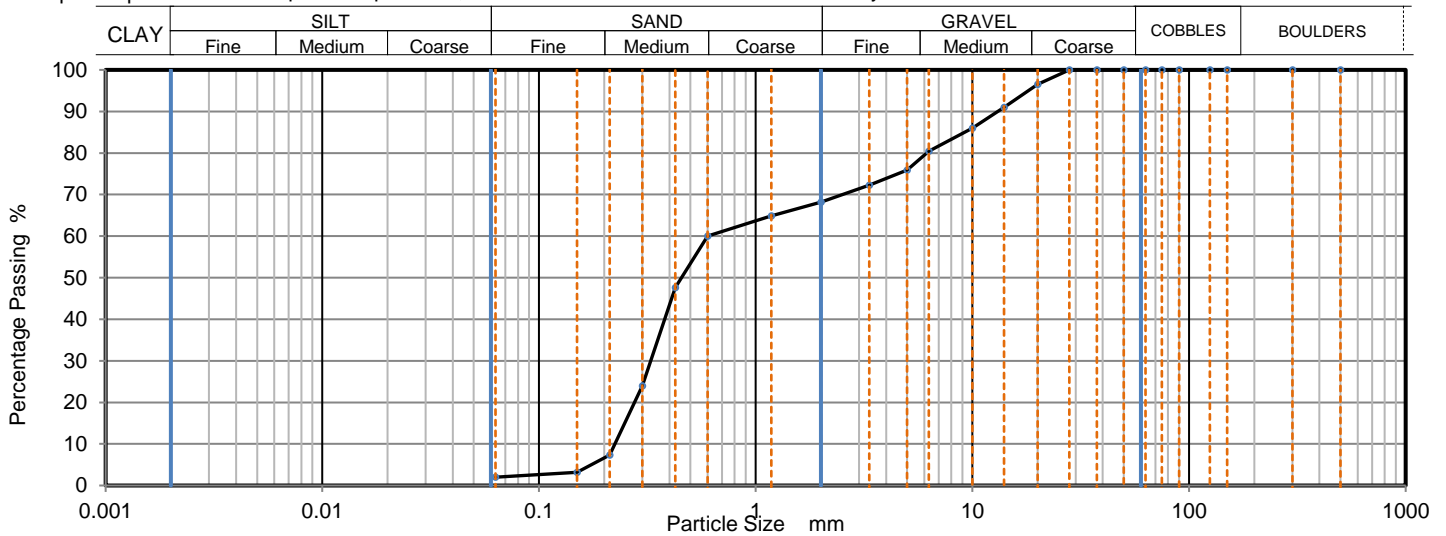
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 06/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439946  
Hole No.: TP229  
Sample Reference: Not Given  
Sample Description: Yellowish brown slightly clayey gravelly SAND  
Sample Preparation: Sample was quartered, oven dried at 109.0 °C and broken down by hand.

Depth Top [m]: 1.20  
Depth Base [m]: Not Given  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	97		
14	91		
10	86		
6.3	80		
5	76		
3.35	72		
2	68		
1.18	65		
0.6	60		
0.425	48		
0.3	24		
0.212	7		
0.15	3		
0.063	2		

Sample Proportions	% dry mass
Very coarse	0
Gravel	32
Sand	66
Fines <0.063mm	2

Grading Analysis		
D100	mm	28
D60	mm	0.6
D30	mm	0.328
D10	mm	0.224
Uniformity Coefficient		2.7
Curvature Coefficient		0.8

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

*Monika Siewior*

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

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Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
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Contact: Nathan Thompson  
Site Address: Begbroke

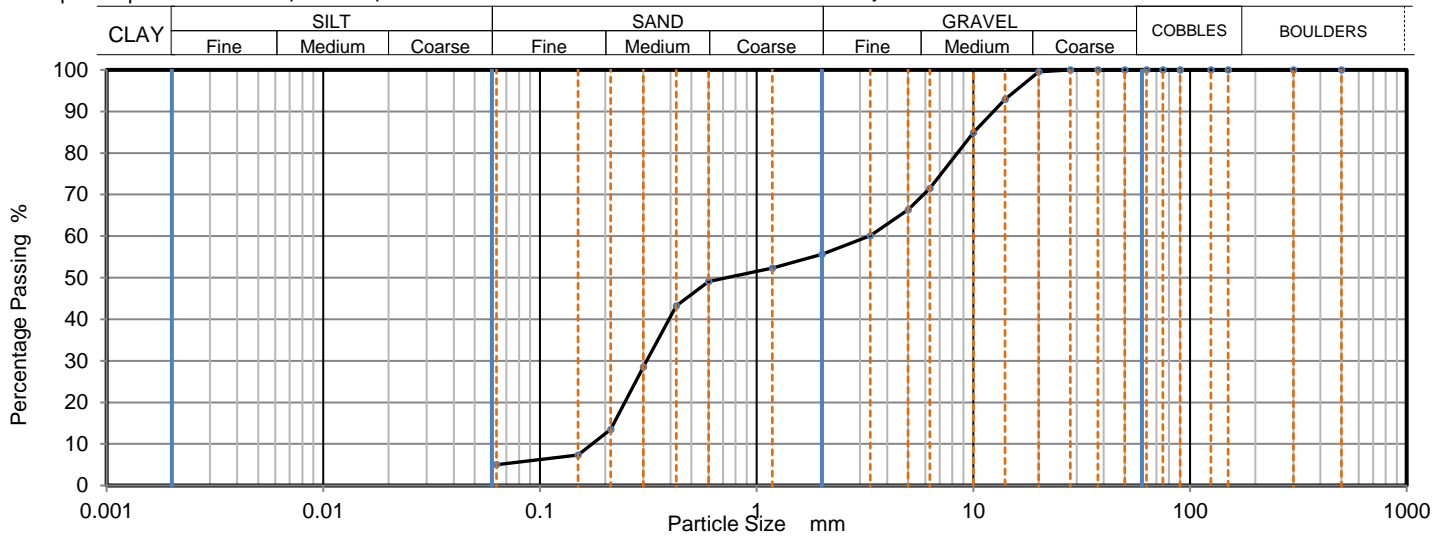
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 06/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439949  
Hole No.: TP234  
Sample Reference: Not Given  
Sample Description: Yellowish brown clayey very gravelly SAND  
Sample Preparation: Sample was quartered, oven dried at 109.0 °C and broken down by hand.

Depth Top [m]: 0.70  
Depth Base [m]: 0.90  
Sample Type: D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	93		
10	85		
6.3	72		
5	66		
3.35	60		
2	56		
1.18	52		
0.6	49		
0.425	43		
0.3	29		
0.212	14		
0.15	7		
0.063	5		

Sample Proportions	% dry mass
Very coarse	0
Gravel	44
Sand	50
Fines <0.063mm	5

Grading Analysis		
D100	mm	28
D60	mm	3.31
D30	mm	0.311
D10	mm	0.174
Uniformity Coefficient		19
Curvature Coefficient		0.17

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

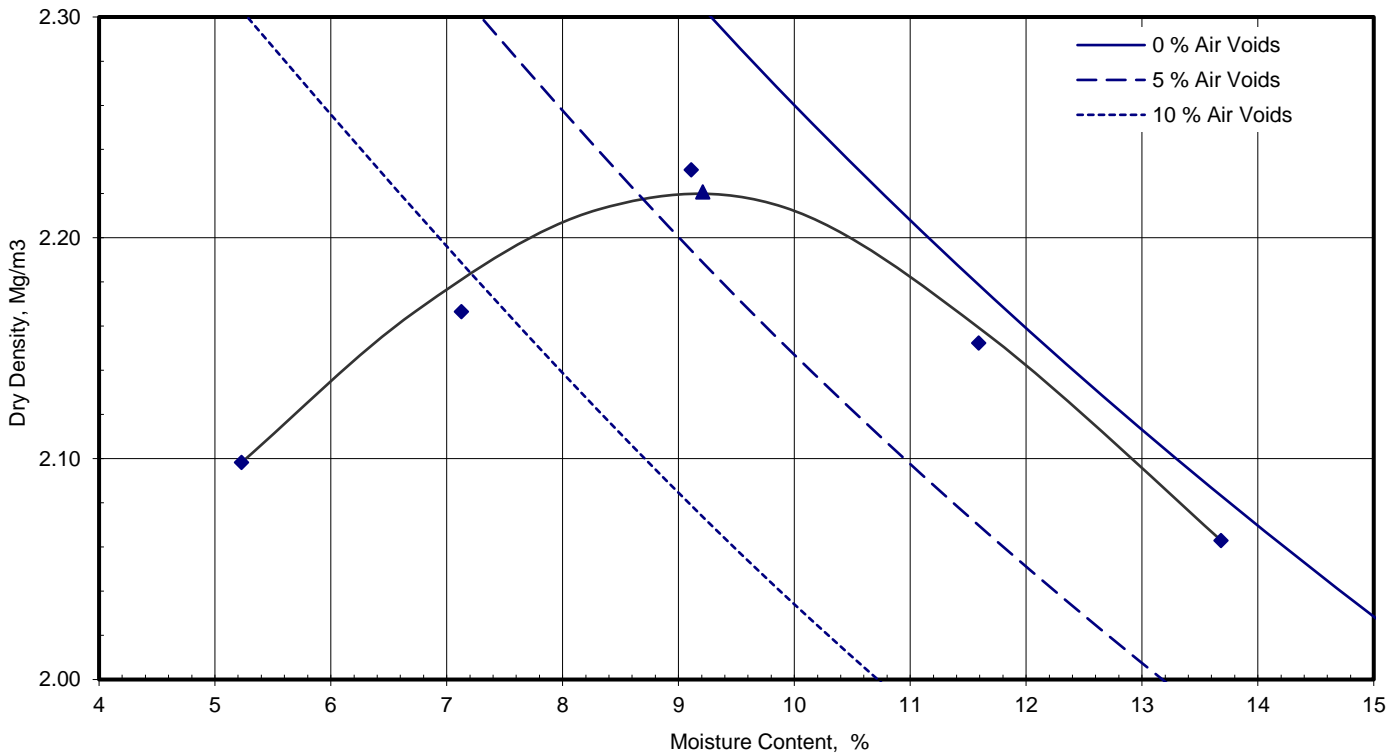
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439917  
Hole No.: TP201  
Sample Reference: Not Given  
Sample Description: Orangish brown silty clayey very gravelly SAND  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D



Compaction Point No.	1	2	3	4	5
Moisture Content	% 5.2	7.1	9.1	12	14
Dry Density	Mg/m³ 2.10	2.17	2.23	2.15	2.06

Mould Type	1 Litre
Samples Used	Single sample tested
Material Retained on 37.5 mm Sieve	% 0
Material Retained on 20.0 mm Sieve	% 1
Particle Density - Measured using gas jar	Mg/m³ 2.92
As received Moisture Content	% 9.8
<b>Maximum Dry Density</b>	<b>Mg/m³ 2.22</b>

<b>Optimum Moisture Content</b>	<b>% 9.2</b>
---------------------------------	--------------

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

*Monika Siewior*

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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**TEST CERTIFICATE****DETERMINATION OF DRY DENSITY/MOISTURE  
CONTENT RELATIONSHIP METHOD USING  
4.5 KG RAMMER**

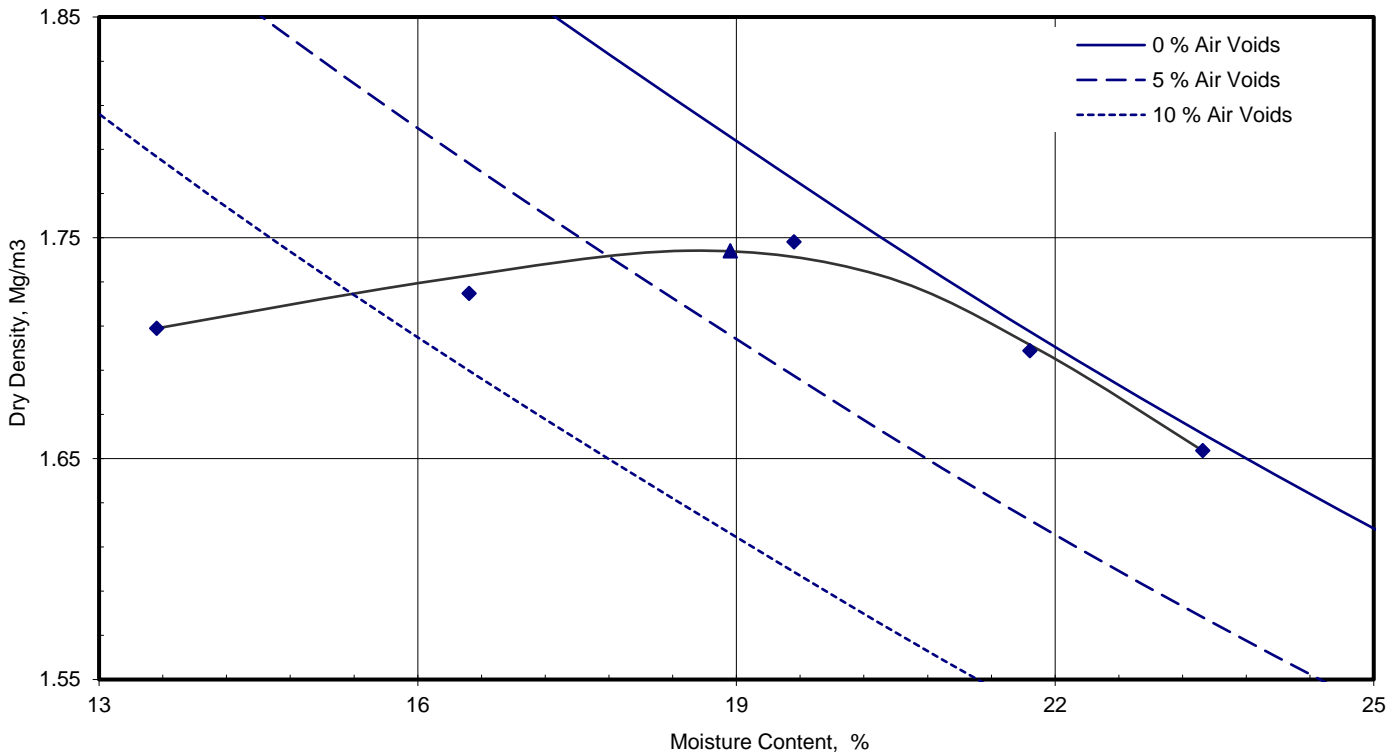
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: BegbrokeClient Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 2439918  
Hole No.: TP203  
Sample Reference: Not Given  
Sample Description: Brownish grey slightly sandy very silty CLAY  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 1.30  
Depth Base [m]: Not Given  
Sample Type: D

Compaction Point No.	1	2	3	4	5	
Moisture Content	%	14	16	20	22	23
Dry Density	Mg/m³	1.71	1.72	1.75	1.70	1.65

Mould Type	1 Litre	
Samples Used	Single sample tested	
Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	0
Particle Density - Measured using gas jar	Mg/m³	2.72
As received Moisture Content	%	27
<b>Maximum Dry Density</b>	Mg/m³	<b>1.74</b>

<b>Optimum Moisture Content</b>	%	<b>19</b>
---------------------------------	---	-----------

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

*Monika Siewior*Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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Page 1 of 1

Date Reported: 18/10/2022

GF 110.22



# TEST CERTIFICATE

## DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD

Contact: Nathan Thompson  
Site Address: Begbroke

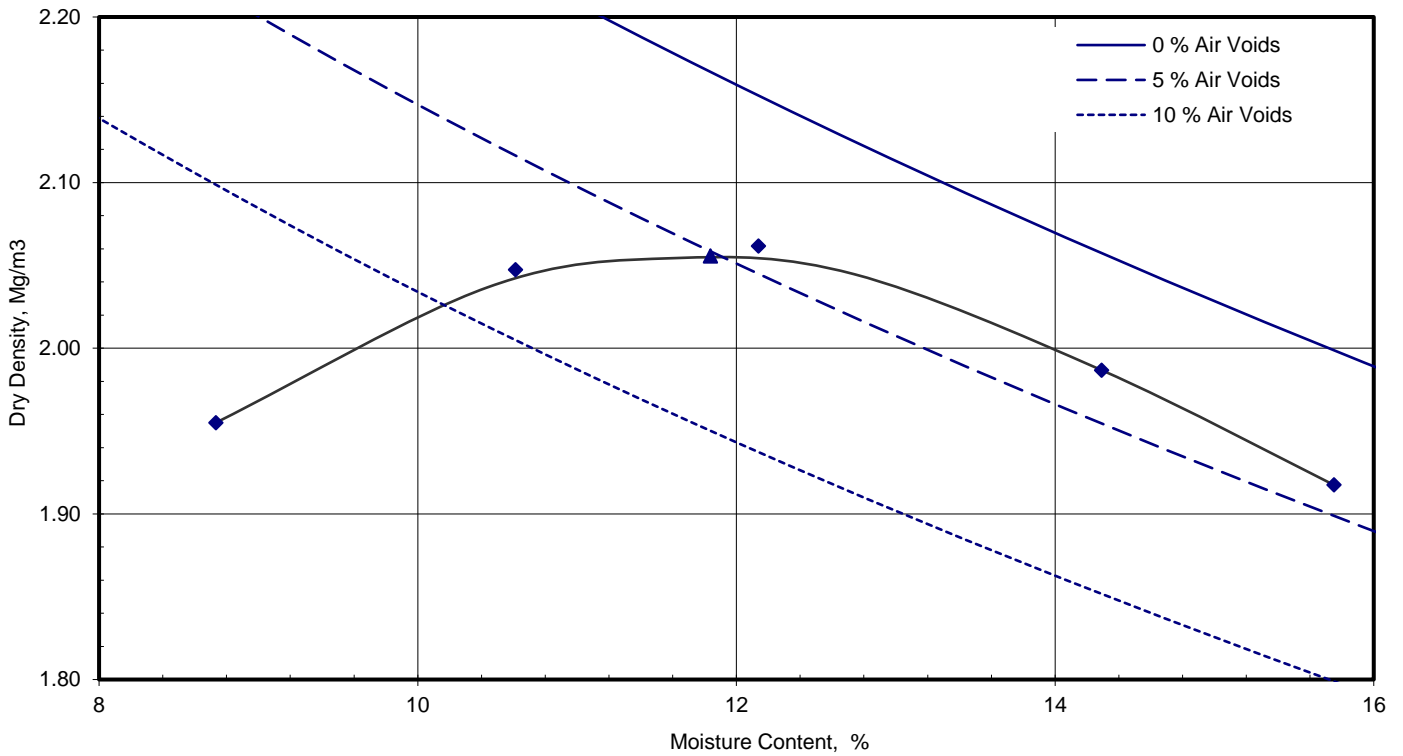
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 2439919  
Hole No.: TP208  
Sample Reference: Not Given  
Sample Description: Orangish brown silty clayey very gravelly SAND  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 0.60  
Depth Base [m]: 0.70  
Sample Type: D



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	8.7	11	12	14	16
Dry Density	Mg/m <sup>3</sup>	1.96	2.05	2.06	1.99	1.92

Mould Type	1 Litre	
Samples Used	Single sample tested	
Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	2
Particle Density - Measured using gas jar	Mg/m <sup>3</sup>	2.92
As received Moisture Content	%	6.7
<b>Maximum Dry Density</b>	Mg/m <sup>3</sup>	<b>2.06</b>

<b>Optimum Moisture Content</b>	%	<b>12</b>
---------------------------------	---	-----------

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

*Monika Siewior*

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

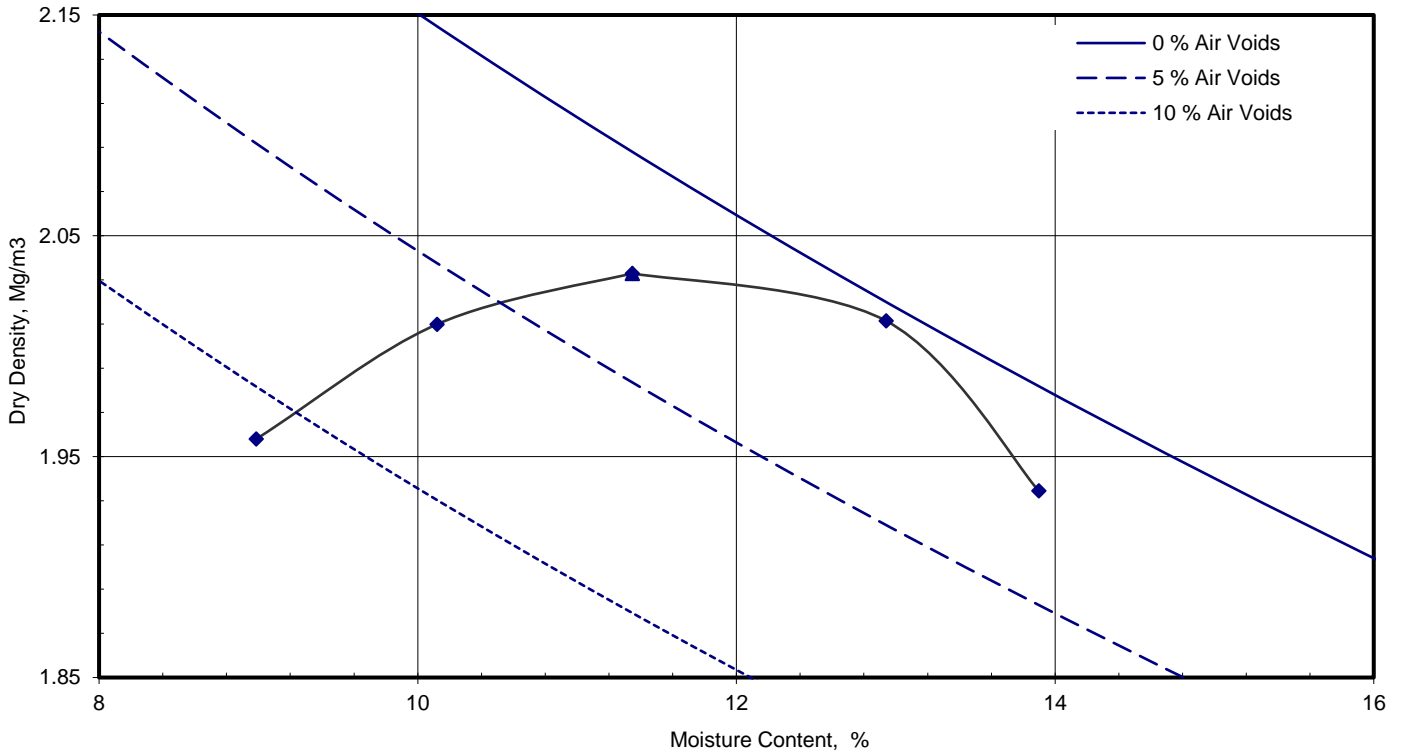
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439920  
Hole No.: TP218  
Sample Reference: Not Given  
Sample Description: Yellowish brown sandy silty clayey GRAVEL  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	9.0	10	11	13	14
Dry Density	Mg/m <sup>3</sup>	1.96	2.01	2.03	2.01	1.93

Mould Type	CBR	
Samples Used	Single sample tested	
Material Retained on 37.5 mm Sieve	%	20
Material Retained on 20.0 mm Sieve	%	54
Particle Density - Measured using gas jar	Mg/m <sup>3</sup>	2.74
As received Moisture Content	%	13
<b>Maximum Dry Density</b>	Mg/m <sup>3</sup>	<b>2.03</b>

<b>Optimum Moisture Content</b>	%	<b>11</b>
---------------------------------	---	-----------

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Zone X - test carried out as per client request

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD

Contact: Nathan Thompson  
Site Address: Begbroke

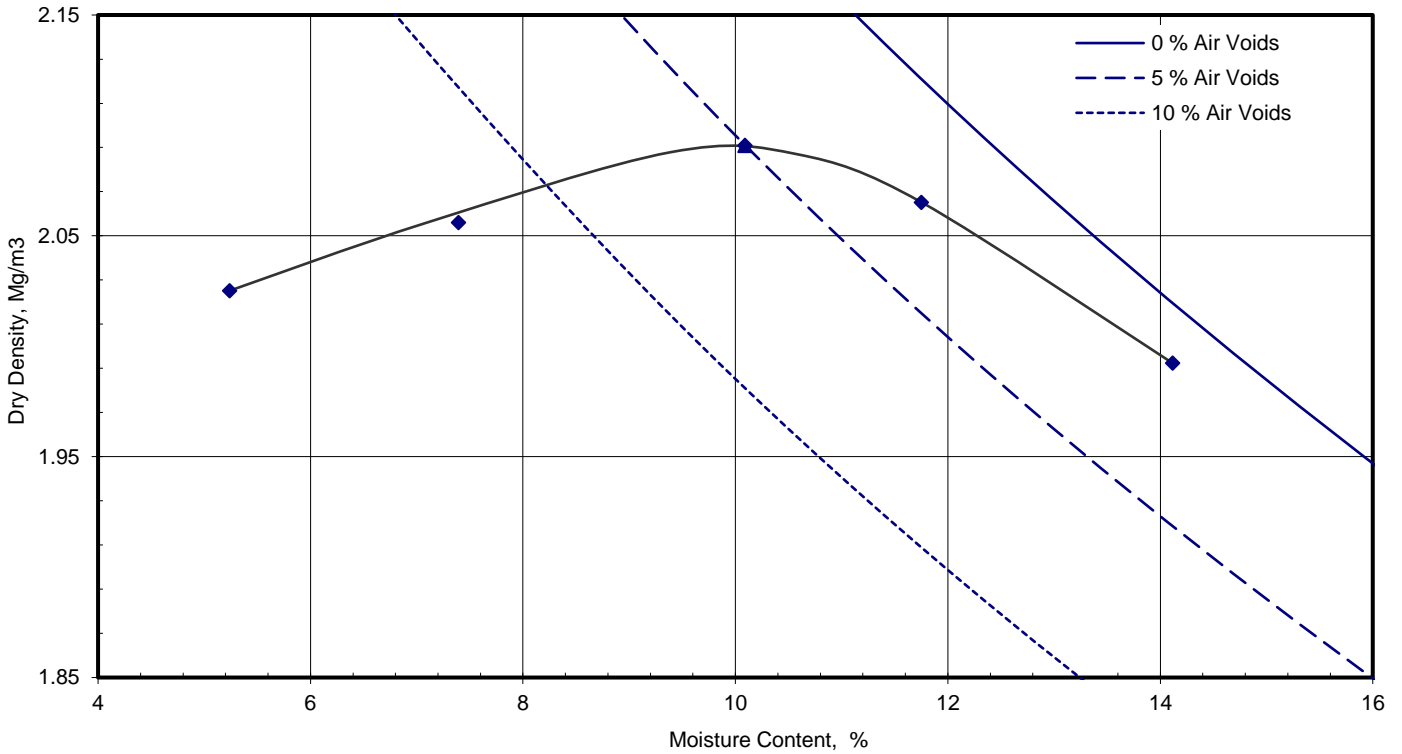
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 2439921  
Hole No.: TP221  
Sample Reference: Not Given  
Sample Description: Orangish brown clayey very gravelly SAND  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 2.20  
Depth Base [m]: 2.30  
Sample Type: D



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	5.2	7.4	10	12	14
Dry Density	Mg/m³	2.03	2.06	2.09	2.07	1.99

Mould Type	1 Litre	
Samples Used	Single sample tested	
Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	5
Particle Density - Measured using gas jar	Mg/m³	2.83
As received Moisture Content	%	8.3
<b>Maximum Dry Density</b>	<b>Mg/m³</b>	<b>2.09</b>

<b>Optimum Moisture Content</b>	<b>%</b>	<b>10</b>
---------------------------------	----------	-----------

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

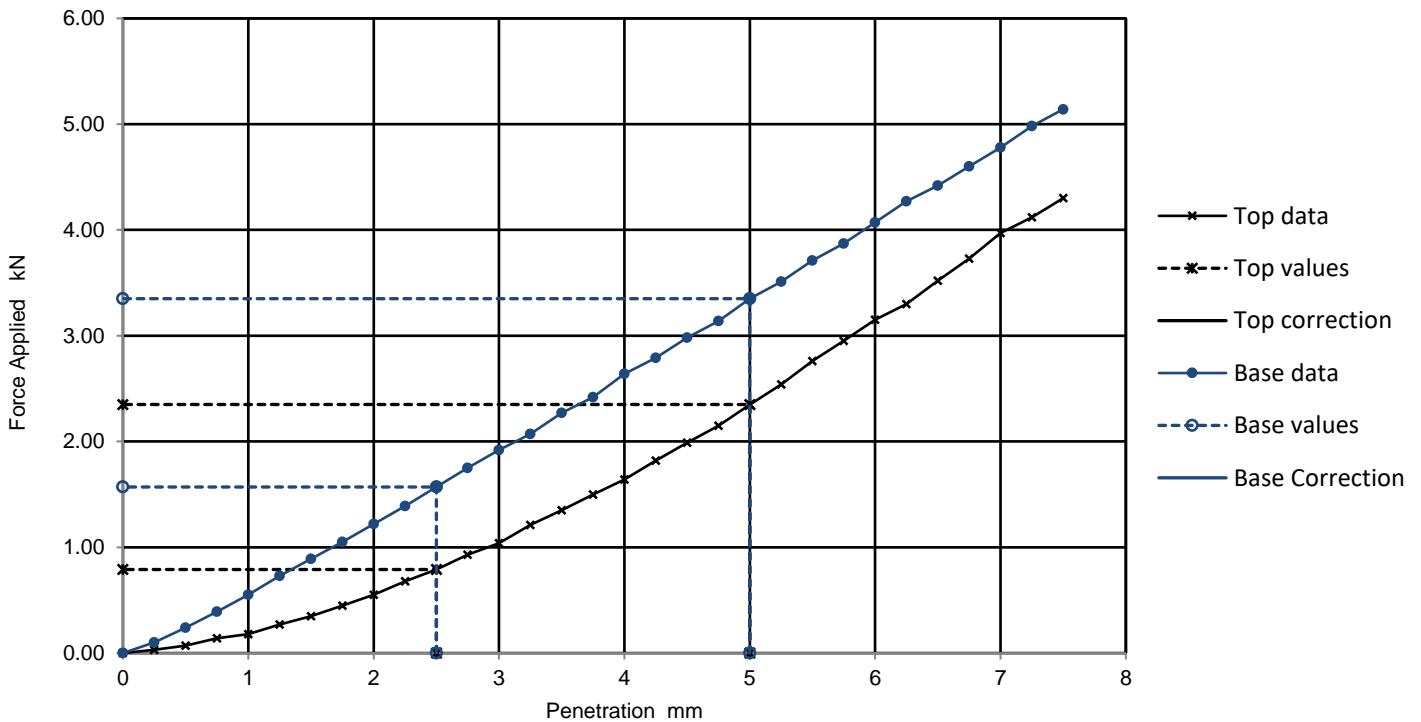
Laboratory Reference: 2439926  
Hole No.: TP204  
Sample Reference: Not Given  
Sample Description: Yellowish brown slightly clayey gravelly SAND

Depth Top [m]: 0.60  
Depth Base [m]: 0.70  
Sample Type: D

### Specimen Preparation:

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
		Time to surface	days
		Amount of swell recorded	mm
Material retained on 20mm sieve removed	9 %	Dry density after soaking	Mg/m <sup>3</sup>
Initial Specimen details	Bulk density 2.01 Mg/m <sup>3</sup>	Surcharge applied	8 kg
	Dry density 1.89 Mg/m <sup>3</sup>		4.8 kPa
	Moisture content 6.4 %		

Force v Penetration Plots



### Results

TOP  
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	6.0	12.0	12.0	
No	12.0	17.0	17.0	

Moisture Content %
6.3
6.5

Remarks:

Test/ Specimen specific remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

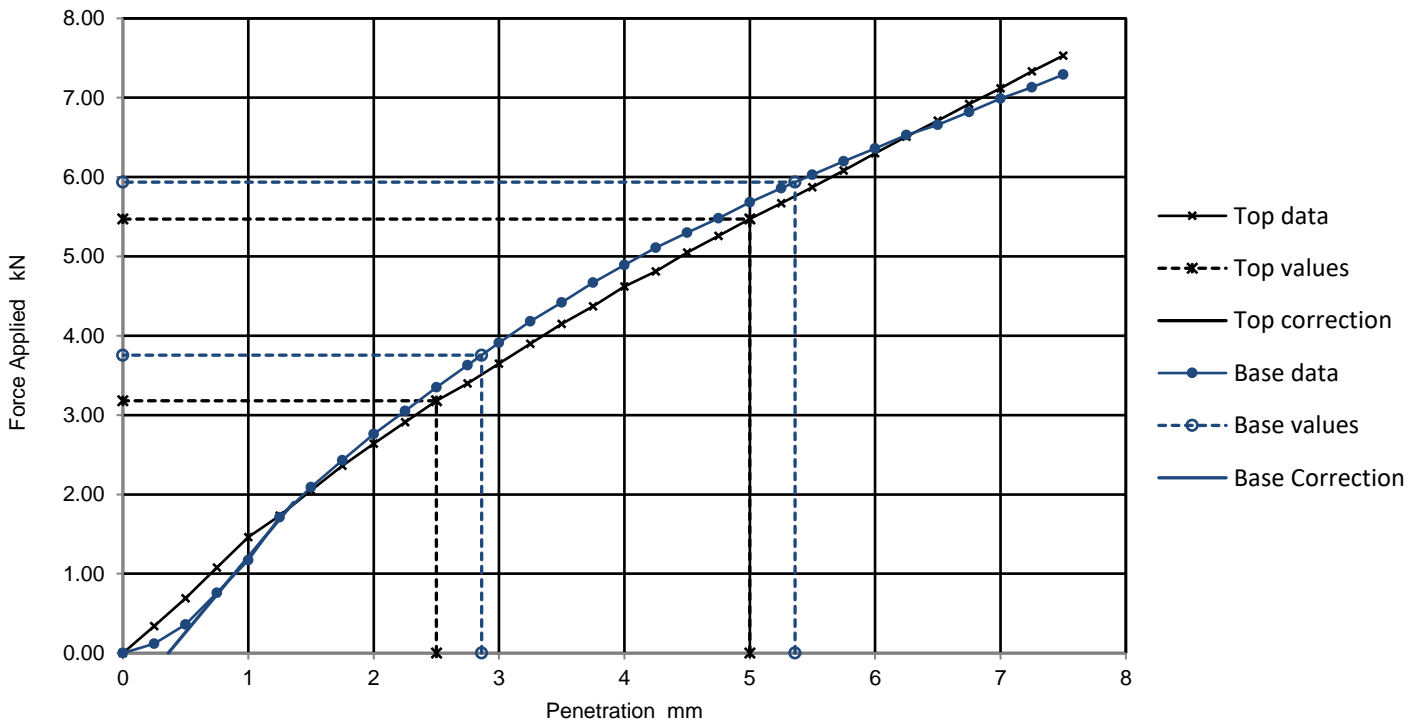
Laboratory Reference: 2439929  
Hole No.: TP209  
Sample Reference: Not Given  
Sample Description: Brown silty clayey very gravelly SAND

Depth Top [m]: 0.60  
Depth Base [m]: Not Given  
Sample Type: D

### Specimen Preparation:

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
		Time to surface	days
		Amount of swell recorded	mm
Material retained on 20mm sieve removed	3 %	Dry density after soaking	Mg/m <sup>3</sup>
Initial Specimen details	Bulk density 2.02 Mg/m <sup>3</sup>	Surcharge applied	8 kg
	Dry density 1.88 Mg/m <sup>3</sup>		4.9 kPa
	Moisture content 7.5 %		

Force v Penetration Plots



### Results

	Curve correction applied	CBR Values, %				Moisture Content %
		2.5mm	5mm	Highest	Average	
TOP	No	24.0	27.0	27.0	29.0	7.3
BASE	Yes	28.0	30.0	30.0		6.9

### Remarks:

Test/ Specimen specific remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

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Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

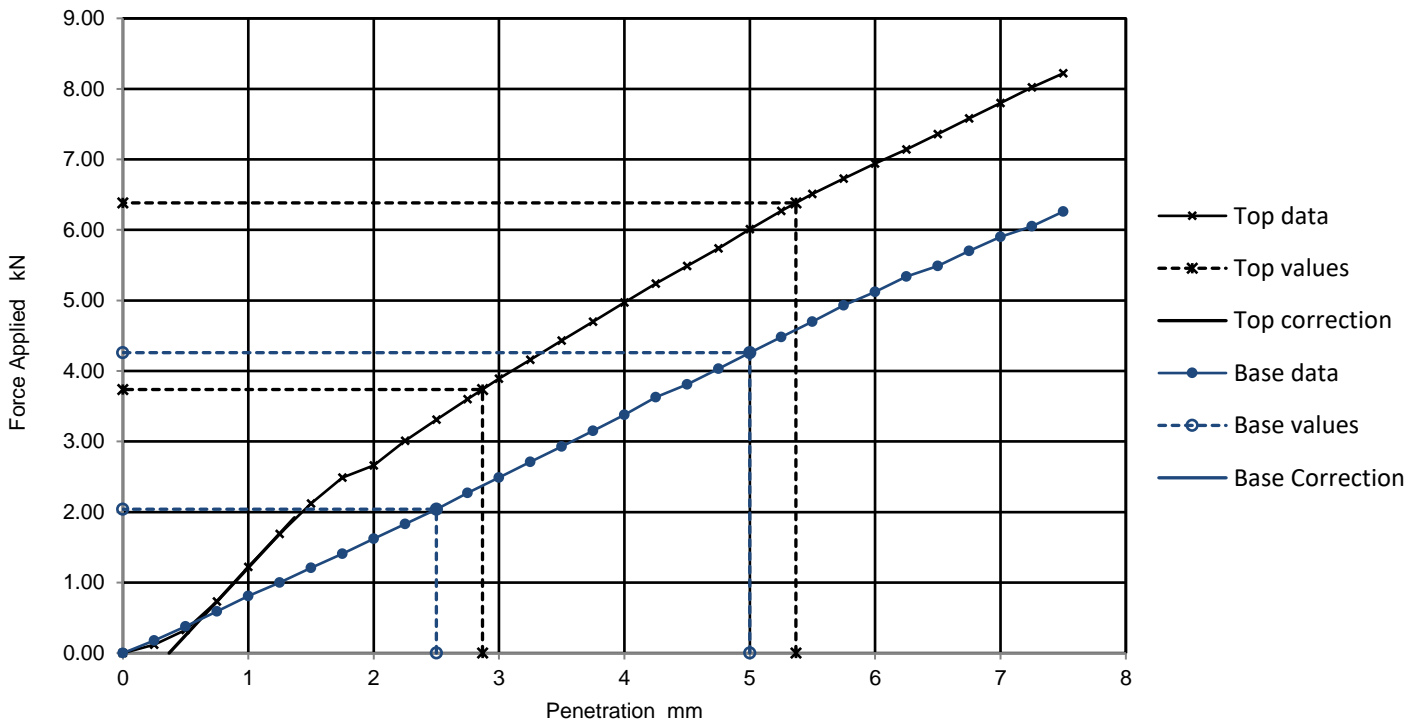
Laboratory Reference: 2439933  
Hole No.: TP212  
Sample Reference: Not Given  
Sample Description: Brown slightly clayey very gravelly SAND

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D

### Specimen Preparation:

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
		Time to surface	days
		Amount of swell recorded	mm
Material retained on 20mm sieve removed	2 %	Dry density after soaking	Mg/m <sup>3</sup>
Initial Specimen details	Bulk density 2.01 Mg/m <sup>3</sup>	Surcharge applied	8 kg
	Dry density 1.90 Mg/m <sup>3</sup>		4.8 kPa
	Moisture content 5.8 %		

Force v Penetration Plots



### Results

	Curve correction applied	CBR Values, %				Moisture Content %
		2.5mm	5mm	Highest	Average	
TOP	Yes	28.0	32.0	32.0		5.9
BASE	No	15.0	21.0	21.0		6.3

### Remarks:

Test/ Specimen specific remarks:

Signed:

Monika Siewior  
Reporting Specialist  
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# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

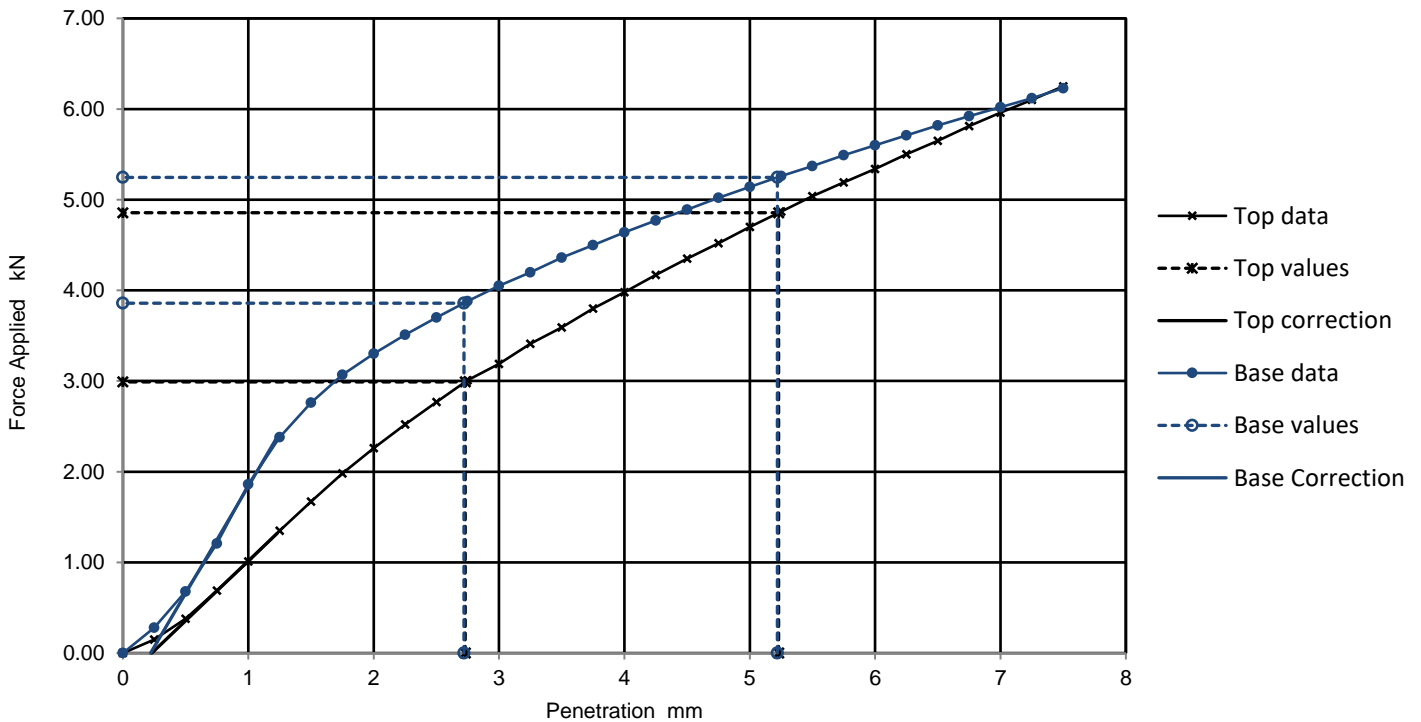
Laboratory Reference: 2439941  
Hole No.: TP224  
Sample Reference: Not Given  
Sample Description: Yellowish brown slightly gravelly sandy CLAY

Depth Top [m]: 0.90  
Depth Base [m]: Not Given  
Sample Type: D

### Specimen Preparation:

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
		Time to surface	days
		Amount of swell recorded	mm
Material retained on 20mm sieve removed	3 %	Dry density after soaking	Mg/m <sup>3</sup>
Initial Specimen details	Bulk density 2.00 Mg/m <sup>3</sup>	Surcharge applied	8 kg
	Dry density 1.82 Mg/m <sup>3</sup>		4.8 kPa
	Moisture content 9.8 %		

Force v Penetration Plots



### Results

TOP  
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
Yes	23.0	24.0	24.0	27.0
Yes	29.0	26.0	29.0	

Moisture Content %
9.8
9.3

### Remarks:

Test/ Specimen specific remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439948  
Hole No.: TP232  
Sample Reference: Not Given  
Sample Description: Brown CLAY

Depth Top [m]: 0.50  
Depth Base [m]: Not Given  
Sample Type: D

### Specimen Preparation:

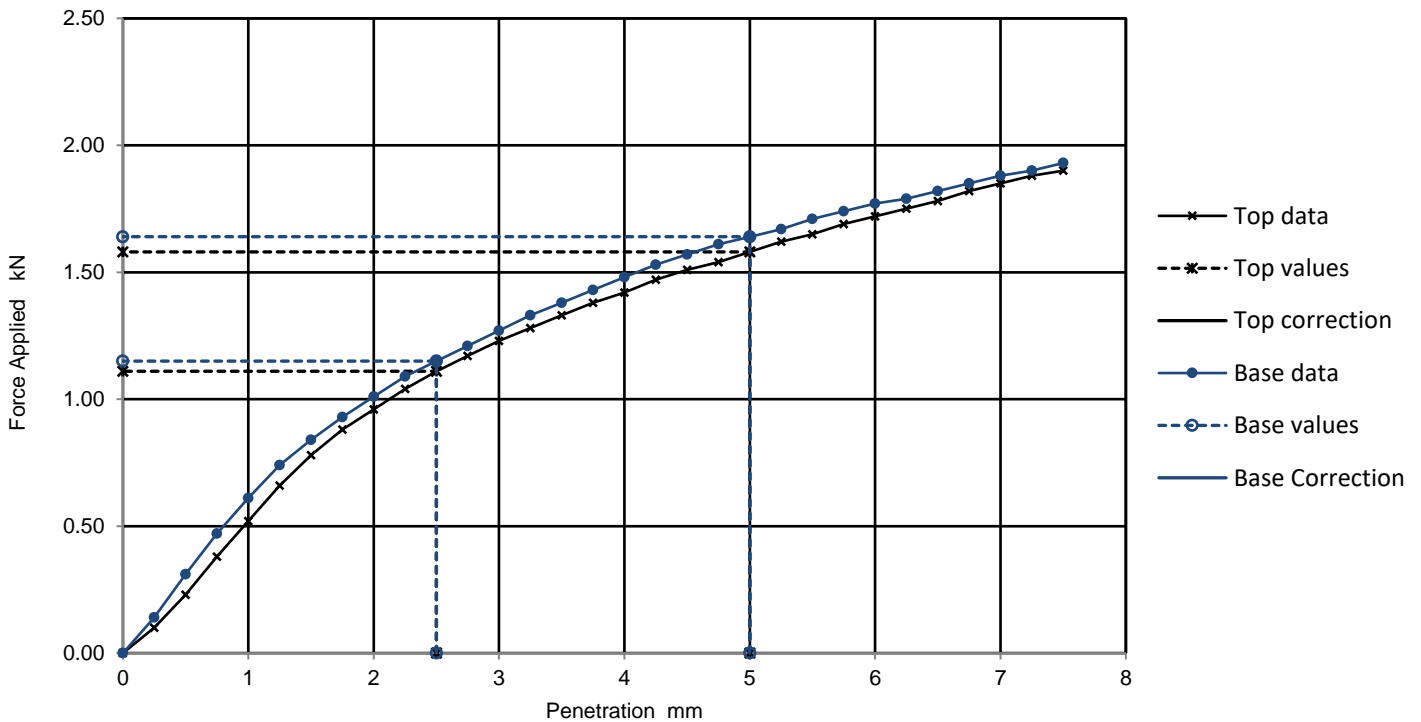
Condition Remoulded  
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked  
Period of soaking days  
Time to surface days  
Amount of swell recorded mm  
Dry density after soaking Mg/m<sup>3</sup>

Material retained on 20mm sieve removed 3 %

Initial Specimen details Bulk density 1.99 Mg/m<sup>3</sup>  
Dry density 1.67 Mg/m<sup>3</sup>  
Moisture content 19 %  
Surcharge applied 8 kg  
4.8 kPa

Force v Penetration Plots



### Results

TOP  
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	8.4	7.9	8.4	8.6
No	8.7	8.2	8.7	

Moisture Content %
19
21

Remarks:

Test/ Specimen specific remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 08/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439917  
Hole No.: TP201  
Sample Reference: Not Given  
Sample Description: Orangish brown silty clayey very gravelly SAND

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D

### Specimen Preparation:

Condition Remoulded  
Details Recompacted with specified standard effort using 4.5kg rammer

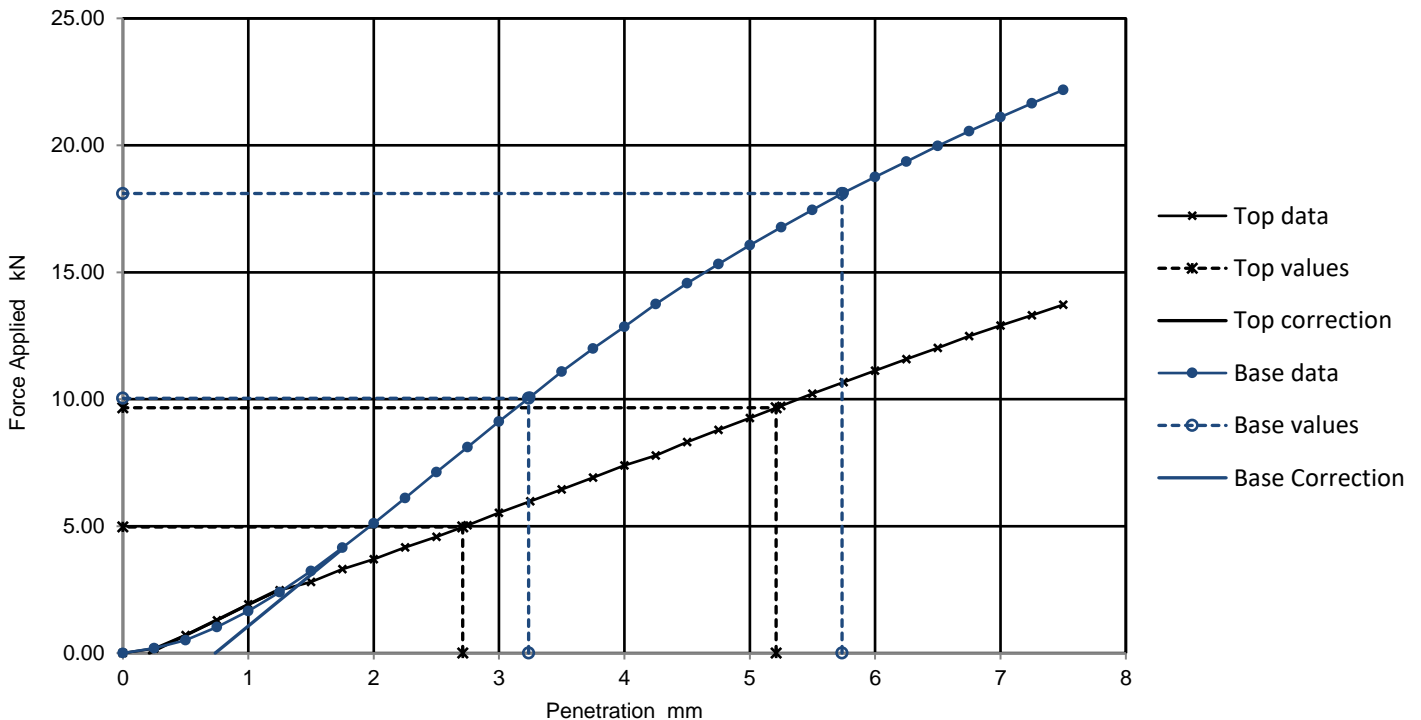
Soaking details  
Period of soaking 6 days  
Time to surface 3 days  
Amount of swell recorded 0.18 mm  
Dry density after soaking 2.21 Mg/m<sup>3</sup>

Material retained on 20mm sieve removed 1 %

Initial Specimen details  
Bulk density 2.41 Mg/m<sup>3</sup>  
Dry density 2.22 Mg/m<sup>3</sup>  
Moisture content 8.8 %

Surcharge applied 8 kg  
4.9 kPa

Force v Penetration Plots



### Results

	Curve correction applied	CBR Values, %				Moisture Content %
		2.5mm	5mm	Highest	Average	
TOP	Yes	38.0	48.0	48.0		12
BASE	Yes	76.0	91.0	91.0		10

Remarks: CBR tested at OMC = 9% of MC.

Test/ Specimen specific remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD

Contact: Nathan Thompson  
Site Address: Begbroke

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

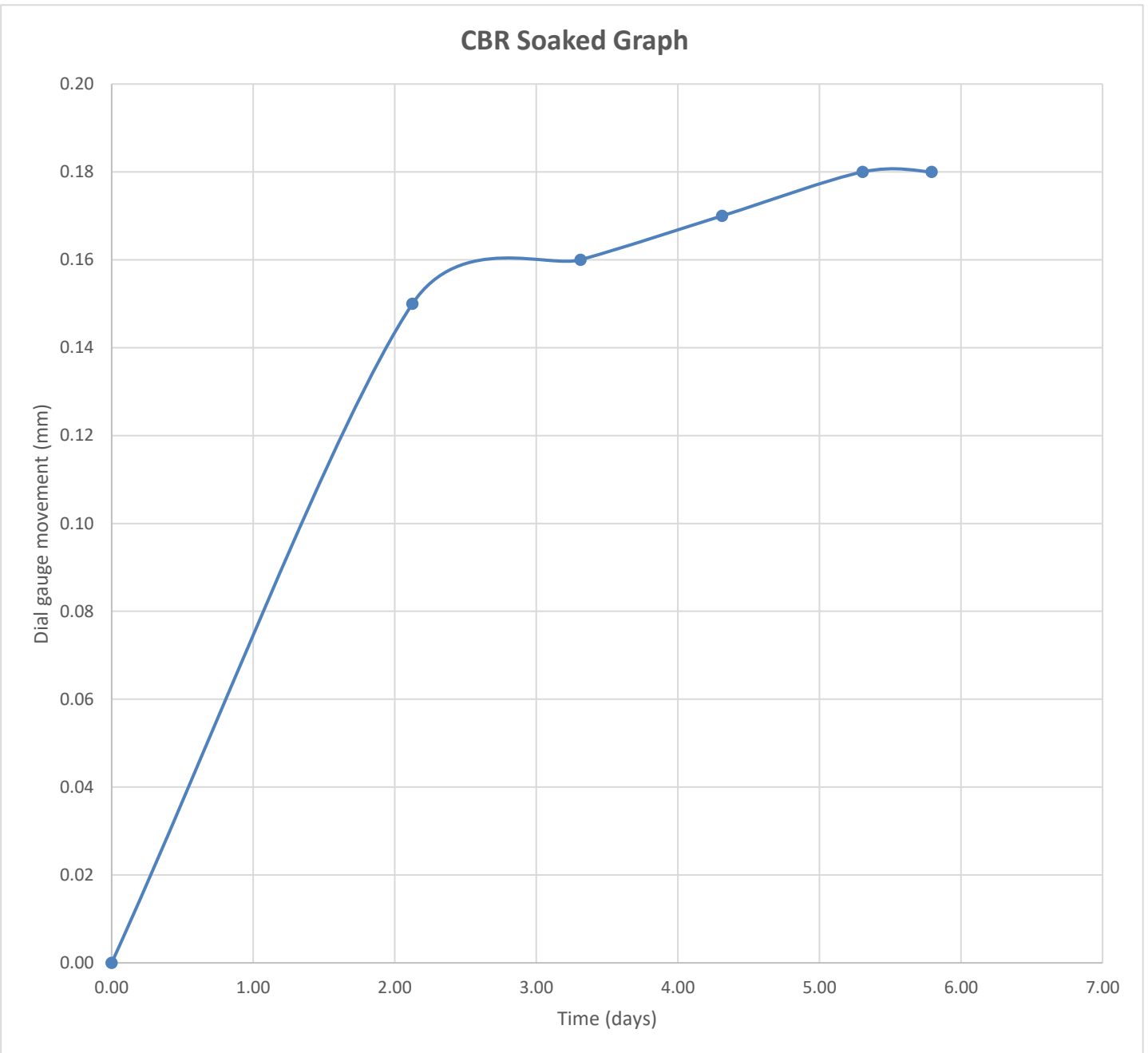
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 08/10/2022  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 2439917  
Hole No.: TP201  
Sample Reference: Not Given  
Sample Description: Orangish brown silty clayey very gravelly SAND

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D

### CBR Soaked Graph



Remarks: CBR tested at OMC = 9% of MC.

Test/ Specimen specific remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 08/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439918  
Hole No.: TP203  
Sample Reference: Not Given  
Sample Description: Brownish grey slightly sandy very silty CLAY

Depth Top [m]: 1.30  
Depth Base [m]: Not Given  
Sample Type: D

### Specimen Preparation:

Condition Remoulded  
Details Recompacted with specified standard effort using 4.5kg rammer

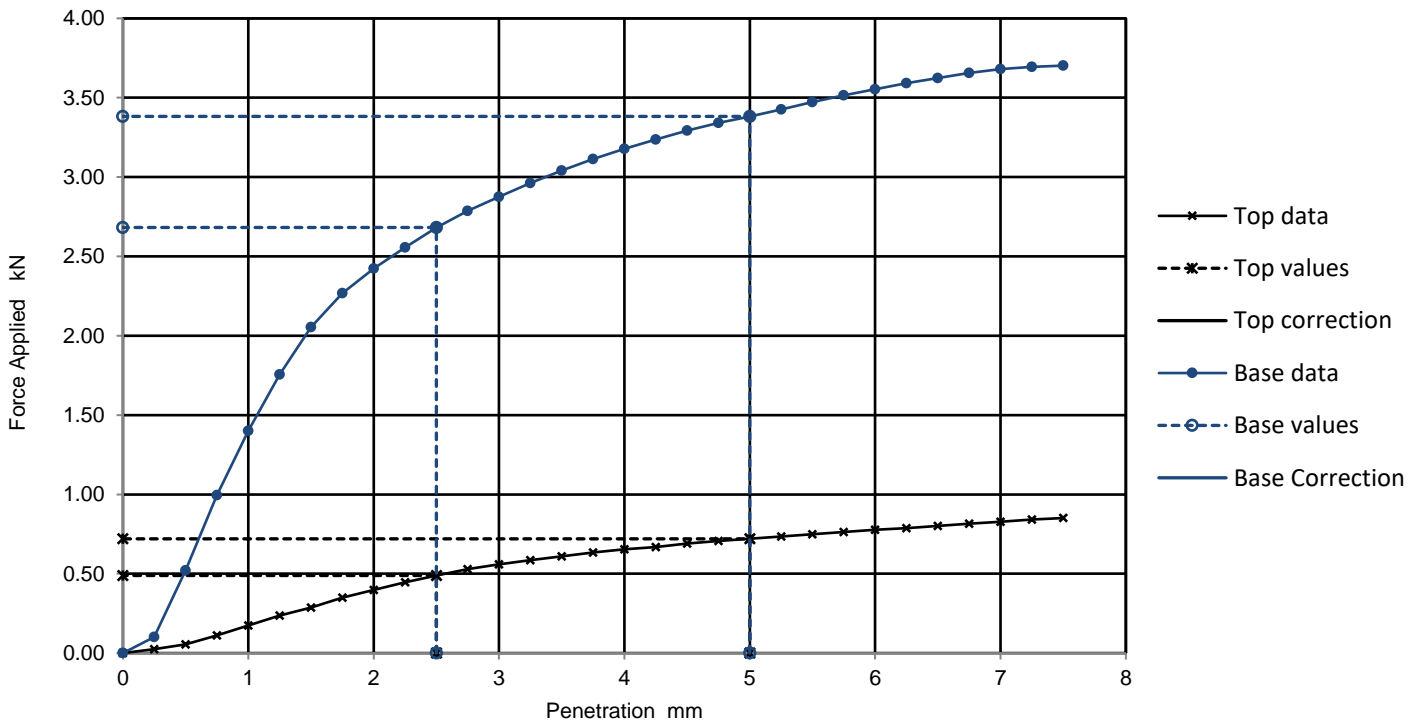
Soaking details  
Period of soaking 9 days  
Time to surface 3 days  
Amount of swell recorded 3.06 mm  
Dry density after soaking 1.69 Mg/m<sup>3</sup>

Material retained on 20mm sieve removed 0 %

Initial Specimen details  
Bulk density 2.05 Mg/m<sup>3</sup>  
Dry density 1.73 Mg/m<sup>3</sup>  
Moisture content 19 %

Surcharge applied 8 kg  
4.8 kPa

Force v Penetration Plots



### Results

TOP  
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	3.7	3.6	3.7	
No	20.0	17.0	20.0	

Moisture Content %
28
23

Remarks: CBR tested at OMC = 19% of MC.

Test/ Specimen specific remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD

Contact: Nathan Thompson  
Site Address: Begbroke

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

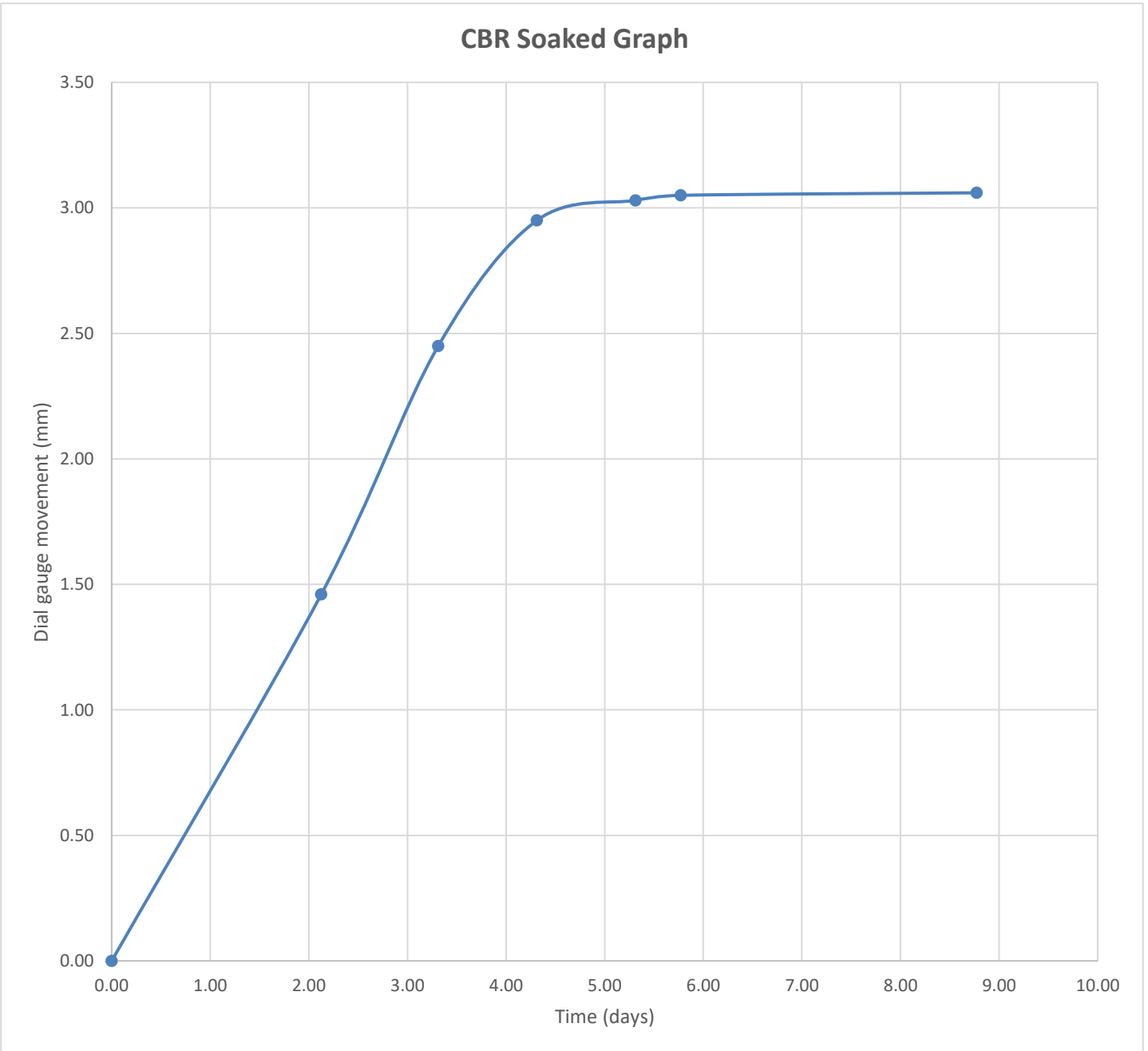
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 08/10/2022  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 2439918  
Hole No.: TP203  
Sample Reference: Not Given  
Sample Description: Brownish grey slightly sandy very silty CLAY

Depth Top [m]: 1.30  
Depth Base [m]: Not Given  
Sample Type: D

### CBR Soaked Graph



Remarks: CBR tested at OMC = 19% of MC. Test/ Specimen specific remarks:

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Signed: *Monika Siewior*  
Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd



# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 06/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439919  
Hole No.: TP208  
Sample Reference: Not Given  
Sample Description: Orangish brown silty clayey very gravelly SAND

Depth Top [m]: 0.60  
Depth Base [m]: 0.70  
Sample Type: D

### Specimen Preparation:

Condition Remoulded  
Details Recompacted with specified standard effort using 4.5kg rammer

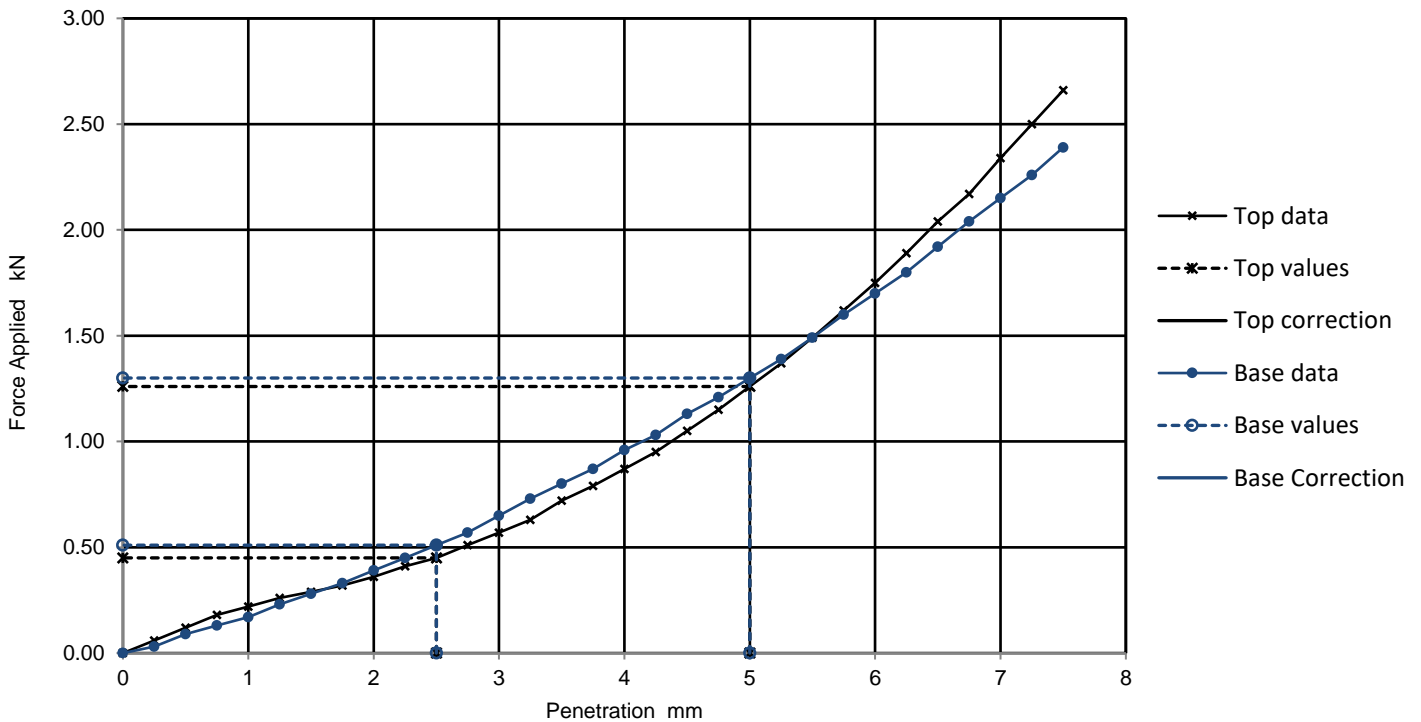
Soaking details  
Period of soaking 6 days  
Time to surface 3 days  
Amount of swell recorded -0.15 mm  
Dry density after soaking 2.05 Mg/m<sup>3</sup>

Material retained on 20mm sieve removed 2 %

Initial Specimen details  
Bulk density 2.30 Mg/m<sup>3</sup>  
Dry density 2.05 Mg/m<sup>3</sup>  
Moisture content 12 %

Surcharge applied 8 kg  
4.8 kPa

Force v Penetration Plots



### Results

	Curve correction applied	CBR Values, %				Moisture Content %
		2.5mm	5mm	Highest	Average	
TOP	No	3.4	6.3	6.3	6.4	13
BASE	No	3.9	6.5	6.5		13

Remarks: CBR tested at OMC = 12% of MC.

Test/ Specimen specific remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

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Environmental Science

4041

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Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD

Contact: Nathan Thompson  
Site Address: Begbroke

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

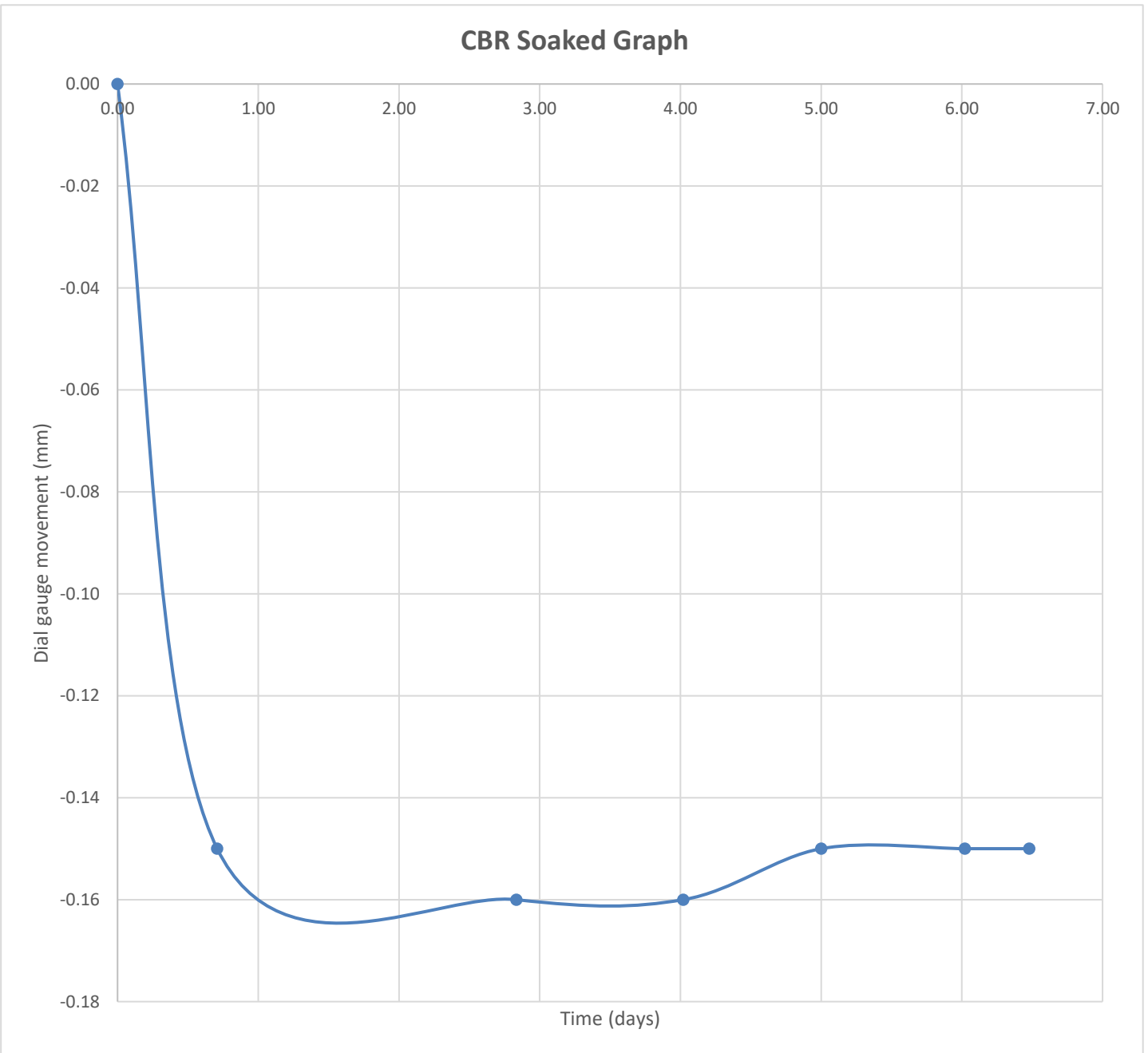
Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 06/10/2022  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 2439919  
Hole No.: TP208  
Sample Reference: Not Given  
Sample Description: Orangish brown silty clayey very gravelly SAND

Depth Top [m]: 0.60  
Depth Base [m]: 0.70  
Sample Type: D

### CBR Soaked Graph



Remarks: CBR tested at OMC = 12% of MC.

Test/ Specimen  
specific remarks:

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*Monika Siewior*

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd



# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

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Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439920  
Hole No.: TP218  
Sample Reference: Not Given  
Sample Description: Yellowish brown sandy silty clayey GRAVEL

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D

### Specimen Preparation:

Condition Remoulded  
Details Recompacted with specified standard effort using 4.5kg rammer

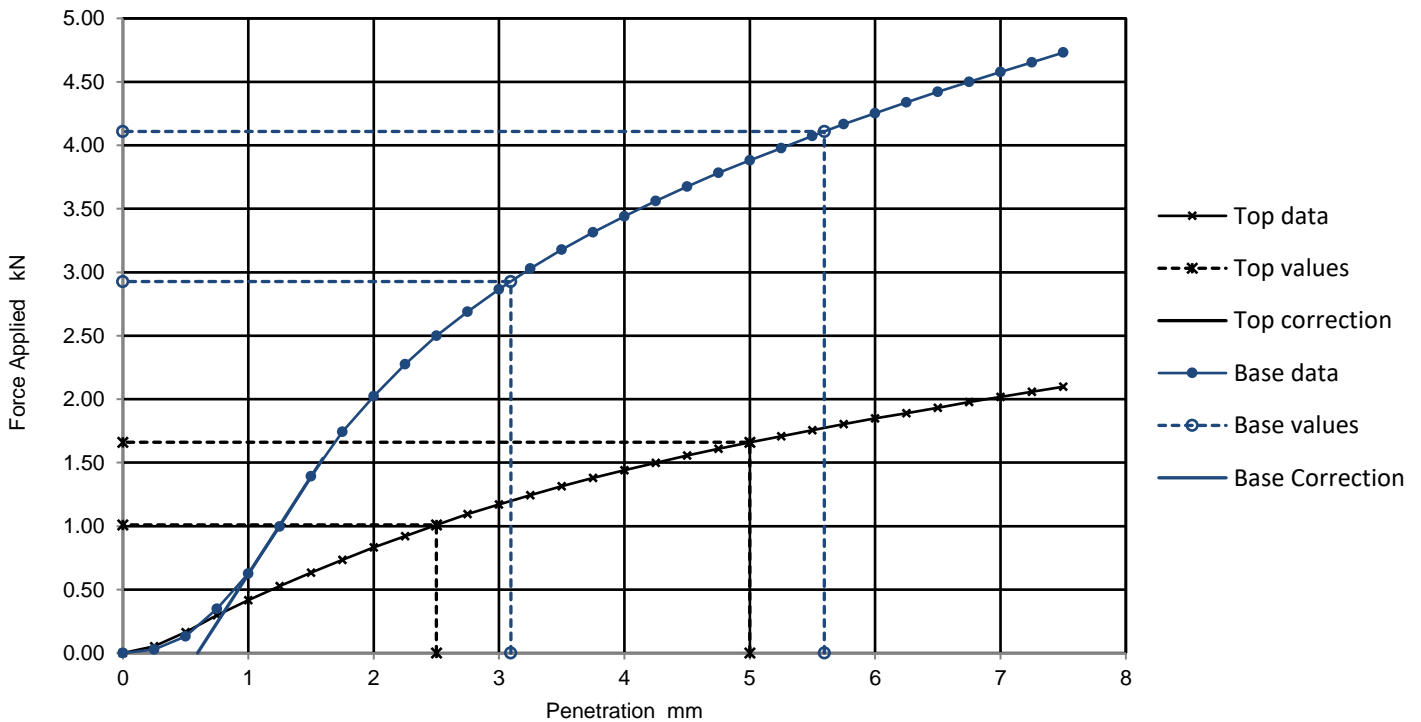
Soaking details  
Period of soaking 9 days  
Time to surface 3 days  
Amount of swell recorded 1.77 mm  
Dry density after soaking 1.99 Mg/m<sup>3</sup>

Material retained on 20mm sieve removed 54 %

Initial Specimen details  
Bulk density 2.23 Mg/m<sup>3</sup>  
Dry density 2.01 Mg/m<sup>3</sup>  
Moisture content 11 %

Surcharge applied 8 kg  
4.9 kPa

Force v Penetration Plots



### Results

TOP  
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	7.7	8.3	8.3	
Yes	22.0	21.0	22.0	

Moisture Content %
15
12

Remarks: CBR tested at OMC = 11% of MC.

Test/ Specimen specific remarks: Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

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Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

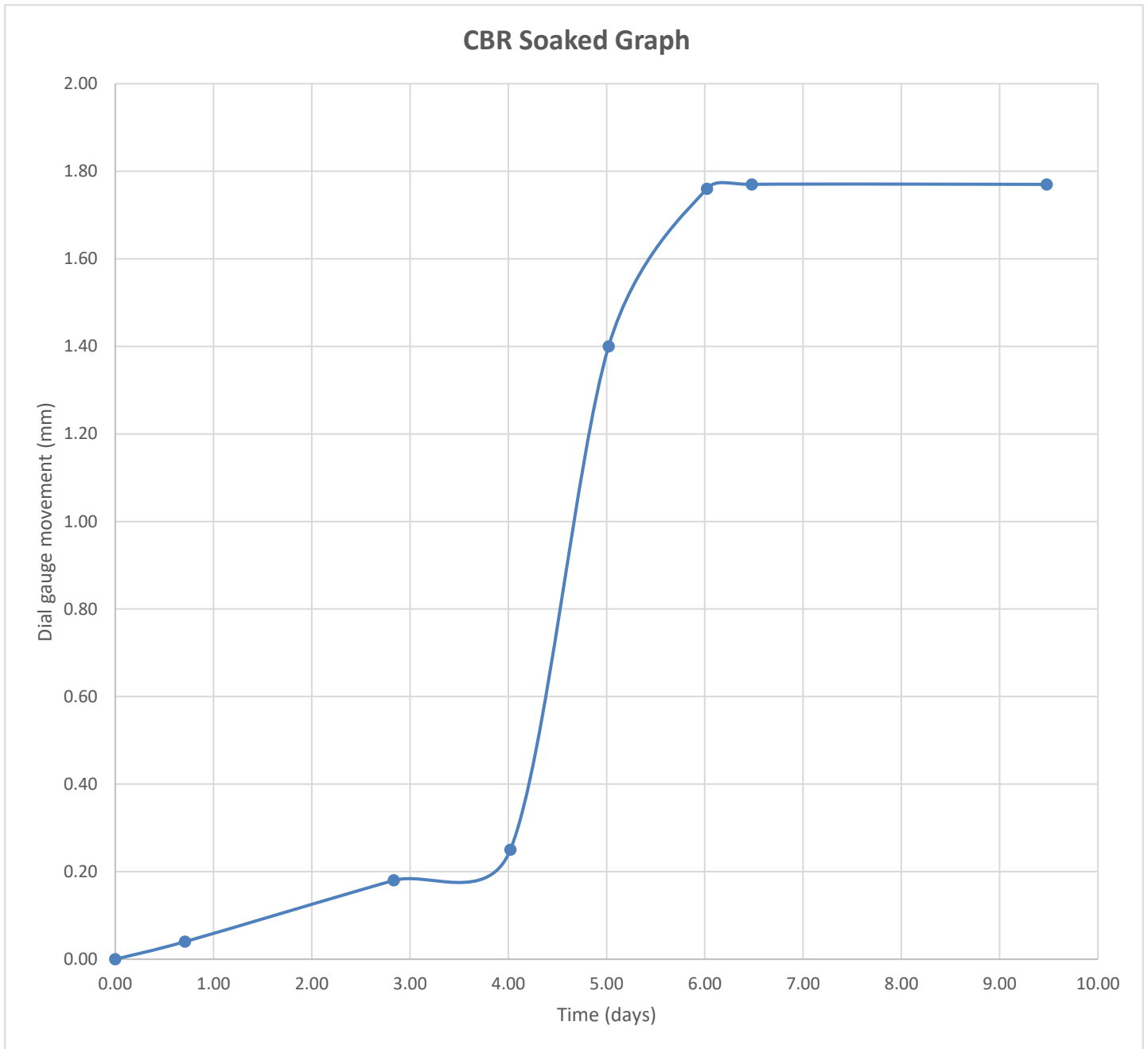
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439920  
Hole No.: TP218  
Sample Reference: Not Given  
Sample Description: Yellowish brown sandy silty clayey GRAVEL

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D

### CBR Soaked Graph



Remarks: CBR tested at OMC = 11% of MC.

Test/ Specimen specific remarks: Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2

Signed:

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Reporting Specialist  
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# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
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Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 08/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439921  
Hole No.: TP221  
Sample Reference: Not Given  
Sample Description: Orangish brown clayey very gravelly SAND

Depth Top [m]: 2.20  
Depth Base [m]: 2.30  
Sample Type: D

### Specimen Preparation:

Condition Remoulded  
Details Recompacted with specified standard effort using 4.5kg rammer

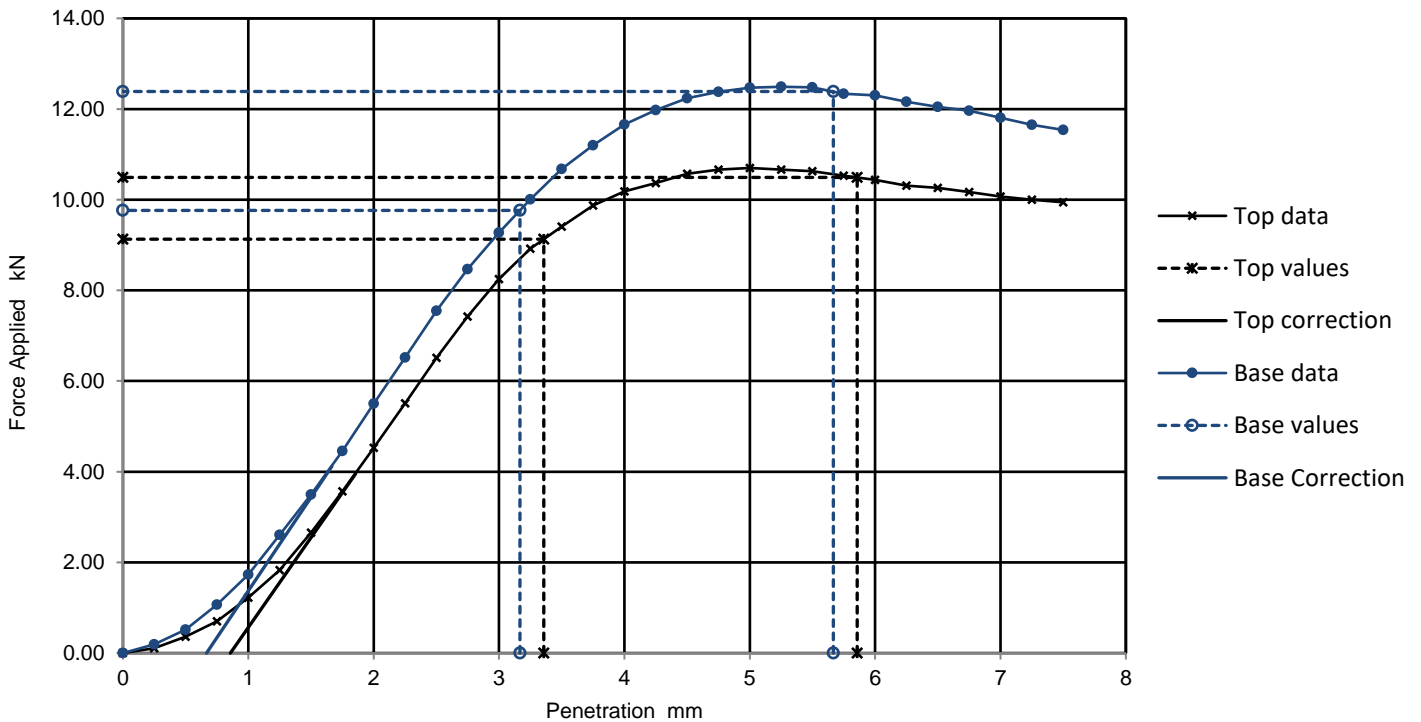
Soaking details  
Period of soaking 6 days  
Time to surface 3 days  
Amount of swell recorded 0.03 mm  
Dry density after soaking 2.06 Mg/m<sup>3</sup>

Material retained on 20mm sieve removed 5 %

Initial Specimen details  
Bulk density 2.28 Mg/m<sup>3</sup>  
Dry density 2.07 Mg/m<sup>3</sup>  
Moisture content 10 %

Surcharge applied 8 kg  
4.9 kPa

Force v Penetration Plots



### Results

	Curve correction applied	CBR Values, %				Moisture Content %
		2.5mm	5mm	Highest	Average	
TOP	Yes	69.0	52.0	69.0	72.0	11
BASE	Yes	74.0	62.0	74.0		10

Remarks: CBR tested at OMC = 10% of MC.

Test/ Specimen specific remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

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Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 08/10/2022  
Sampled By: Not Given

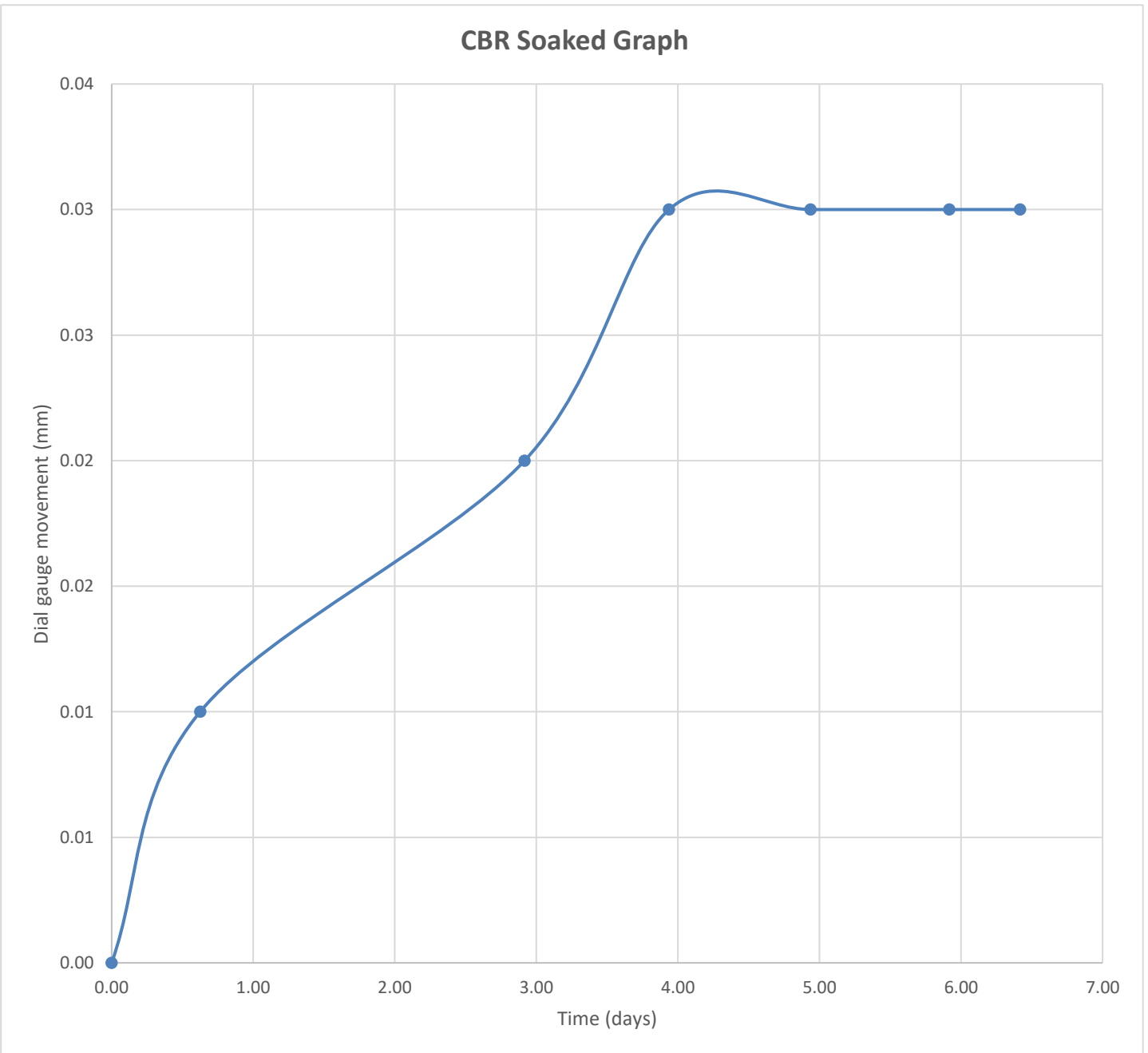
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439921  
Hole No.: TP221  
Sample Reference: Not Given  
Sample Description: Orangish brown clayey very gravelly SAND

Depth Top [m]: 2.20  
Depth Base [m]: 2.30  
Sample Type: D

### CBR Soaked Graph



Remarks: CBR tested at OMC = 10% of MC.

Test/ Specimen  
specific remarks:

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF UNDRAINED SHEAR STRENGTH AT EACH COMPACTION POINT USING HAND VANE APPARATUS

Tested in Accordance with: Guideline for Hand Shear Vane Test\*

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD

Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439917  
Hole No.: TP201  
Sample Reference: Not Given  
Soil Description: Orangish brown silty clayey very gravelly SAND

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D

Moisture Content %	Shear Vane Reading					Tv kPa
	1 kPa	2 kPa	3 kPa	4 kPa	Average kPa	
5.2	UTP	UTP	UTP	UTP	UTP	
7.1	UTP	UTP	UTP	UTP	UTP	
9.1	UTP	UTP	UTP	UTP	UTP	
12	UTP	UTP	UTP	UTP	UTP	
14	84	70	66	52	68	

Note: UTP - Unable To Penetrate; \* - Guideline for Hand Held Shear Vane Test, New Zealand Geotechnical Society INC, August 2001

Remarks: Compacted by: Heavy Compaction 4.5kg (BS1377:Part 4:1990).

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

Page 1 of 1

Date Reported: 18/10/2022

GF 275.12

# TEST CERTIFICATE

## DETERMINATION OF UNDRAINED SHEAR STRENGTH AT EACH COMPACTION POINT USING HAND VANE APPARATUS

Tested in Accordance with: Guideline for Hand Shear Vane Test\*

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD

Contact: Nathan Thompson  
Site Address: Begbroke

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 2439918  
Hole No.: TP203  
Sample Reference: Not Given  
Soil Description: Brownish grey slightly sandy very silty CLAY

Depth Top [m]: 1.30  
Depth Base [m]: Not Given  
Sample Type: D

Moisture Content %	Shear Vane Reading					Tv kPa
	1 kPa	2 kPa	3 kPa	4 kPa	Average kPa	
14	UTP	UTP	UTP	UTP	UTP	
17	UTP	UTP	UTP	UTP	UTP	
20	UTP	UTP	UTP	UTP	UTP	
22	UTP	UTP	UTP	UTP	UTP	
23	UTP	UTP	UTP	UTP	UTP	

Note: UTP - Unable To Penetrate; \* - Guideline for Hand Held Shear Vane Test, New Zealand Geotechnical Society INC, August 2001

Remarks: Compacted by: Heavy Compaction 4.5kg (BS1377:Part 4:1990).

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Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

Page 1 of 1

Date Reported: 18/10/2022

GF 275.12

# TEST CERTIFICATE

## DETERMINATION OF UNDRAINED SHEAR STRENGTH AT EACH COMPACTION POINT USING HAND VANE APPARATUS

Tested in Accordance with: Guideline for Hand Shear Vane Test\*

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD

Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2439919  
Hole No.: TP208  
Sample Reference: Not Given  
Soil Description: Orangish brown silty clayey very gravelly SAND

Depth Top [m]: 0.60  
Depth Base [m]: 0.70  
Sample Type: D

Moisture Content %	Shear Vane Reading					Tv kPa
	1 kPa	2 kPa	3 kPa	4 kPa	Average kPa	
8.7	UTP	UTP	UTP	UTP	UTP	
11	UTP	UTP	UTP	UTP	UTP	
12	UTP	UTP	UTP	UTP	UTP	
14	66	64	60	60	63	
16	24	18	20	14	19	

Note: UTP - Unable To Penetrate; \* - Guideline for Hand Held Shear Vane Test, New Zealand Geotechnical Society INC, August 2001

Remarks: Compacted by: Heavy Compaction 4.5kg (BS1377:Part 4:1990).

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Signed:

Page 1 of 1

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

Date Reported: 18/10/2022

GF 275.12



# TEST CERTIFICATE

## DETERMINATION OF UNDRAINED SHEAR STRENGTH AT EACH COMPACTION POINT USING HAND VANE APPARATUS

Tested in Accordance with: Guideline for Hand Shear Vane Test\*

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
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NN6 8LD

Contact: Nathan Thompson  
Site Address: Begbroke

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 2439920  
Hole No.: TP218  
Sample Reference: Not Given  
Soil Description: Yellowish brown sandy silty clayey GRAVEL

Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D

Moisture Content %	Shear Vane Reading					Tv kPa
	1 kPa	2 kPa	3 kPa	4 kPa	Average kPa	
9.0	UTP	UTP	UTP	UTP	UTP	
10	UTP	UTP	UTP	UTP	UTP	
11	UTP	UTP	UTP	UTP	UTP	
13	UTP	UTP	UTP	UTP	UTP	
14	104	90	110	90	99	

Note: UTP - Unable To Penetrate; \* - Guideline for Hand Held Shear Vane Test, New Zealand Geotechnical Society INC, August 2001

Remarks: Compacted by: Heavy Compaction 4.5kg (BS1377:Part 4:1990).

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## DETERMINATION OF UNDRAINED SHEAR STRENGTH AT EACH COMPACTION POINT USING HAND VANE APPARATUS

Tested in Accordance with: Guideline for Hand Shear Vane Test\*

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Brackmills Industrial Estate  
Northampton NN4 7EB



Client: Hydrock Consultants Ltd  
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Contact: Nathan Thompson  
Site Address: Begbroke

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 07/10/2022  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 2439921  
Hole No.: TP221  
Sample Reference: Not Given  
Soil Description: Orangish brown clayey very gravelly SAND

Depth Top [m]: 2.20  
Depth Base [m]: 2.30  
Sample Type: D

Moisture Content %	Shear Vane Reading					Tv kPa
	1 kPa	2 kPa	3 kPa	4 kPa	Average kPa	
5.2	UTP	UTP	UTP	UTP	UTP	
7.4	UTP	UTP	UTP	UTP	UTP	
10	UTP	UTP	UTP	UTP	UTP	
12	UTP	UTP	UTP	UTP	UTP	
14	34	16	22	28	25	

Note: UTP - Unable To Penetrate; \* - Guideline for Hand Held Shear Vane Test, New Zealand Geotechnical Society INC, August 2001

Remarks: Compacted by: Heavy Compaction 4.5kg (BS1377:Part 4:1990).

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Signed:

Page 1 of 1

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

Date Reported: 18/10/2022

GF 275.12

4041

Tested in Accordance with: BS 1377-7: 1990: Clause 8

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 10/10/2022  
Sampled By: Not Given

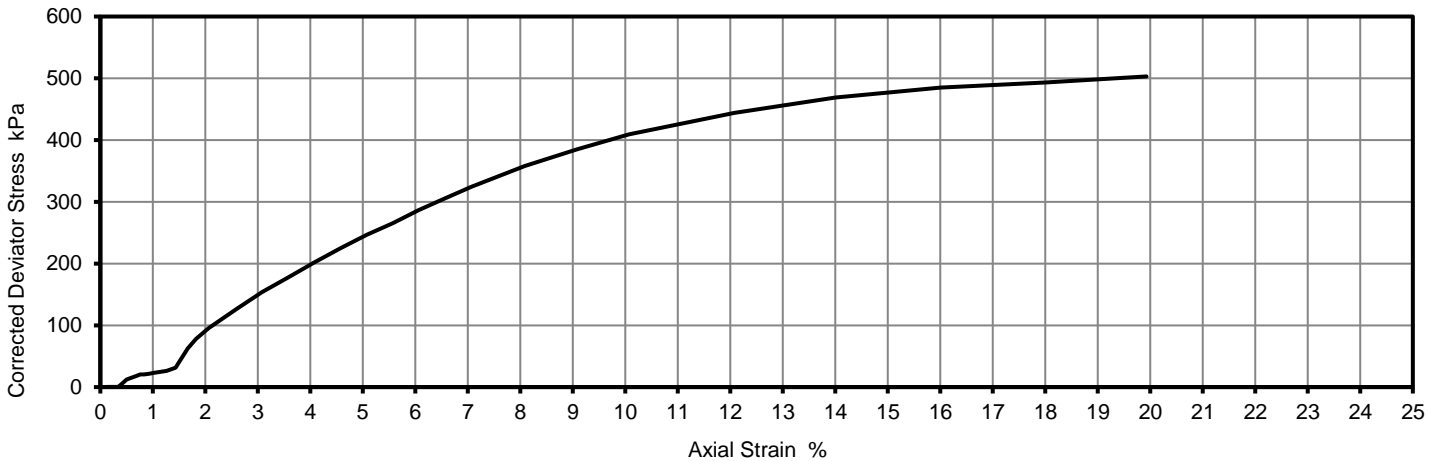
*Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland*

**Test Results:**

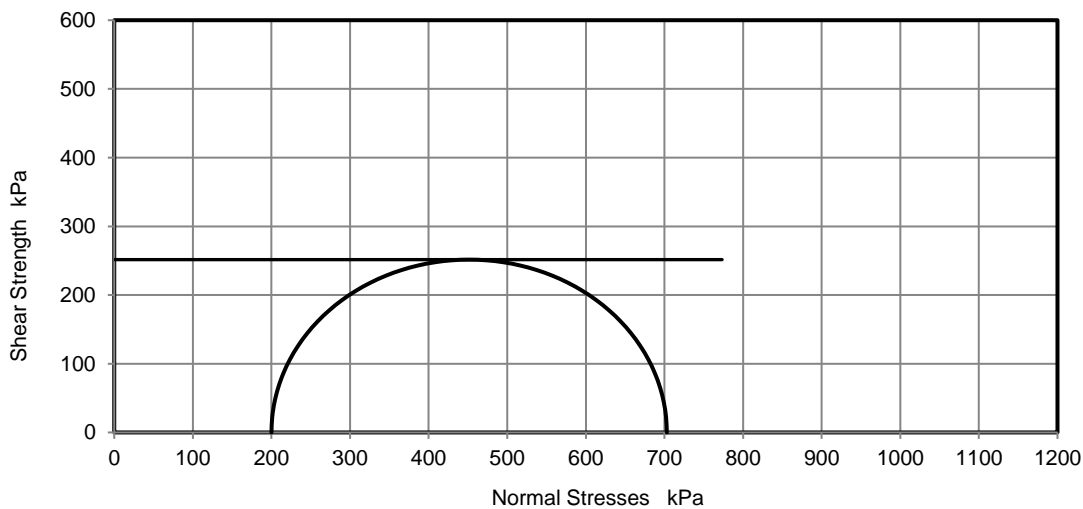
Laboratory Reference: 2439917	Depth Top [m]: 0.70
Hole No.: TP201	Depth Base [m]: Not Given
Sample Reference: Not Given	Sample Type: D
Sample Description: Orangish brown silty clayey very gravelly SAND	
Sample Preparation: Recompacted at OMC using 4.5kg rammer in accordance with Table 6 of BS1377-1:2016.	

Test Number	1	Rate of Strain	1.00	%/min
Length	199.33	Cell Pressure	200	kPa
Diameter	102.07	Axial Strain at failure	19.9	%
Bulk Density	2.38	Deviator Stress, ( $\sigma_1 - \sigma_3$ ) <sub>f</sub>	503	kPa
Moisture Content	9.0	Undrained Shear Strength, cu	251	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	2.19	Mode of Failure	Compound	
Membrane Correction	1.01	Membrane thickness	0.27	mm

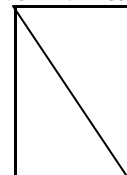
**Deviator Stress v Axial Strain**



**Mohr Circles**



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377. This is provided for information only.

**Remarks:**

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

4041

Tested in Accordance with: BS 1377-7: 1990: Clause 8

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 10/10/2022  
Sampled By: Not Given

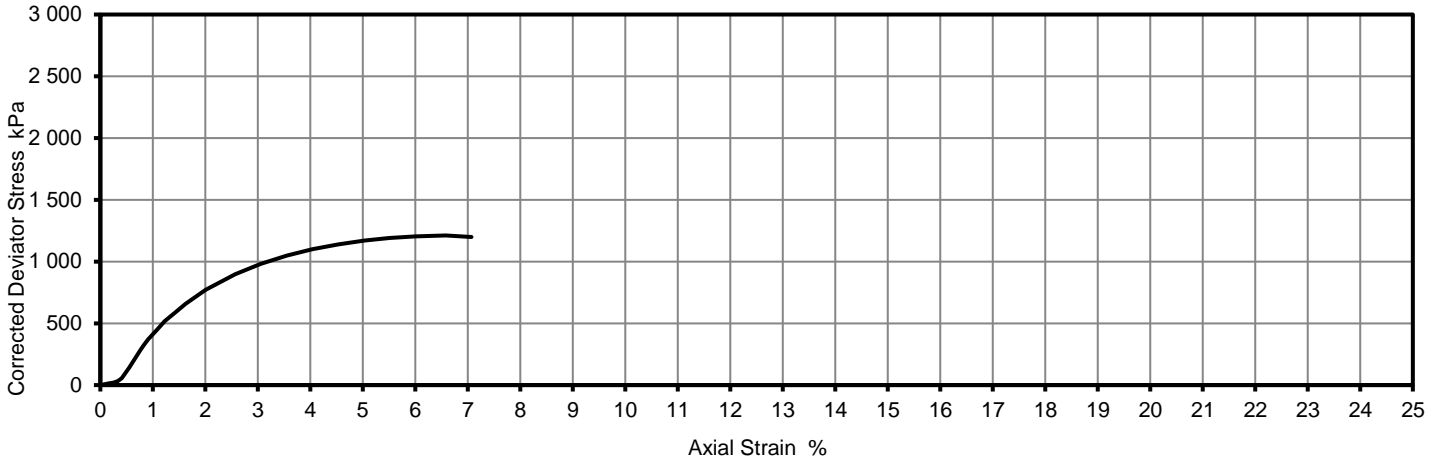
*Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland*

**Test Results:**

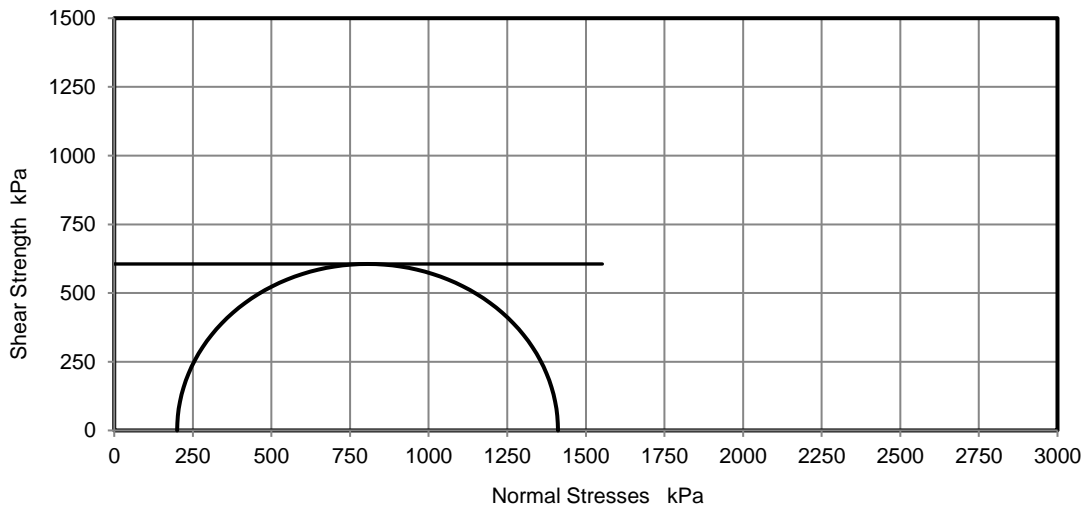
Laboratory Reference: 2439918	Depth Top [m]: 1.30
Hole No.: TP203	Depth Base [m]: Not Given
Sample Reference: Not Given	Sample Type: D
Sample Description: Brownish grey slightly sandy very silty CLAY	
Sample Preparation: Recompacted at OMC using 4.5kg rammer in accordance with Table 6 of BS1377-1:2016.	

Test Number	1	Rate of Strain	1.00	%/min
Length	201.87	Cell Pressure	200	kPa
Diameter	100.70	Axial Strain at failure	6.6	%
Bulk Density	2.07	Deviator Stress, ( $\sigma_1 - \sigma_3$ ) <sub>f</sub>	1211	kPa
Moisture Content	19	Undrained Shear Strength, cu	606	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.74	Mode of Failure	Compound	
Membrane Correction	0.43	Membrane thickness	0.26	mm

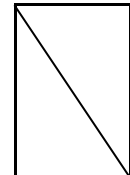
**Deviator Stress v Axial Strain**



**Mohr Circles**



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377. This is provided for information only.

**Remarks:**

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**Signed:**

*Monika Siewior*

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd



4041

Tested in Accordance with: BS 1377-7: 1990: Clause 8

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 10/10/2022  
Sampled By: Not Given

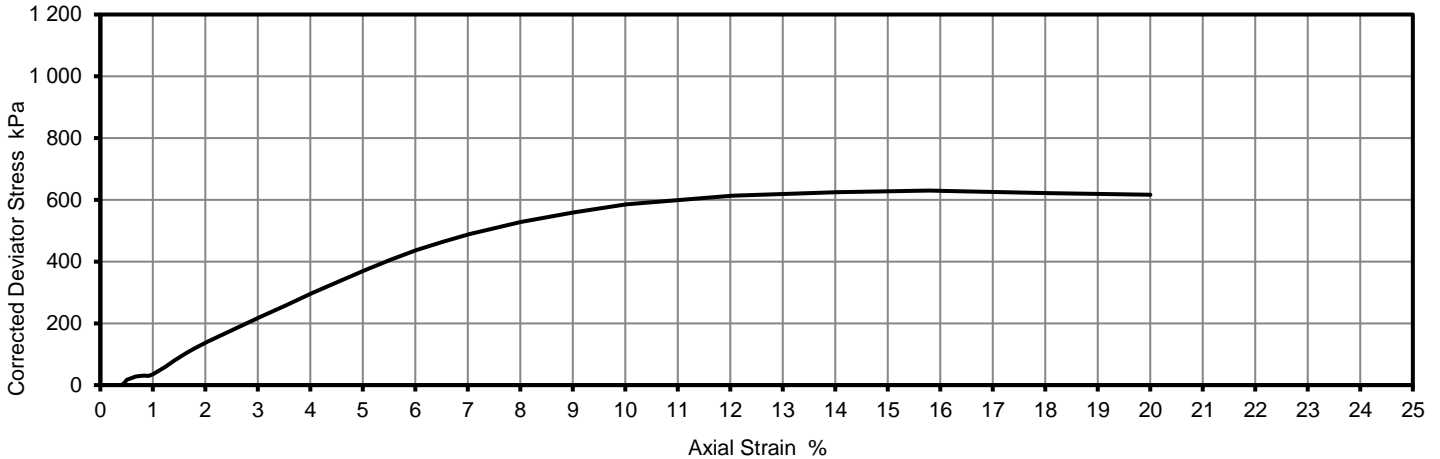
*Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland*

**Test Results:**

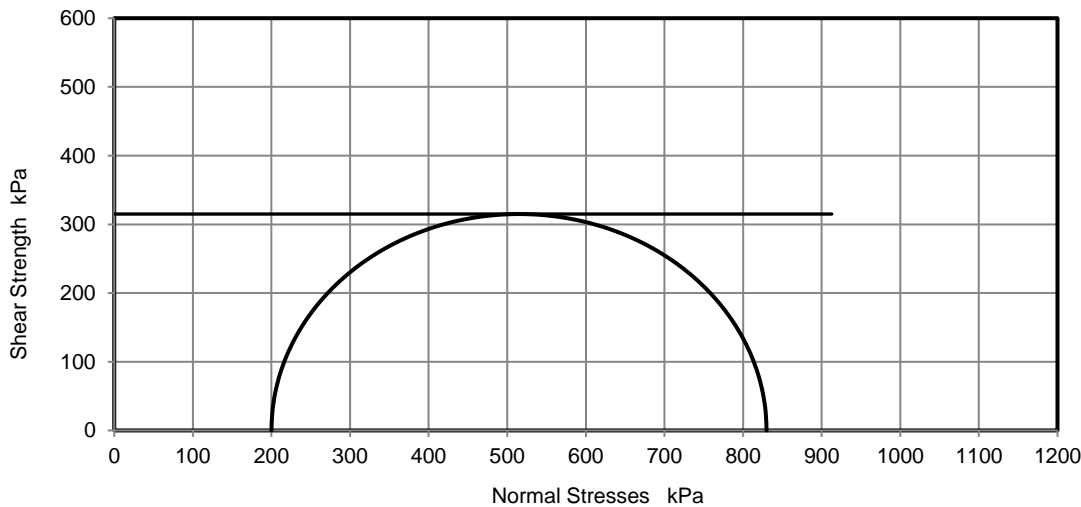
Laboratory Reference: 2439919	Depth Top [m]: 0.60
Hole No.: TP208	Depth Base [m]: 0.70
Sample Reference: Not Given	Sample Type: D
Sample Description: Orangish brown silty clayey very gravelly SAND	
Sample Preparation: Recompacted at OMC using 4.5kg rammer in accordance with Table 6 of BS1377-1:2016.	

Test Number	1	Rate of Strain	1.00	%/min
Length	199.20	Cell Pressure	200	kPa
Diameter	101.15	Axial Strain at failure	15.8	%
Bulk Density	2.35	Deviator Stress, ( $\sigma_1 - \sigma_3$ ) <sub>f</sub>	630	kPa
Moisture Content	12	Undrained Shear Strength, cu	315	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	2.10	Mode of Failure	Compound	
Membrane Correction	0.88	Membrane thickness	0.28	mm

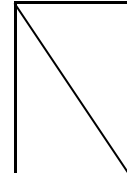
**Deviator Stress v Axial Strain**



**Mohr Circles**



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377. This is provided for information only.

**Remarks:**

**Signed:**

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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4041

Tested in Accordance with: BS 1377-7: 1990: Clause 8

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 10/10/2022  
Sampled By: Not Given

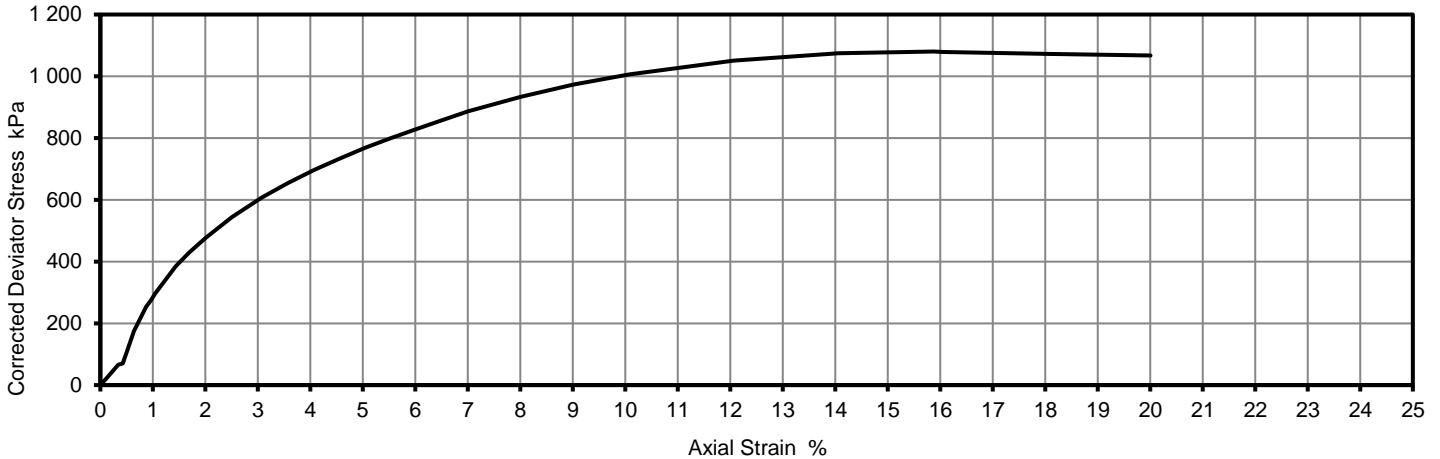
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

**Test Results:**

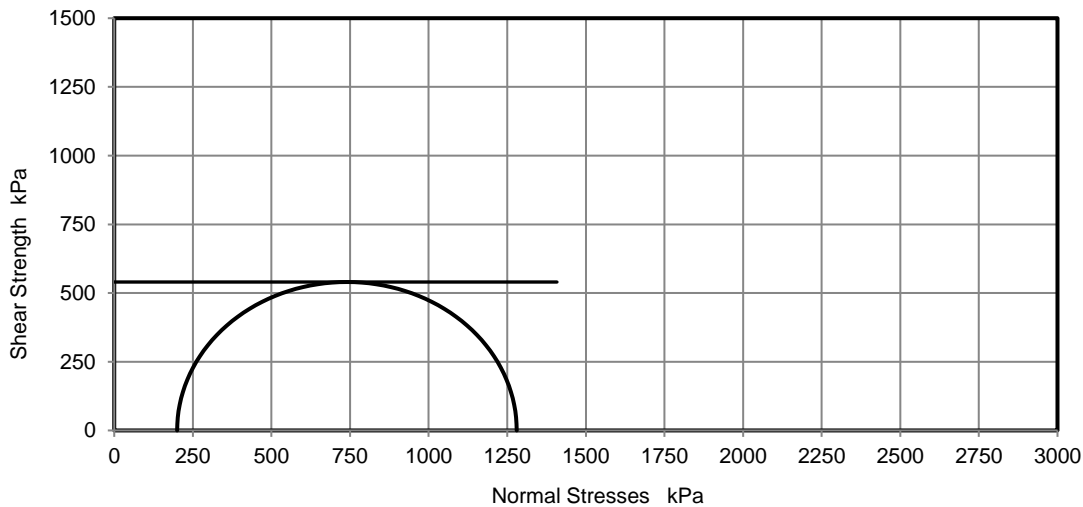
Laboratory Reference: 2439920  
Hole No.: TP218  
Sample Reference: Not Given  
Sample Description: Yellowish brown sandy silty clayey GRAVEL  
Sample Preparation: Recompacted at OMC using 4.5kg rammer in accordance with Table 6 of BS1377-1:2016.  
Depth Top [m]: 0.70  
Depth Base [m]: Not Given  
Sample Type: D

Test Number	1	Rate of Strain	1.00	%/min
Length	200.91	Cell Pressure	200	kPa
Diameter	100.78	Axial Strain at failure	15.9	%
Bulk Density	2.29	Deviator Stress, ( $\sigma_1 - \sigma_3$ ) <sub>f</sub>	1080	kPa
Moisture Content	11	Undrained Shear Strength, cu	540	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	2.07	Mode of Failure	Compound	
Membrane Correction	0.85	Membrane thickness	0.27	mm

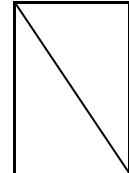
**Deviator Stress v Axial Strain**



**Mohr Circles**



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377. This is provided for information only.

**Remarks:**

Signed:

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF THE UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION WITHOUT MEASUREMENT OF PORE PRESSURE

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Tested in Accordance with: BS 1377-7: 1990: Clause 8

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 22-86688  
Date Sampled: 09/09/2022  
Date Received: 26/09/2022  
Date Tested: 10/10/2022  
Sampled By: Not Given

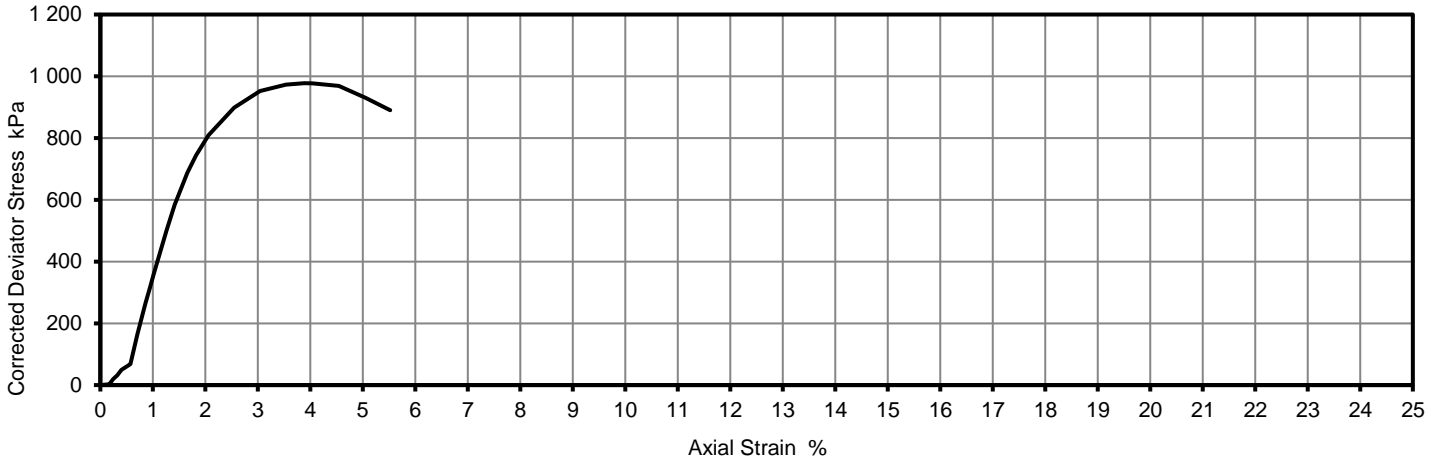
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

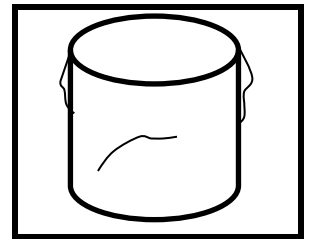
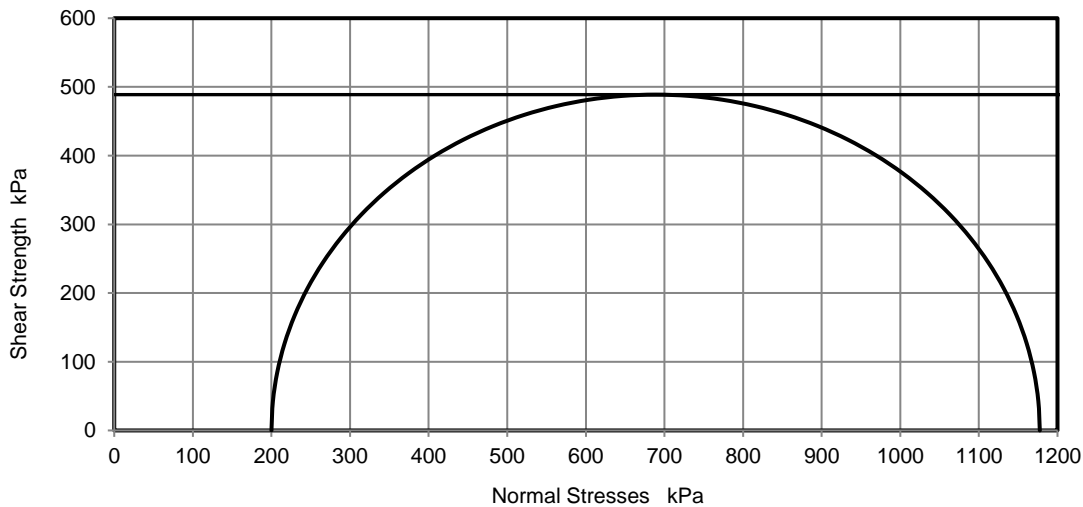
Laboratory Reference: 2439921  
Hole No.: TP221  
Sample Reference: Not Given  
Sample Description: Orangish brown clayey very gravelly SAND  
Sample Preparation: Recompacted at OMC using 4.5kg rammer in accordance with Table 6 of BS1377-1:2016.  
Depth Top [m]: 2.20  
Depth Base [m]: 2.30  
Sample Type: D

Test Number	1	Rate of Strain	1.00	%/min
Length	198.69	Cell Pressure	200	kPa
Diameter	100.57	Axial Strain at failure	3.9	%
Bulk Density	2.26	Deviator Stress, ( $\sigma_1 - \sigma_3$ ) <sub>f</sub>	978	kPa
Moisture Content	10	Undrained Shear Strength, cu	489	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	2.05	Mode of Failure	Compound	
Membrane Correction	0.27	Membrane thickness	0.26	mm

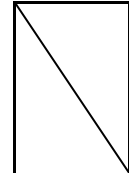
### Deviator Stress v Axial Strain



### Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377. This is provided for information only.

Remarks: Unable to take a photo.

Signed:

*Monika Siewior*

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.



**Nathan Thompson**  
Hydrock Consultants Ltd  
2-4 Hawthorne Park  
Holdenby Road  
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## **Analytical Report Number : 22-86699**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	26/09/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	27/09/2022
<b>Your order number:</b>	PO20272	<b>Analysis completed by:</b>	11/10/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	11/10/2022
<b>Samples Analysed:</b>	31 soil samples		

  
**Signed:** \_\_\_\_\_  
Anna Goc  
Junior Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 22-86699  
 Project / Site name: Begbroke  
 Your Order No: PO20272

Lab Sample Number	2439989	2439990	2439991	2439992	2439993			
Sample Reference	TP201	TP203	TP208	TP218	TP221			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.70	1.30	0.60-0.70	0.70	2.20-2.30			
Date Sampled	09/09/2022	06/09/2022	05/09/2022	09/09/2022	05/09/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	6.9	18	5.2	11	5.9
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.3

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	7.9	7.7	7.8	7.8
Total Sulphate as SO4	mg/kg	50	MCERTS	300	8100	240	100	300
Total Sulphate as SO4	%	0.005	MCERTS	0.03	0.807	0.024	0.01	0.03
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.009	0.013	0.0088	0.0069	0.012
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	9	12.6	8.8	6.9	11.7
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	11	3.6	11	2.7	4.3
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	5.3	1.8	5.3	1.3	2.2
Total Sulphur	mg/kg	50	MCERTS	170	3500	180	75	190
Total Sulphur	%	0.005	MCERTS	0.017	0.354	0.018	0.007	0.019
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ammonium as NH4 (10:1 leachate equivalent)	mg/l	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Organic Matter (automated)	%	0.1	MCERTS	0.4	0.6	0.6	0.4	0.2
Water Soluble Nitrate (2:1) as NO3	mg/kg	2	NONE	5.2	12	17	6.2	7.9
Water Soluble Nitrate (2:1) as NO3 (leachate equivalent)	mg/l	5	NONE	< 5.0	6.2	8.5	< 5.0	< 5.0

#### Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Magnesium (leachate equivalent)	mg/l	2.5	NONE	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-86699  
 Project / Site name: Begbroke  
 Your Order No: PO20272

Lab Sample Number	2439994	2439995	2439996	2439997	2439998			
Sample Reference	BH202	BH202	TP201	TP207	TP209			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	2.00-2.45	6.30-6.60	1.80	0.70	3.40			
Date Sampled	31/08/2022	31/08/2022	09/09/2022	06/09/2022	06/09/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	27	< 0.1
Moisture Content	%	0.01	NONE	13	13	17	3.2	16
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.2	0.2	0.2

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.8	7.3	7.5	8.4	7.7
Total Sulphate as SO <sub>4</sub>	mg/kg	50	MCERTS	270	6900	2600	650	210
Total Sulphate as SO <sub>4</sub>	%	0.005	MCERTS	0.027	0.69	0.26	0.065	0.021
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.037	3.1	0.031	0.0079	0.015
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	36.9	3070	30.6	7.9	15.4
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	7.9	660	8.2	3.3	3.6
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	4	330	4.1	1.7	1.8
Total Sulphur	mg/kg	50	MCERTS	290	43000	1300	500	160
Total Sulphur	%	0.005	MCERTS	0.029	4.31	0.129	0.05	0.016
Ammoniacal Nitrogen as NH <sub>4</sub>	mg/kg	0.5	MCERTS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ammonium as NH <sub>4</sub> (10:1 leachate equivalent)	mg/l	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Organic Matter (automated)	%	0.1	MCERTS	-	-	-	-	-
Water Soluble Nitrate (2:1) as NO <sub>3</sub>	mg/kg	2	NONE	6.3	< 2.0	13	9.6	7.4
Water Soluble Nitrate (2:1) as NO <sub>3</sub> (leachate equivalent)	mg/l	5	NONE	< 5.0	< 5.0	6.5	< 5.0	< 5.0

#### Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	< 5.0	39	17	< 5.0	< 5.0
Magnesium (leachate equivalent)	mg/l	2.5	NONE	< 2.5	20	8.6	< 2.5	< 2.5

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-86699  
 Project / Site name: Begbroke  
 Your Order No: PO20272

Lab Sample Number	2439999	2440000	2440001	2440002	2440003			
Sample Reference	TP211	TP213	TP219	TP220	TP221			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	1.20	1.30	2.30	2.50	0.70			
Date Sampled	09/09/2022	08/09/2022	06/09/2022	05/09/2022	08/09/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.8	7.8	14	14	4.3
Total mass of sample received	kg	0.001	NONE	0.2	0.2	0.2	0.2	0.2

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.8	7.9	8.2	7.6	7.2
Total Sulphate as SO <sub>4</sub>	mg/kg	50	MCERTS	100	120	4000	500	240
Total Sulphate as SO <sub>4</sub>	%	0.005	MCERTS	0.01	0.012	0.399	0.05	0.024
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0074	0.0086	0.009	0.0088	0.011
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	7.4	8.6	9	8.8	10.6
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	2.4	2.4	25	7.1	1.3
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	1.2	1.2	12	3.5	0.7
Total Sulphur	mg/kg	50	MCERTS	57	120	1500	210	130
Total Sulphur	%	0.005	MCERTS	0.006	0.012	0.154	0.021	0.013
Ammoniacal Nitrogen as NH <sub>4</sub>	mg/kg	0.5	MCERTS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ammonium as NH <sub>4</sub> (10:1 leachate equivalent)	mg/l	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Organic Matter (automated)	%	0.1	MCERTS	-	-	0.3	-	-
Water Soluble Nitrate (2:1) as NO <sub>3</sub>	mg/kg	2	NONE	8.3	33	27	12	13
Water Soluble Nitrate (2:1) as NO <sub>3</sub> (leachate equivalent)	mg/l	5	NONE	< 5.0	17	14	6.1	6.7

#### Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Magnesium (leachate equivalent)	mg/l	2.5	NONE	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-86699  
 Project / Site name: Begbroke  
 Your Order No: PO20272

Lab Sample Number	2440004	2440005	2440006	2440007	2440008			
Sample Reference	TP223	TP226	TP229	TP230	TP232			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	1.20	0.80	1.20	1.00	0.50			
Date Sampled	08/09/2022	05/09/2022	05/09/2022	07/09/2022	07/09/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	17	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	5.5	8.2	3.3	5.4	16
Total mass of sample received	kg	0.001	NONE	0.2	0.2	0.2	0.2	0.2

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	7.7	7.3	7.6	-
Total Sulphate as SO <sub>4</sub>	mg/kg	50	MCERTS	390	150	170	490	-
Total Sulphate as SO <sub>4</sub>	%	0.005	MCERTS	0.039	0.015	0.017	0.049	-
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.04	0.026	0.0022	0.091	-
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	40	26.4	2.2	90.7	-
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	2.9	1.4	1.4	4.3	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	1.4	0.7	0.7	2.1	-
Total Sulphur	mg/kg	50	MCERTS	190	110	63	210	-
Total Sulphur	%	0.005	MCERTS	0.019	0.011	0.006	0.021	-
Ammoniacal Nitrogen as NH <sub>4</sub>	mg/kg	0.5	MCERTS	< 0.5	< 0.5	< 0.5	< 0.5	-
Ammonium as NH <sub>4</sub> (10:1 leachate equivalent)	mg/l	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Organic Matter (automated)	%	0.1	MCERTS	-	-	-	-	1.6
Water Soluble Nitrate (2:1) as NO <sub>3</sub>	mg/kg	2	NONE	4	6.2	2.7	6.3	-
Water Soluble Nitrate (2:1) as NO <sub>3</sub> (leachate equivalent)	mg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	-

#### Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	-
Magnesium (leachate equivalent)	mg/l	2.5	NONE	< 2.5	< 2.5	< 2.5	< 2.5	-

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number: 22-86699  
 Project / Site name: Begbroke  
 Your Order No: PO20272

Lab Sample Number	2440009	2440010	2440011	2440012	2440013			
Sample Reference	TP234	WS201	WS214	WS215	WS219			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.70-0.90	1.70	0.90	1.60	2.00			
Date Sampled	07/09/2022	30/08/2022	23/08/2022	25/08/2022	24/08/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	22	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	5.3	16	4.2	17	15
Total mass of sample received	kg	0.001	NONE	0.2	0.2	0.2	0.2	0.2

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	6.9	7.2	8.4	7.6
Total Sulphate as SO <sub>4</sub>	mg/kg	50	MCERTS	680	100000	990	270	890
Total Sulphate as SO <sub>4</sub>	%	0.005	MCERTS	0.068	10.1	0.099	0.027	0.089
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.2	3	0.31	0.021	0.22
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	201	2950	307	20.8	216
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	5.5	91	3.9	6.2	110
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	2.8	45	1.9	3.1	56
Total Sulphur	mg/kg	50	MCERTS	420	44000	500	240	1400
Total Sulphur	%	0.005	MCERTS	0.042	4.39	0.05	0.024	0.138
Ammoniacal Nitrogen as NH <sub>4</sub>	mg/kg	0.5	MCERTS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ammonium as NH <sub>4</sub> (10:1 leachate equivalent)	mg/l	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Organic Matter (automated)	%	0.1	MCERTS	-	-	-	-	-
Water Soluble Nitrate (2:1) as NO <sub>3</sub>	mg/kg	2	NONE	< 2.0	< 2.0	20	8.7	2
Water Soluble Nitrate (2:1) as NO <sub>3</sub> (leachate equivalent)	mg/l	5	NONE	< 5.0	< 5.0	10	< 5.0	< 5.0

#### Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	< 5.0	13	10	< 5.0	8.9
Magnesium (leachate equivalent)	mg/l	2.5	NONE	< 2.5	6.4	5	< 2.5	4.4

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-86699  
 Project / Site name: Begbroke  
 Your Order No: PO20272

Lab Sample Number	2440014	2440015	2440016	2440017	2440018			
Sample Reference	WS219	WS225	WS227	WS241	WS242			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	3.20-4.00	1.20-2.00	1.60	0.60	1.60			
Date Sampled	24/08/2022	31/08/2022	23/08/2022	01/09/2022	05/09/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	5.7	5.2	20	14
Total mass of sample received	kg	0.001	NONE	0.2	0.2	0.2	0.2	0.2

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.3	8.2	7.5	-	8
Total Sulphate as SO <sub>4</sub>	mg/kg	50	MCERTS	3000	360	470	-	160
Total Sulphate as SO <sub>4</sub>	%	0.005	MCERTS	0.303	0.036	0.047	-	0.016
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	1.6	0.017	0.0085	-	0.029
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	1610	16.7	8.5	-	29.4
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	32	2.1	1.6	-	15
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	16	1	0.8	-	7.3
Total Sulphur	mg/kg	50	MCERTS	32000	280	230	-	190
Total Sulphur	%	0.005	MCERTS	3.19	0.028	0.023	-	0.019
Ammoniacal Nitrogen as NH <sub>4</sub>	mg/kg	0.5	MCERTS	0.8	< 0.5	< 0.5	-	< 0.5
Ammonium as NH <sub>4</sub> (10:1 leachate equivalent)	mg/l	0.05	MCERTS	0.08	< 0.05	< 0.05	-	< 0.05
Organic Matter (automated)	%	0.1	MCERTS	-	-	-	2.2	-
Water Soluble Nitrate (2:1) as NO <sub>3</sub>	mg/kg	2	NONE	8	< 2.0	< 2.0	-	3.8
Water Soluble Nitrate (2:1) as NO <sub>3</sub> (leachate equivalent)	mg/l	5	NONE	< 5.0	< 5.0	< 5.0	-	< 5.0

#### Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	60	< 5.0	< 5.0	-	< 5.0
Magnesium (leachate equivalent)	mg/l	2.5	NONE	30	< 2.5	< 2.5	-	< 2.5

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-86699  
 Project / Site name: Begbroke  
 Your Order No: PO20272

<b>Lab Sample Number</b>				2440019
<b>Sample Reference</b>				WS245
<b>Sample Number</b>				None Supplied
<b>Depth (m)</b>				1.10
<b>Date Sampled</b>				02/09/2022
<b>Time Taken</b>				None Supplied
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	21
Total mass of sample received	kg	0.001	NONE	0.2

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6
Total Sulphate as SO <sub>4</sub>	mg/kg	50	MCERTS	690
Total Sulphate as SO <sub>4</sub>	%	0.005	MCERTS	0.069
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.32
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	322
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	15
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	7.4
Total Sulphur	mg/kg	50	MCERTS	840
Total Sulphur	%	0.005	MCERTS	0.084
Ammoniacal Nitrogen as NH <sub>4</sub>	mg/kg	0.5	MCERTS	< 0.5
Ammonium as NH <sub>4</sub> (10:1 leachate equivalent)	mg/l	0.05	MCERTS	< 0.05
Organic Matter (automated)	%	0.1	MCERTS	1.2
Water Soluble Nitrate (2:1) as NO <sub>3</sub>	mg/kg	2	NONE	< 2.0
Water Soluble Nitrate (2:1) as NO <sub>3</sub> (leachate equivalent)	mg/l	5	NONE	< 5.0

#### Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	7.8
Magnesium (leachate equivalent)	mg/l	2.5	NONE	3.9

U/S = Unsuitable Sample I/S = Insufficient Sample

**Analytical Report Number : 22-86699**

**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2439989	TP201	None Supplied	0.7	Brown sandy clay with gravel.
2439990	TP203	None Supplied	1.3	Brown clay and sand.
2439991	TP208	None Supplied	0.60-0.70	Brown loam and clay with gravel and vegetation.
2439992	TP218	None Supplied	0.7	Brown clay and loam with vegetation.
2439993	TP221	None Supplied	2.20-2.30	Brown gravelly sand.
2439994	BH202	None Supplied	2.00-2.45	Brown clay and sand.
2439995	BH202	None Supplied	6.30-6.60	Brown clay and sand.
2439996	TP201	None Supplied	1.8	Brown clay and sand with gravel.
2439997	TP207	None Supplied	0.7	Brown sand with stones.
2439998	TP209	None Supplied	3.4	Brown clay and sand with gravel.
2439999	TP211	None Supplied	1.2	Brown sandy clay with gravel.
2440000	TP213	None Supplied	1.3	Brown clay and loam with gravel and vegetation.
2440001	TP219	None Supplied	2.3	Brown sandy clay.
2440002	TP220	None Supplied	2.5	Brown clay and sand.
2440003	TP221	None Supplied	0.7	Brown clay and loam with vegetation.
2440004	TP223	None Supplied	1.2	Brown clay and sand with gravel and stones.
2440005	TP226	None Supplied	0.8	Brown clay and sand.
2440006	TP229	None Supplied	1.2	Brown sand with gravel.
2440007	TP230	None Supplied	1	Brown sand with gravel.
2440008	TP232	None Supplied	0.5	Brown clay and loam with gravel and vegetation.
2440009	TP234	None Supplied	0.70-0.90	Brown sand with gravel and stones.
2440010	WS201	None Supplied	1.7	Brown clay and sand with gravel.
2440011	WS214	None Supplied	0.9	Brown sandy clay with gravel.
2440012	WS215	None Supplied	1.6	Brown sand with gravel.
2440013	WS219	None Supplied	2	Brown clay and sand.
2440014	WS219	None Supplied	3.20-4.00	Brown clay and sand.
2440015	WS225	None Supplied	1.20-2.00	Brown sand with gravel.
2440016	WS227	None Supplied	1.6	Brown sand with gravel.
2440017	WS241	None Supplied	0.6	Brown clay and sand with gravel.
2440018	WS242	None Supplied	1.6	Brown clay and sand with vegetation.
2440019	WS245	None Supplied	1.1	Brown clay and sand with vegetation.



Analytical Report Number : 22-86699

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	MCERTS
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES.	In-house method based on TRL 447	L038-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Nitrate, water soluble, in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Ammonium as NH4 in soil	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method, 10:1 water extraction.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Total Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total Sulphur in soil as %	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Water Soluble Nitrate (leachate equivalent)	Determination of nitrate by reaction with sodium salicylate and colorimetry.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	D	NONE
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC



**Analytical Report Number : 22-86699**  
**Project / Site name: Begbroke**

**Water matrix abbreviations:**

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

## Sample Deviation Report



**Analytical Report Number : 22-86699**

**Project / Site name: Begbroke**

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS201	None Supplied	S	2440010	c	Ammoniacal Nitrogen as N in soil	L082-PL	c
WS201	None Supplied	S	2440010	c	Ammonium as NH4 in soil	L082-PL	c
WS201	None Supplied	S	2440010	c	Chloride, water soluble, in soil	L082-PL	c
WS201	None Supplied	S	2440010	c	Nitrate, water soluble, in soil	L078-PL	c
WS201	None Supplied	S	2440010	c	Water Soluble Nitrate (2:1) as N in soil	L078-PL	c
WS201	None Supplied	S	2440010	c	Water Soluble Nitrate (leachate equivalent)	L078-PL	c
WS201	None Supplied	S	2440010	c	pH in soil (automated)	L099-PL	c
WS214	None Supplied	S	2440011	c	Ammoniacal Nitrogen as N in soil	L082-PL	c
WS214	None Supplied	S	2440011	c	Ammonium as NH4 in soil	L082-PL	c
WS214	None Supplied	S	2440011	c	Chloride, water soluble, in soil	L082-PL	c
WS214	None Supplied	S	2440011	c	Nitrate, water soluble, in soil	L078-PL	c
WS214	None Supplied	S	2440011	c	Water Soluble Nitrate (2:1) as N in soil	L078-PL	c
WS214	None Supplied	S	2440011	c	Water Soluble Nitrate (leachate equivalent)	L078-PL	c
WS214	None Supplied	S	2440011	c	pH in soil (automated)	L099-PL	c
WS215	None Supplied	S	2440012	c	Ammoniacal Nitrogen as N in soil	L082-PL	c
WS215	None Supplied	S	2440012	c	Ammonium as NH4 in soil	L082-PL	c
WS215	None Supplied	S	2440012	c	Chloride, water soluble, in soil	L082-PL	c
WS215	None Supplied	S	2440012	c	Nitrate, water soluble, in soil	L078-PL	c
WS215	None Supplied	S	2440012	c	Water Soluble Nitrate (2:1) as N in soil	L078-PL	c
WS215	None Supplied	S	2440012	c	Water Soluble Nitrate (leachate equivalent)	L078-PL	c
WS215	None Supplied	S	2440012	c	pH in soil (automated)	L099-PL	c
WS219	None Supplied	S	2440013	c	Ammoniacal Nitrogen as N in soil	L082-PL	c
WS219	None Supplied	S	2440013	c	Ammonium as NH4 in soil	L082-PL	c
WS219	None Supplied	S	2440013	c	Chloride, water soluble, in soil	L082-PL	c
WS219	None Supplied	S	2440013	c	Nitrate, water soluble, in soil	L078-PL	c
WS219	None Supplied	S	2440013	c	Water Soluble Nitrate (2:1) as N in soil	L078-PL	c
WS219	None Supplied	S	2440013	c	Water Soluble Nitrate (leachate equivalent)	L078-PL	c
WS219	None Supplied	S	2440013	c	pH in soil (automated)	L099-PL	c
WS219	None Supplied	S	2440014	c	Ammoniacal Nitrogen as N in soil	L082-PL	c
WS219	None Supplied	S	2440014	c	Ammonium as NH4 in soil	L082-PL	c
WS219	None Supplied	S	2440014	c	Chloride, water soluble, in soil	L082-PL	c
WS219	None Supplied	S	2440014	c	Nitrate, water soluble, in soil	L078-PL	c
WS219	None Supplied	S	2440014	c	Water Soluble Nitrate (2:1) as N in soil	L078-PL	c
WS219	None Supplied	S	2440014	c	Water Soluble Nitrate (leachate equivalent)	L078-PL	c
WS219	None Supplied	S	2440014	c	pH in soil (automated)	L099-PL	c
WS227	None Supplied	S	2440016	c	Ammoniacal Nitrogen as N in soil	L082-PL	c
WS227	None Supplied	S	2440016	c	Ammonium as NH4 in soil	L082-PL	c
WS227	None Supplied	S	2440016	c	Chloride, water soluble, in soil	L082-PL	c
WS227	None Supplied	S	2440016	c	Nitrate, water soluble, in soil	L078-PL	c
WS227	None Supplied	S	2440016	c	Water Soluble Nitrate (2:1) as N in soil	L078-PL	c
WS227	None Supplied	S	2440016	c	Water Soluble Nitrate (leachate equivalent)	L078-PL	c
WS227	None Supplied	S	2440016	c	pH in soil (automated)	L099-PL	c

**Nathan Thompson**  
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## **Analytical Report Number : 23-17615**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	10/02/2023
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	10/02/2023
<b>Your order number:</b>	PO23999	<b>Analysis completed by:</b>	23/02/2023
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	24/02/2023
<b>Samples Analysed:</b>	150 soil samples		

  
**Signed:** \_\_\_\_\_

Joanna Wawrzeczko  
Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 23-17615  
Project / Site name: Begbroke  
Your Order No: PO23999

Lab Sample Number	2585501	2585502	2585503	2585504	2585505			
Sample Reference	HP301	HP301	HP301	HP302	HP302			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	21	21	18	21	21
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

#### General Inorganics

Organic Matter (automated)	%	0.1	MCERTS	5.2	4.7	3.1	4.8	5
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number	2585506	2585507	2585508	2585509	2585510			
Sample Reference	HP302	HP303	HP303	HP303	HP304			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	21	21	21	19	22
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	3.5	5	4.7	3.9	5.5
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number	2585511	2585512	2585513	2585514	2585515			
Sample Reference	HP304	HP304	HP305	HP305	HP305			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	20	18	24	22	15
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	4.8	3.8	5.8	5.1	1.8
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number	2585516	2585517	2585518	2585519	2585520			
Sample Reference	HP306	HP306	HP306	HP307	HP307			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	30	26	24	30	30
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	6.8	4.6	4.4	8.4	6.8
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number				2585521	2585522	2585523	2585524	2585525
Sample Reference				HP307	HP308	HP308	HP308	HP309
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10
Date Sampled				06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
				Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	23	13	14	11	15
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	3.8	3.6	4.3	3.4	3.5

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number	2585526	2585527	2585528	2585529	2585530			
Sample Reference	HP309	HP309	HP310	HP310	HP310			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	13	11	12	11
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	2.4	2.7	3	2.4	2.3
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number				2585531	2585532	2585533	2585534	2585535
Sample Reference				HP311	HP311	HP311	HP312	HP312
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20
Date Sampled				06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
				Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	14	14	10	11	11
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS					
				3.3	2.6	2.2	2.8	2.4

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number	2585536	2585537	2585538	2585539	2585540			
Sample Reference	HP312	HP313	HP313	HP313	HP314			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	11	12	12	29
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	1.7	2.2	2.8	1.3	5.4
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number	2585541	2585542	2585543	2585544	2585545			
Sample Reference	HP314	HP314	HP315	HP315	HP315			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	31	29	29	30	34
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	4.2	4.3	5.6	5.6	2.6
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
Project / Site name: Begbroke  
Your Order No: PO23999

Lab Sample Number	2585546	2585547	2585548	2585549	2585550			
Sample Reference	HP316	HP316	HP316	HP317	HP317			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	27	28	28	14	14
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	5.7	5.5	3.9	4.1	2.9
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number	2585551	2585552	2585553	2585554	2585555			
Sample Reference	HP317	HP318	HP318	HP318	HP319			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	12	12	11	10
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	2.7	2.8	3	2.4	3
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number	2585556	2585557	2585558	2585559	2585560			
Sample Reference	HP319	HP319	HP320	HP320	HP320			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.8	10	12	12	11
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	3	1.6	2.8	3.1	1.6
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number	2585561	2585562	2585563	2585564	2585565			
Sample Reference	HP321	HP321	HP321	HP322	HP322			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	11	11	13	13
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	3.2	2.6	2.5	2.6	2.9
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
Project / Site name: Begbroke  
Your Order No: PO23999

Lab Sample Number	2585566	2585567	2585568	2585569	2585570			
Sample Reference	HP322	HP323	HP323	HP323	HP324			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	15	3.3	12	13
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

#### General Inorganics

Organic Matter (automated)	%	0.1	MCERTS	2.6	4.4	5	3.1	4.3
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
Project / Site name: Begbroke  
Your Order No: PO23999

Lab Sample Number				2585571	2585572	2585573	2585574	2585575
Sample Reference				HP324	HP324	HP325	HP325	HP325
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30
Date Sampled				06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	13	14	15	13
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

#### General Inorganics

Organic Matter (automated)	%	0.1	MCERTS	3.5	3.5	4.8	5	2.7
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number	2585576	2585577	2585578	2585579	2585580			
Sample Reference	HP326	HP326	HP326	HP327	HP327			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	13	11	14	14
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS					
				3.1	2.9	1.8	3.2	3.1

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number	2585581	2585582	2585583	2585584	2585585			
Sample Reference	HP327	HP328	HP328	HP328	HP329			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	14	14	10	12
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	1.9	4	4.2	1.9	3.2
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number	2585586	2585587	2585588	2585589	2585590			
Sample Reference	HP329	HP329	HP330	HP330	HP330			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	42	< 0.1
Moisture Content	%	0.01	NONE	12	11	14	9.6	9
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	3.2	2.5	4.3	2.7	0.9
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number				2585591	2585592	2585593	2585594	2585595
Sample Reference				HP331	HP331	HP331	HP332	HP332
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20
Date Sampled				06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
				Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	13	12	11	10	13
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	2.3	2.3	1.9	2.2	2.6

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
Project / Site name: Begbroke  
Your Order No: PO23999

Lab Sample Number	2585596	2585597	2585598	2585599	2585600			
Sample Reference	HP332	HP333	HP333	HP333	HP334			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	13	11	9.6	9.9
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

#### General Inorganics

Organic Matter (automated)	%	0.1	MCERTS	1.6	3.7	3	2.1	3.2
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number	2585601	2585602	2585603	2585604	2585605			
Sample Reference	HP334	HP334	HP335	HP335	HP335			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	8.3	11	12	11
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	3.7	2.1	3	3.1	2.3
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
 Project / Site name: Begbroke  
 Your Order No: PO23999

Lab Sample Number	2585606	2585607	2585608	2585609	2585610			
Sample Reference	HP336	HP336	HP336	HP337	HP337			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	11	12	13	12
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	3.1	2.8	1.2	3.7	2.8
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
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Lab Sample Number	2585611	2585612	2585613	2585614	2585615			
Sample Reference	HP337	HP338	HP338	HP338	HP339			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	33	29	24	21
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

#### General Inorganics

Organic Matter (automated)	%	0.1	MCERTS	2.4	7.2	5.8	4	4.8
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
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 Your Order No: PO23999

Lab Sample Number	2585616	2585617	2585618	2585619	2585620			
Sample Reference	HP339	HP339	HP340	HP340	HP340			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	16	14	14	14
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	3.1	2.7	3.1	2.9	1.9
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number: 23-17615  
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Lab Sample Number	2585621	2585622	2585623	2585624	2585625			
Sample Reference	HP341	HP341	HP341	HP342	HP342			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	13	11	17	17
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	2.6	2.4	1.2	3.2	3.4
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
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Lab Sample Number				2585626	2585627	2585628	2585629	2585630
Sample Reference				HP342	HP343	HP343	HP343	HP344
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10
Date Sampled				06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
				Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	13	15	15	14	12
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	1.9	2.8	2.6	1.7	4.2

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Lab Sample Number	2585631	2585632	2585633	2585634	2585635			
Sample Reference	HP344	HP344	HP345	HP345	HP345			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	11	10	9	11
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	4.5	3	2.9	1.3	3.1
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
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Lab Sample Number	2585636	2585637	2585638	2585639	2585640			
Sample Reference	HP346	HP346	HP346	HP347	HP347			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	29	11	16	12
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	3	3	2.5	5.3	3.4
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Lab Sample Number	2585641	2585642	2585643	2585644	2585645			
Sample Reference	HP347	HP348	HP348	HP348	HP349			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30	0.00-0.10			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	9.9	13	9.4	11
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	2.6	2.7	3.2	2.1	2.6
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17615  
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 Your Order No: PO23999

Lab Sample Number	2585646	2585647	2585648	2585649	2585650			
Sample Reference	HP349	HP349	HP350	HP350	HP350			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10-0.20	0.20-0.30	0.00-0.10	0.10-0.20	0.20-0.30			
Date Sampled	06/02/2023	06/02/2023	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.6	11	9.9	10	9.1
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5

**General Inorganics**

Organic Matter (automated)	%	0.1	MCERTS	2	2.1	2	2	1.7
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2585501	HP301	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585502	HP301	None Supplied	0.10-0.20	Brown clay and loam with gravel and vegetation.
2585503	HP301	None Supplied	0.20-0.30	Brown clay and sand with gravel and vegetation.
2585504	HP302	None Supplied	0.00-0.10	Brown clay and loam with gravel and vegetation.
2585505	HP302	None Supplied	0.10-0.20	Brown clay and loam with gravel and vegetation.
2585506	HP302	None Supplied	0.20-0.30	Brown clay and sand with gravel and vegetation.
2585507	HP303	None Supplied	0.00-0.10	Brown clay and loam with vegetation.
2585508	HP303	None Supplied	0.10-0.20	Brown clay and sand with vegetation and gravel
2585509	HP303	None Supplied	0.20-0.30	Brown clay and sand with vegetation and gravel
2585510	HP304	None Supplied	0.00-0.10	Brown clay and sand with vegetation and gravel
2585511	HP304	None Supplied	0.10-0.20	Brown clay and sand with vegetation and gravel
2585512	HP304	None Supplied	0.20-0.30	Brown clay and sand with vegetation.
2585513	HP305	None Supplied	0.00-0.10	Brown clay and sand with vegetation and gravel
2585514	HP305	None Supplied	0.10-0.20	Brown clay and loam with vegetation and gravel
2585515	HP305	None Supplied	0.20-0.30	Brown clay and sand with gravel and vegetation.
2585516	HP306	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585517	HP306	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585518	HP306	None Supplied	0.20-0.30	Brown clay and sand with gravel and vegetation.
2585519	HP307	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585520	HP307	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585521	HP307	None Supplied	0.20-0.30	Brown clay and sand with gravel and vegetation.
2585522	HP308	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585523	HP308	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585524	HP308	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585525	HP309	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585526	HP309	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585527	HP309	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585528	HP310	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585529	HP310	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585530	HP310	None Supplied	0.20-0.30	Brown clay and sand with gravel and vegetation.
2585531	HP311	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585532	HP311	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585533	HP311	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585534	HP312	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585535	HP312	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585536	HP312	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585537	HP313	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585538	HP313	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585539	HP313	None Supplied	0.20-0.30	Brown clay and sand with vegetation.
2585540	HP314	None Supplied	0.00-0.10	Brown clay and sand with vegetation.
2585541	HP314	None Supplied	0.10-0.20	Brown clay and sand with vegetation.
2585542	HP314	None Supplied	0.20-0.30	Brown clay and sand with vegetation.
2585543	HP315	None Supplied	0.00-0.10	Brown clay and sand with vegetation.
2585544	HP315	None Supplied	0.10-0.20	Brown clay and sand with vegetation.
2585545	HP315	None Supplied	0.20-0.30	Brown clay and sand.
2585546	HP316	None Supplied	0.00-0.10	Brown clay and sand with gravel and vegetation.
2585547	HP316	None Supplied	0.10-0.20	Brown clay and sand with vegetation.
2585548	HP316	None Supplied	0.20-0.30	Brown clay and sand.
2585549	HP317	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585550	HP317	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585551	HP317	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585552	HP318	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585553	HP318	None Supplied	0.10-0.20	Brown sandy clay with vegetation.
2585554	HP318	None Supplied	0.20-0.30	Brown sandy clay with vegetation.
2585555	HP319	None Supplied	0.00-0.10	Brown loam and sand with vegetation and gravel.
2585556	HP319	None Supplied	0.10-0.20	Brown loam and sand with vegetation and gravel.
2585557	HP319	None Supplied	0.20-0.30	Brown loam and sand with vegetation and gravel.
2585558	HP320	None Supplied	0.00-0.10	Brown loam and sand with vegetation.
2585559	HP320	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2585560	HP320	None Supplied	0.20-0.30	Brown sandy clay with gravel and vegetation.
2585561	HP321	None Supplied	0.00-0.10	Brown sandy clay with gravel and vegetation.
2585562	HP321	None Supplied	0.10-0.20	Brown sandy clay with gravel and vegetation.
2585563	HP321	None Supplied	0.20-0.30	Brown sandy clay with gravel and vegetation.
2585564	HP322	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585565	HP322	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585566	HP322	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585567	HP323	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585568	HP323	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585569	HP323	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585570	HP324	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585571	HP324	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585572	HP324	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585573	HP325	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585574	HP325	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585575	HP325	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585576	HP326	None Supplied	0.00-0.10	Brown clay and sand with gravel and vegetation.
2585577	HP326	None Supplied	0.10-0.20	Brown clay and sand with gravel and vegetation.
2585578	HP326	None Supplied	0.20-0.30	Light brown clay and sand with gravel.
2585579	HP327	None Supplied	0.00-0.10	Brown clay and sand with gravel and vegetation.
2585580	HP327	None Supplied	0.10-0.20	Brown clay and sand with gravel and vegetation.
2585581	HP327	None Supplied	0.20-0.30	Brown clay and sand with gravel and vegetation.
2585582	HP328	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585583	HP328	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585584	HP328	None Supplied	0.20-0.30	Brown loam and sand with gravel.
2585585	HP329	None Supplied	0.00-0.10	Brown sandy loam with gravel and vegetation.
2585586	HP329	None Supplied	0.10-0.20	Brown sandy loam with gravel and vegetation.
2585587	HP329	None Supplied	0.20-0.30	Brown sandy loam with gravel and vegetation.
2585588	HP330	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585589	HP330	None Supplied	0.10-0.20	Brown loam and sand with vegetation and stones.
2585590	HP330	None Supplied	0.20-0.30	Brown sandy clay with gravel and vegetation.
2585591	HP331	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585592	HP331	None Supplied	0.10-0.20	Brown loam and sand with gravel.
2585593	HP331	None Supplied	0.20-0.30	Brown loam and sand with gravel.
2585594	HP332	None Supplied	0.00-0.10	Brown sandy clay with gravel and stones.
2585595	HP332	None Supplied	0.10-0.20	Brown sandy clay with gravel and vegetation.
2585596	HP332	None Supplied	0.20-0.30	Brown sandy clay with gravel and vegetation.
2585597	HP333	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585598	HP333	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585599	HP333	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585600	HP334	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585601	HP334	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585602	HP334	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585603	HP335	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585604	HP335	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585605	HP335	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585606	HP336	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585607	HP336	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585608	HP336	None Supplied	0.20-0.30	Brown clay and sand with gravel and vegetation.
2585609	HP337	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585610	HP337	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585611	HP337	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585612	HP338	None Supplied	0.00-0.10	Brown loam with gravel and vegetation.
2585613	HP338	None Supplied	0.10-0.20	Brown loam with gravel and vegetation.
2585614	HP338	None Supplied	0.20-0.30	Brown clay and sand with vegetation.
2585615	HP339	None Supplied	0.00-0.10	Brown clay and loam with vegetation.
2585616	HP339	None Supplied	0.10-0.20	Brown clay and loam with vegetation.
2585617	HP339	None Supplied	0.20-0.30	Brown clay and loam with vegetation.
2585618	HP340	None Supplied	0.00-0.10	Brown clay and sand with vegetation.



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**Project / Site name: Begbroke**

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2585619	HP340	None Supplied	0.10-0.20	Brown clay and sand with vegetation.
2585620	HP340	None Supplied	0.20-0.30	Brown clay and sand with vegetation.
2585621	HP341	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585622	HP341	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585623	HP341	None Supplied	0.20-0.30	Brown clay and sand with vegetation.
2585624	HP342	None Supplied	0.00-0.10	Brown loam and sand with vegetation.
2585625	HP342	None Supplied	0.10-0.20	Brown clay and sand with vegetation.
2585626	HP342	None Supplied	0.20-0.30	Light brown clay and sand.
2585627	HP343	None Supplied	0.00-0.10	Brown sandy clay with vegetation.
2585628	HP343	None Supplied	0.10-0.20	Brown sandy clay with vegetation.
2585629	HP343	None Supplied	0.20-0.30	Light brown clay and sand.
2585630	HP344	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585631	HP344	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585632	HP344	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585633	HP345	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585634	HP345	None Supplied	0.10-0.20	Brown sandy clay with gravel and vegetation.
2585635	HP345	None Supplied	0.20-0.30	Brown sandy clay with gravel and vegetation.
2585636	HP346	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585637	HP346	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585638	HP346	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585639	HP347	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585640	HP347	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585641	HP347	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585642	HP348	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585643	HP348	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585644	HP348	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585645	HP349	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585646	HP349	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585647	HP349	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
2585648	HP350	None Supplied	0.00-0.10	Brown loam and sand with gravel and vegetation.
2585649	HP350	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation.
2585650	HP350	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.

Analytical Report Number : 23-17615  
Project / Site name: Begbroke

**Water matrix abbreviations:**

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC. Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



# TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS  
Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 02/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

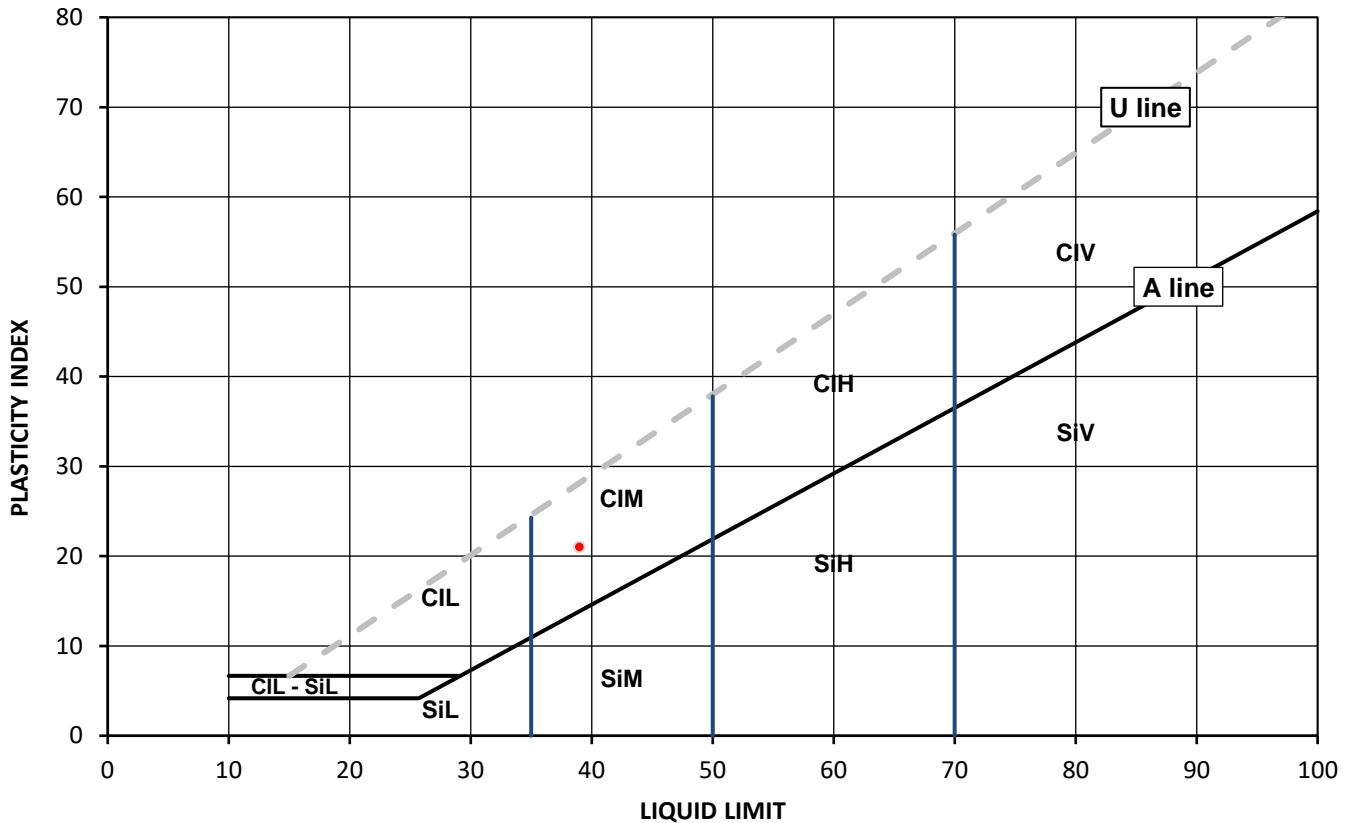
## Test Results:

Laboratory Reference: 2592788  
Hole No.: TP315  
Sample Reference: Not Given  
Sample Description: Yellowish brown sandy CLAY

Depth Top [m]: 0.40  
Depth Base [m]: 0.70  
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
21	39	18	21	76



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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Job Number: 23-18737-1  
Date Sampled: 02/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

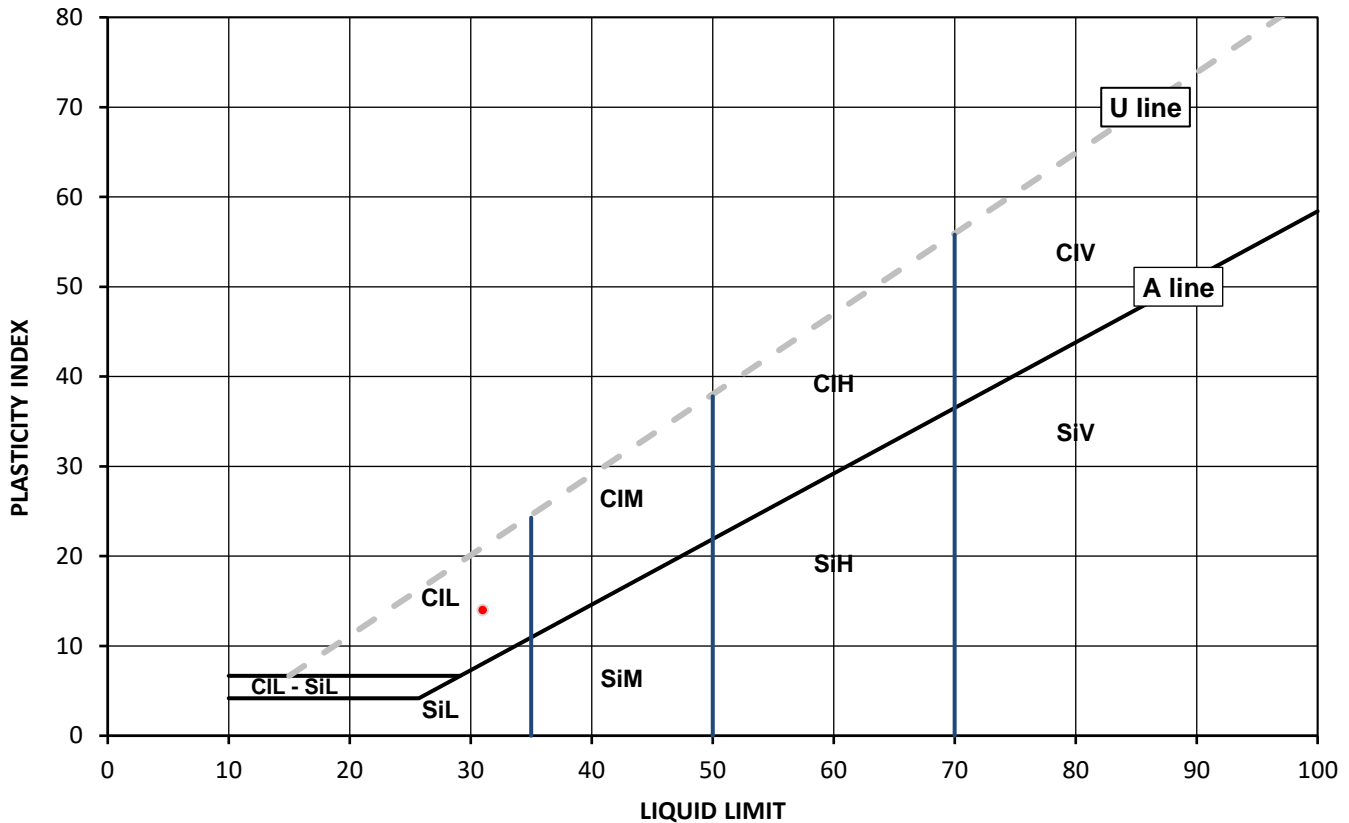
## Test Results:

Laboratory Reference: 2592790  
Hole No.: TP316  
Sample Reference: Not Given  
Sample Description: Yellowish brown slightly gravelly very sandy CLAY

Depth Top [m]: 0.30  
Depth Base [m]: 0.50  
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
21	31	17	14	74



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Northampton NN4 7EB



Environmental Science

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 02/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

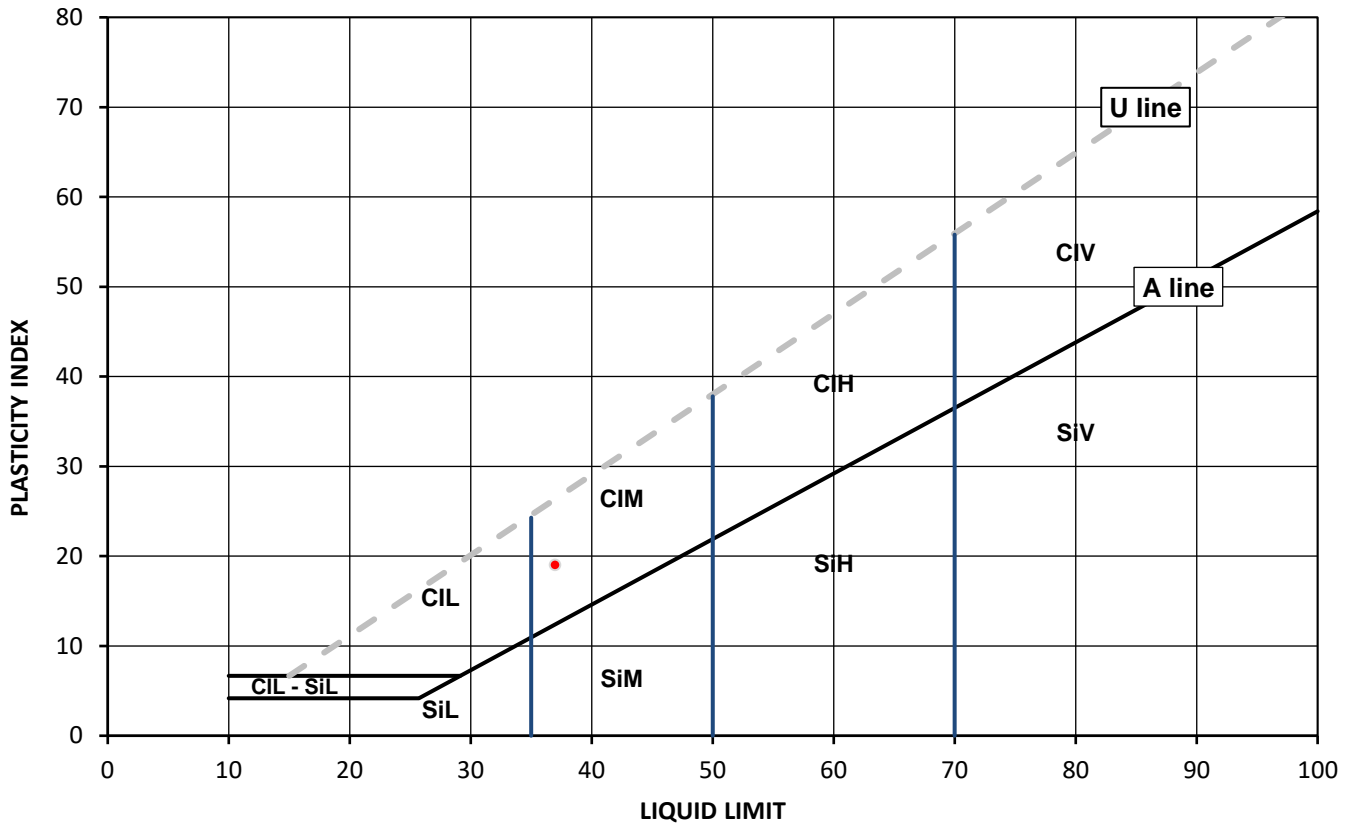
### Test Results:

Laboratory Reference: 2592792  
Hole No.: TP317  
Sample Reference: Not Given  
Sample Description: Greyish brown slightly gravelly sandy CLAY

Depth Top [m]: 0.30  
Depth Base [m]: 0.50  
Sample Type: B

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
20	37	18	19	97



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 31/01/2023  
Date Received: 17/02/2023  
Date Tested: 28/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

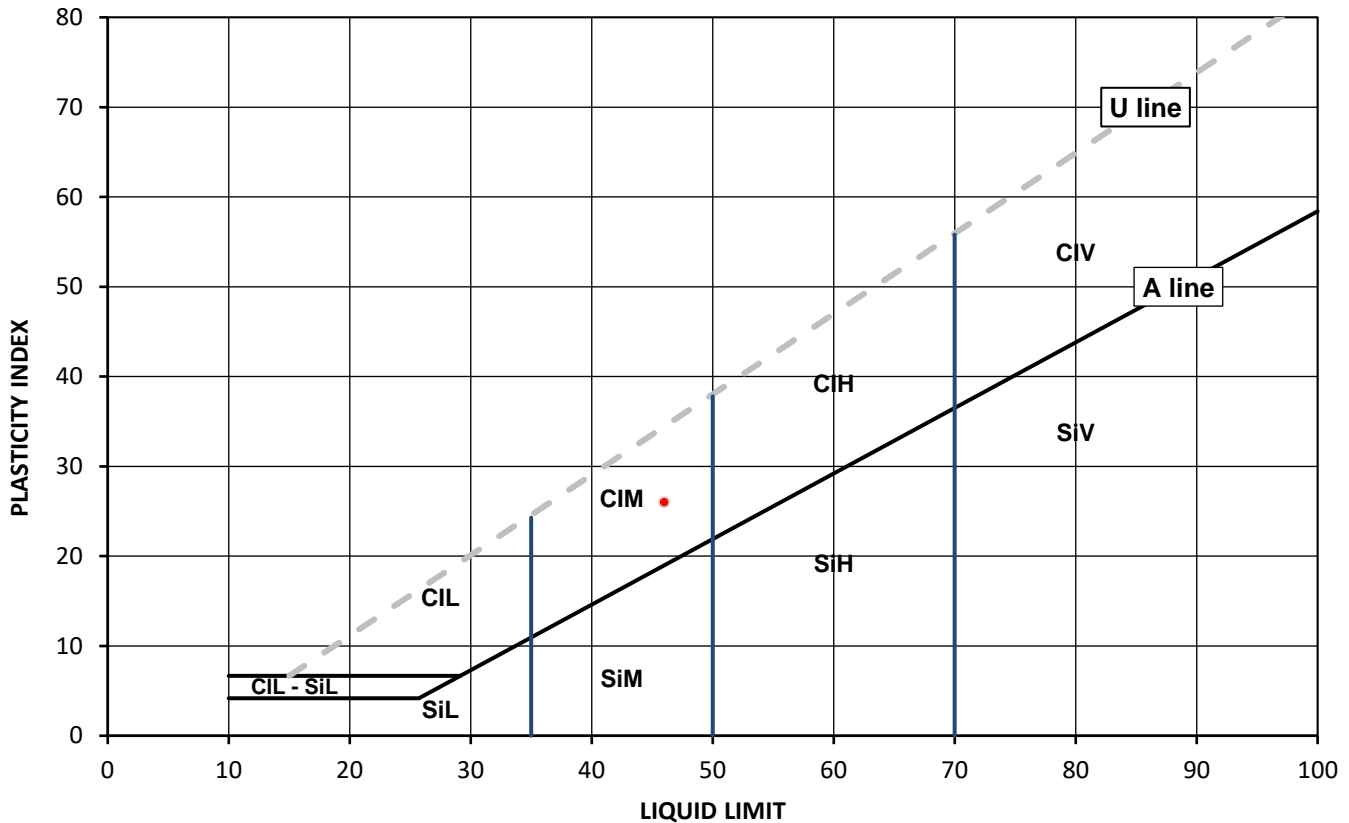
### Test Results:

Laboratory Reference: 2592794  
Hole No.: RO305  
Sample Reference: Not Given  
Sample Description: Brown very gravelly slightly sandy CLAY

Depth Top [m]: 4.00  
Depth Base [m]: 4.50  
Sample Type: U

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
15	46	20	26	31



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 31/01/2023  
Date Received: 17/02/2023  
Date Tested: 24/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

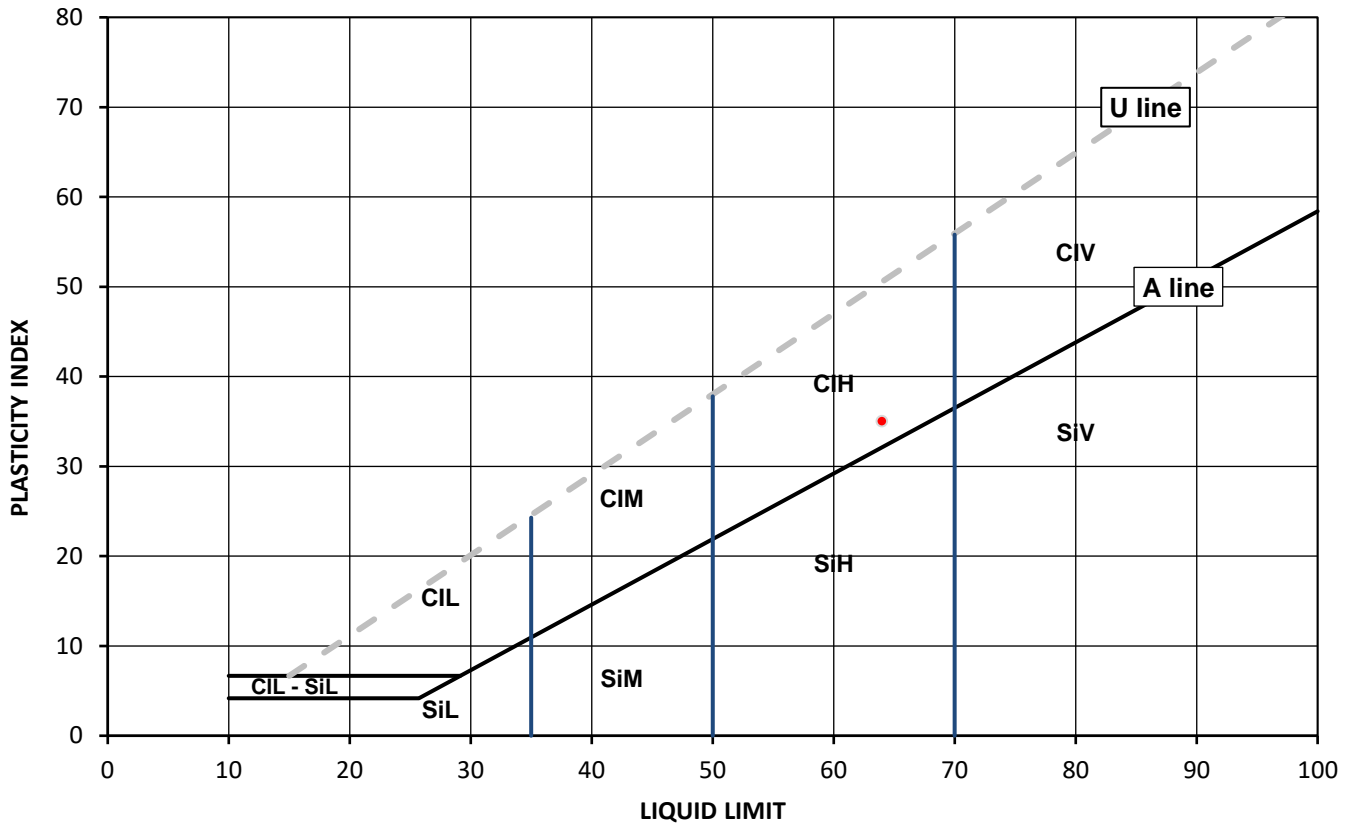
## Test Results:

Laboratory Reference: 2592796  
Hole No.: RO305  
Sample Reference: Not Given  
Sample Description: Brownish grey CLAY

Depth Top [m]: 6.20  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
27	64	29	35	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Environmental Science

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Client Address: 2-4 Hawthorne Park, Holdenby Road,  
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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 31/01/2023  
Date Received: 17/02/2023  
Date Tested: 24/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

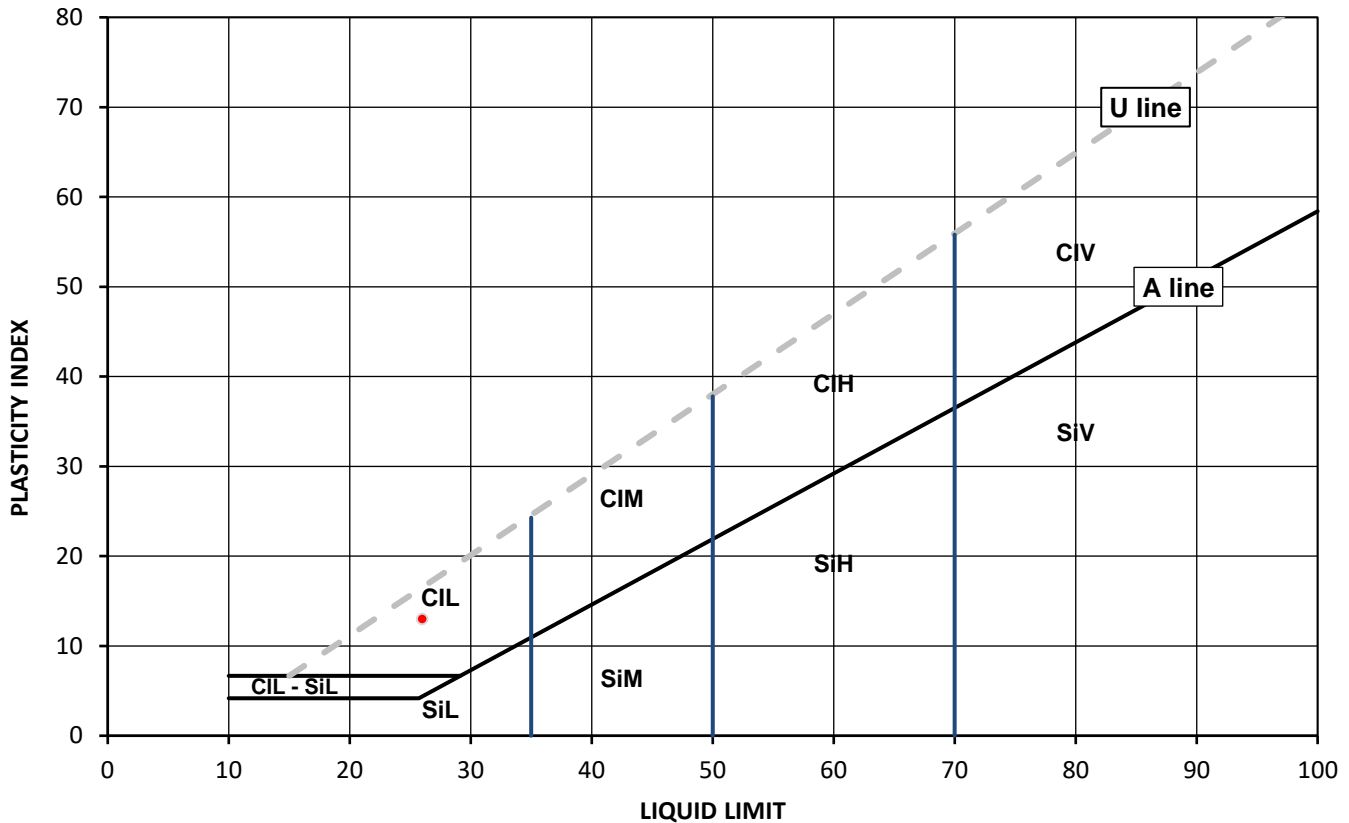
### Test Results:

Laboratory Reference: 2592798  
Hole No.: RO305  
Sample Reference: Not Given  
Sample Description: Grey slightly gravelly very sandy CLAY

Depth Top [m]: 11.60  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
24	26	13	13	97



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Environmental Science

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 31/01/2023  
Date Received: 17/02/2023  
Date Tested: 24/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

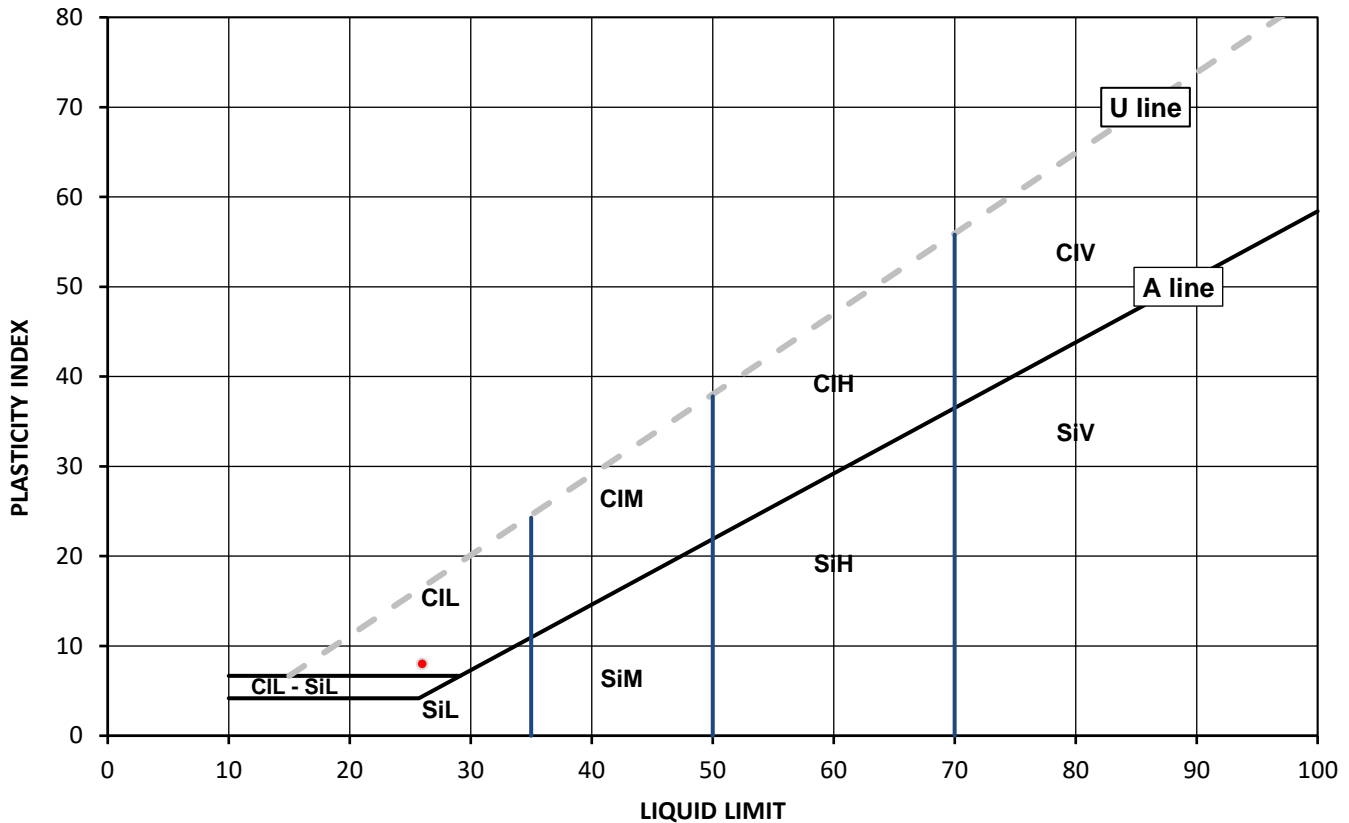
## Test Results:

Laboratory Reference: 2592799  
Hole No.: RO305  
Sample Reference: Not Given  
Sample Description: Grey very sandy CLAY

Depth Top [m]: 12.70  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
20	26	18	8	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 31/01/2023  
Date Received: 17/02/2023  
Date Tested: 24/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

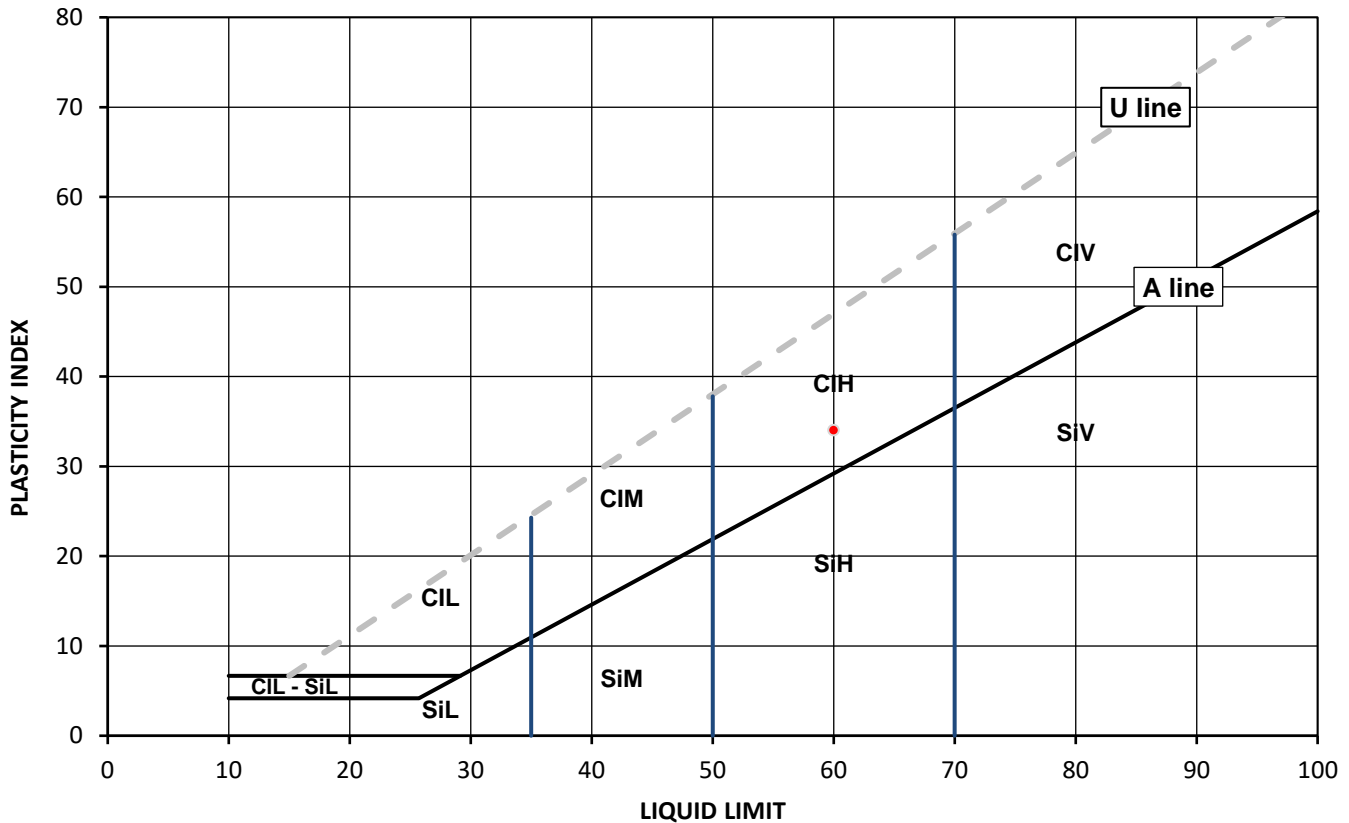
### Test Results:

Laboratory Reference: 2592800  
Hole No.: RO305  
Sample Reference: Not Given  
Sample Description: Grey CLAY

Depth Top [m]: 16.50  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
25	60	26	34	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

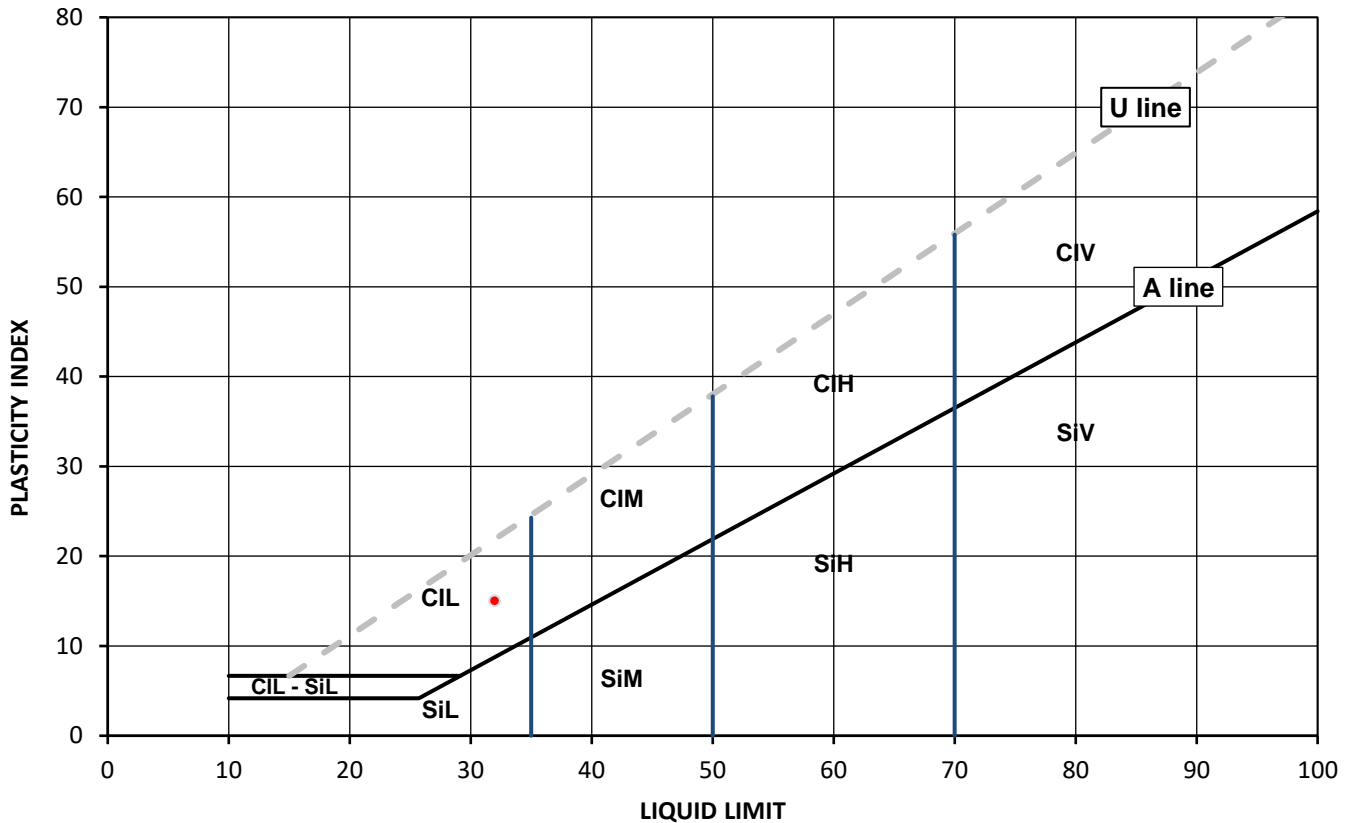
## Test Results:

Laboratory Reference: 2592801  
Hole No.: TP302  
Sample Reference: Not Given  
Sample Description: Brown clayey SAND

Depth Top [m]: 0.80  
Depth Base [m]: 1.00  
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
18	32	17	15	69



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 02/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

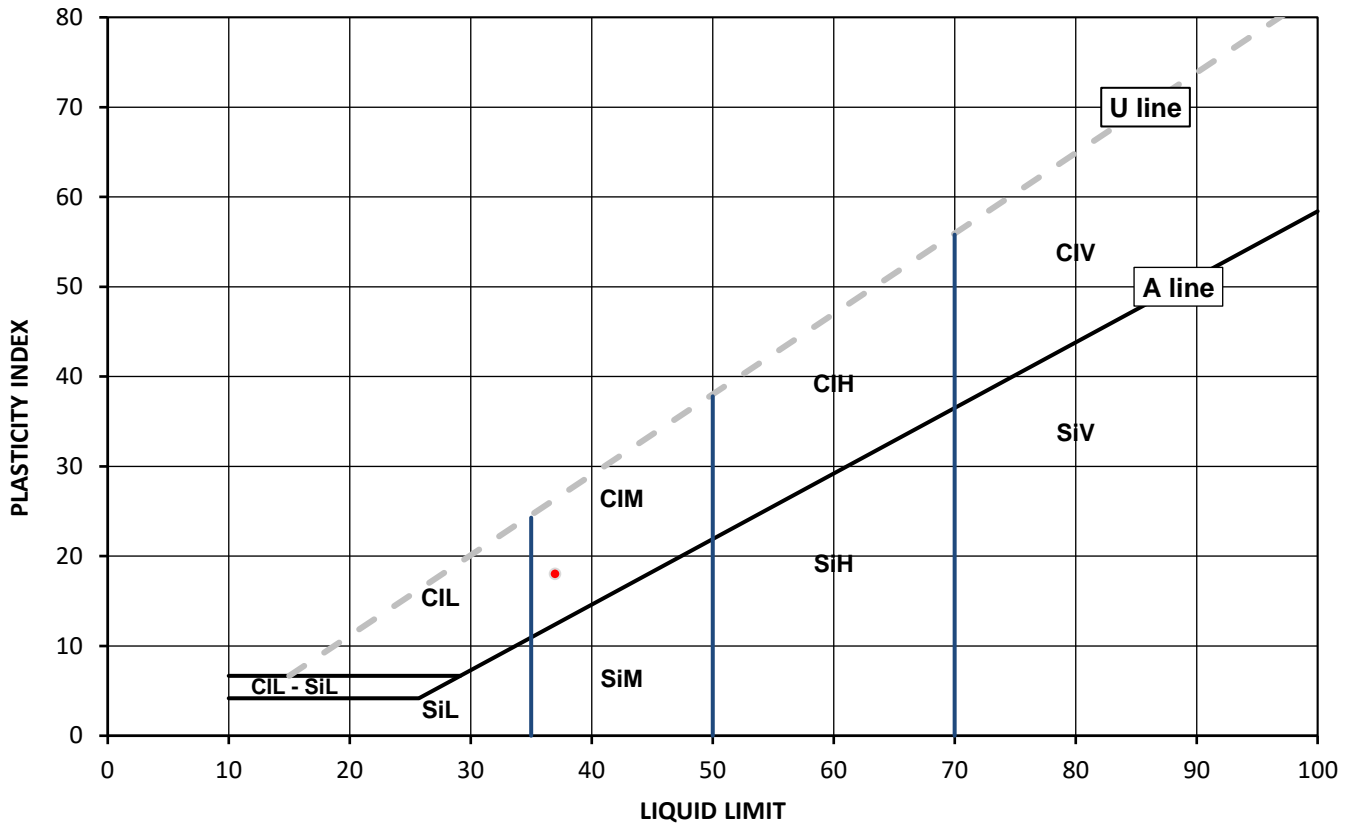
## Test Results:

Laboratory Reference: 2592802  
Hole No.: TP303  
Sample Reference: Not Given  
Sample Description: Brown sandy CLAY

Depth Top [m]: 0.30  
Depth Base [m]: 0.60  
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
22	37	19	18	84



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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DETERMINATION OF LIQUID AND PLASTIC LIMITS  
Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 31/01/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

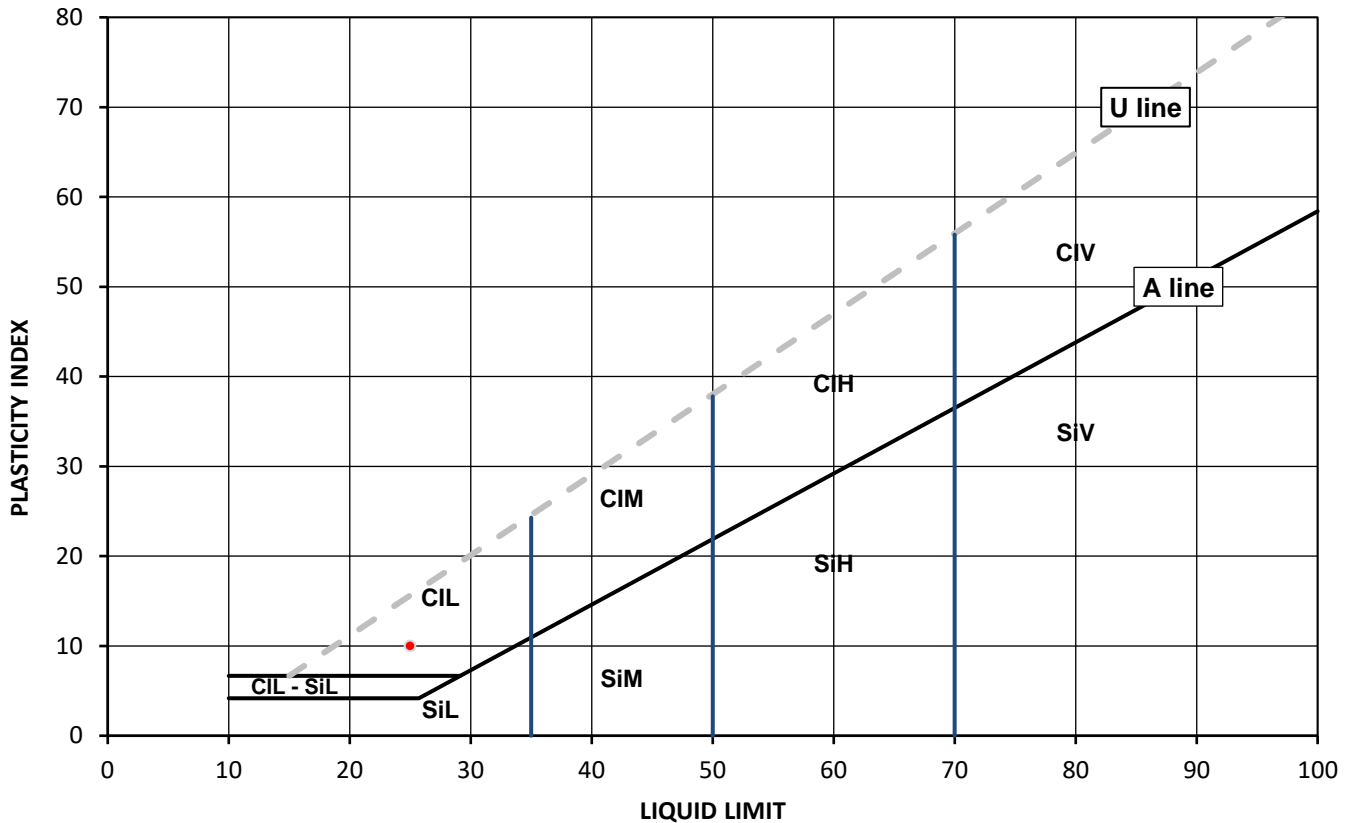
### Test Results:

Laboratory Reference: 2592804  
Hole No.: TP304  
Sample Reference: Not Given  
Sample Description: Brown slightly gravelly clayey SAND

Depth Top [m]: 0.60  
Depth Base [m]: 0.80  
Sample Type: B

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
18	25	15	10	97



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS  
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Environmental Science

4041

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Client Address: 2-4 Hawthorne Park, Holdenby Road,  
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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 02/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

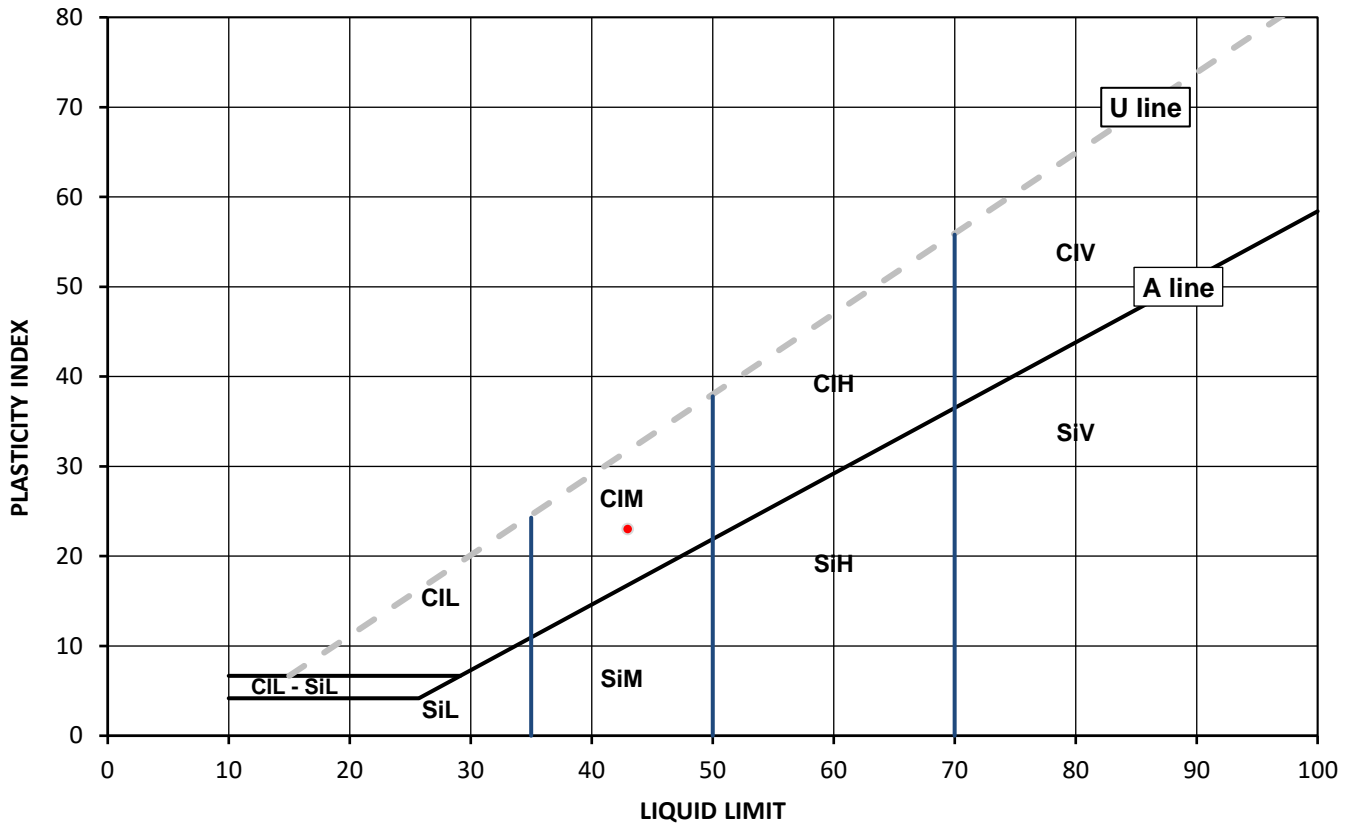
## Test Results:

Laboratory Reference: 2592807  
Hole No.: TP306  
Sample Reference: Not Given  
Sample Description: Yellowish brown slightly gravelly sandy CLAY

Depth Top [m]: 0.60  
Depth Base [m]: 0.80  
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
20	43	20	23	79



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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i2 Analytical Ltd  
Unit 8 Harrowden Road  
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Environmental Science

4041

Client: Hydrock Consultants Ltd  
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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 06/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

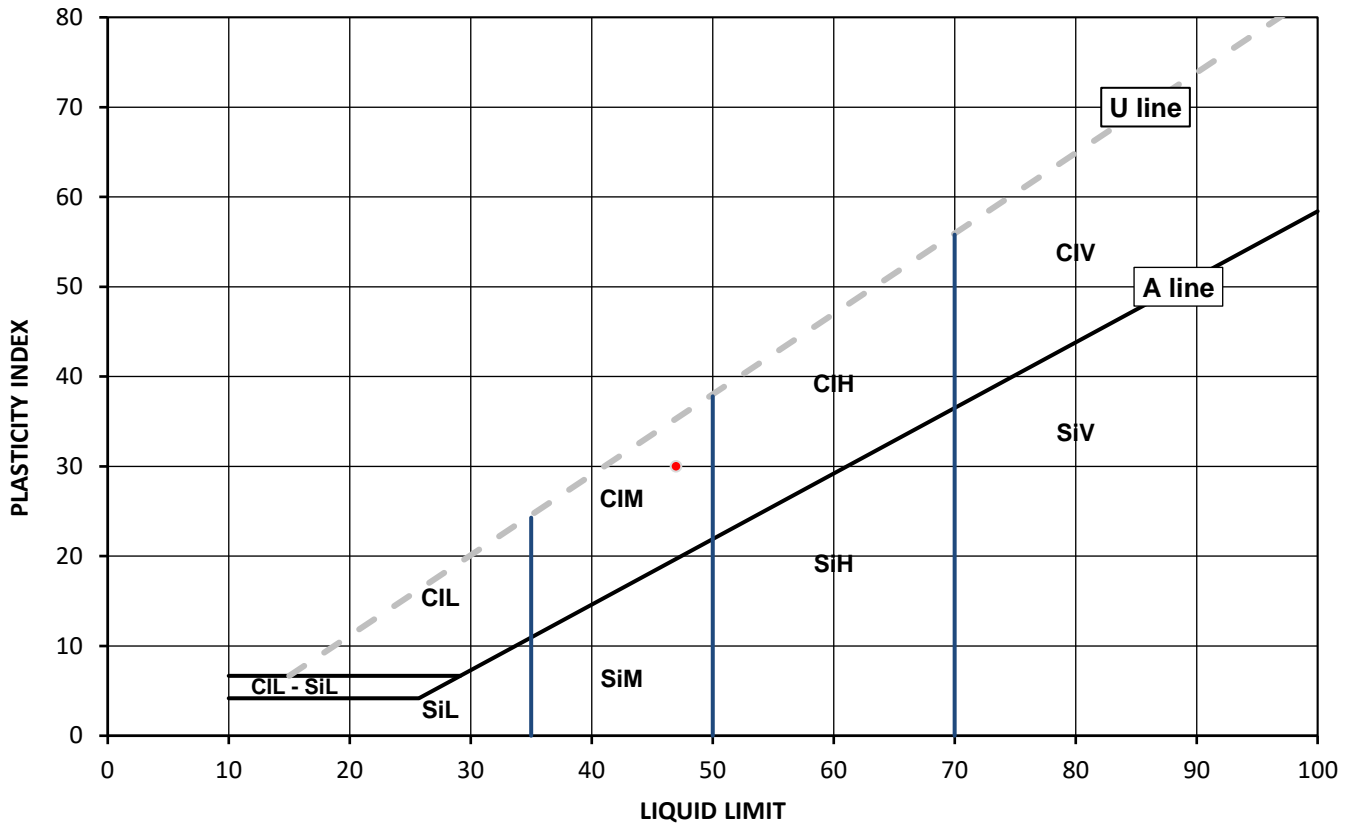
### Test Results:

Laboratory Reference: 2592808  
Hole No.: TP307  
Sample Reference: Not Given  
Sample Description: Greyish brown sandy CLAY

Depth Top [m]: 0.30  
Depth Base [m]: 0.50  
Sample Type: B

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
28	47	17	30	94



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	Liquid Limit
Si	Silt	L	Low
		M	Medium
		H	High
		V	Very high
		O	Organic
			below 35
			35 to 50
			50 to 70
			exceeding 70
			append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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i2 Analytical Ltd  
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Environmental Science

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 06/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

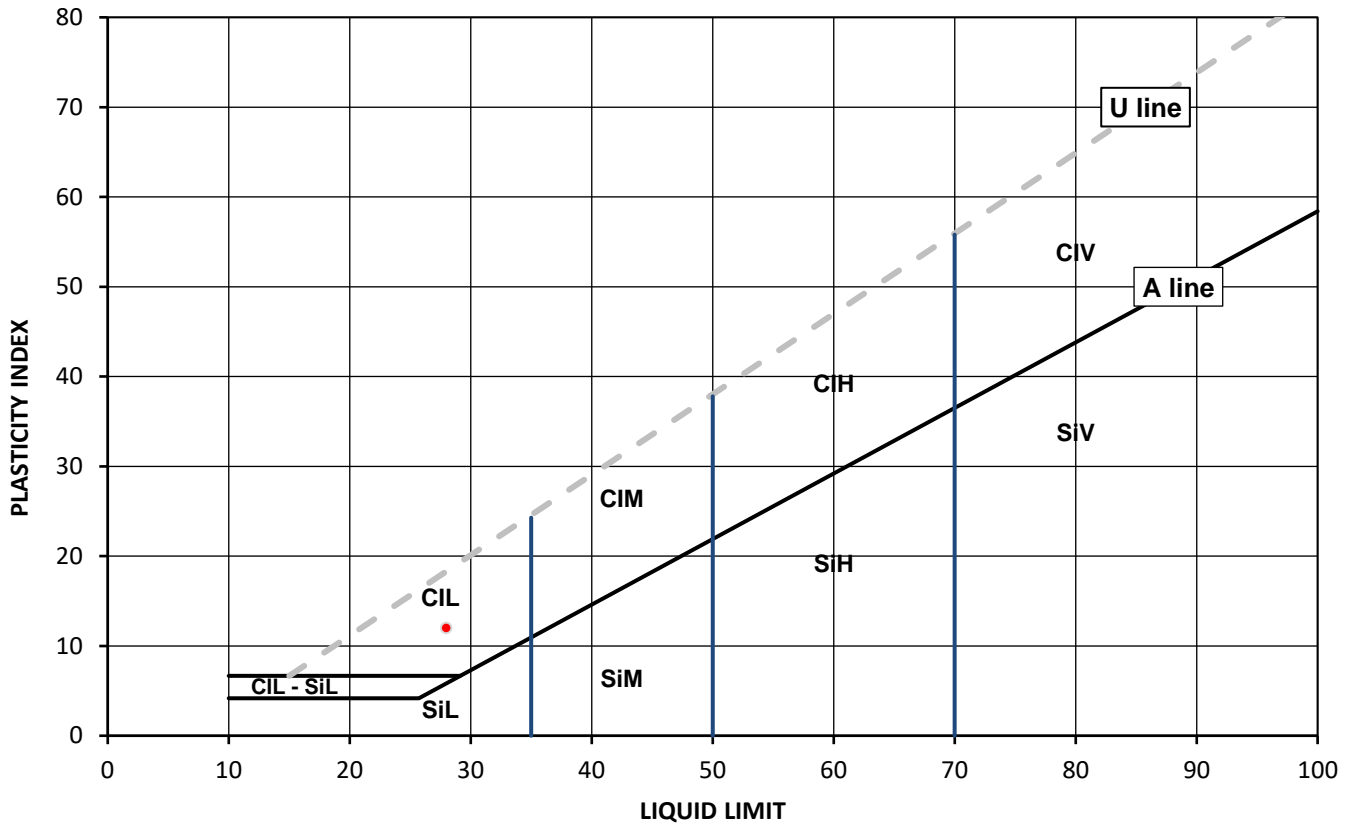
## Test Results:

Laboratory Reference: 2592810  
Hole No.: TP307  
Sample Reference: Not Given  
Sample Description: Greyish gravelly sandy CLAY

Depth Top [m]: 2.20  
Depth Base [m]: 2.40  
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
14	28	16	12	62



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material ( eg ClHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

*Katarzyna Koziel*

Katarzyna Koziel  
Reporting Specialist  
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Environmental Science

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 06/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

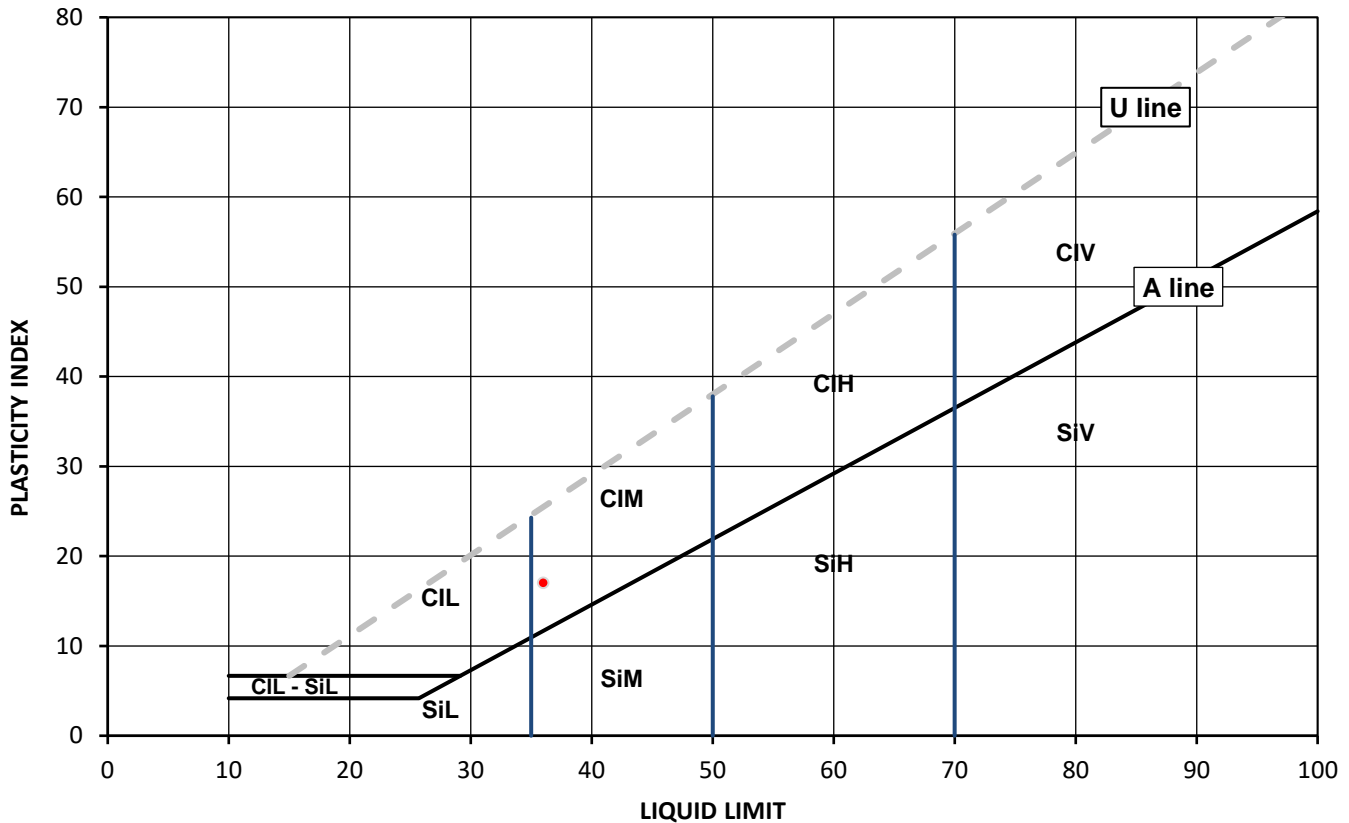
## Test Results:

Laboratory Reference: 2592811  
Hole No.: TP308  
Sample Reference: Not Given  
Sample Description: Greyish brown slightly gravelly sandy CLAY

Depth Top [m]: 1.30  
Depth Base [m]: 1.70  
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
18	36	19	17	83



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 06/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

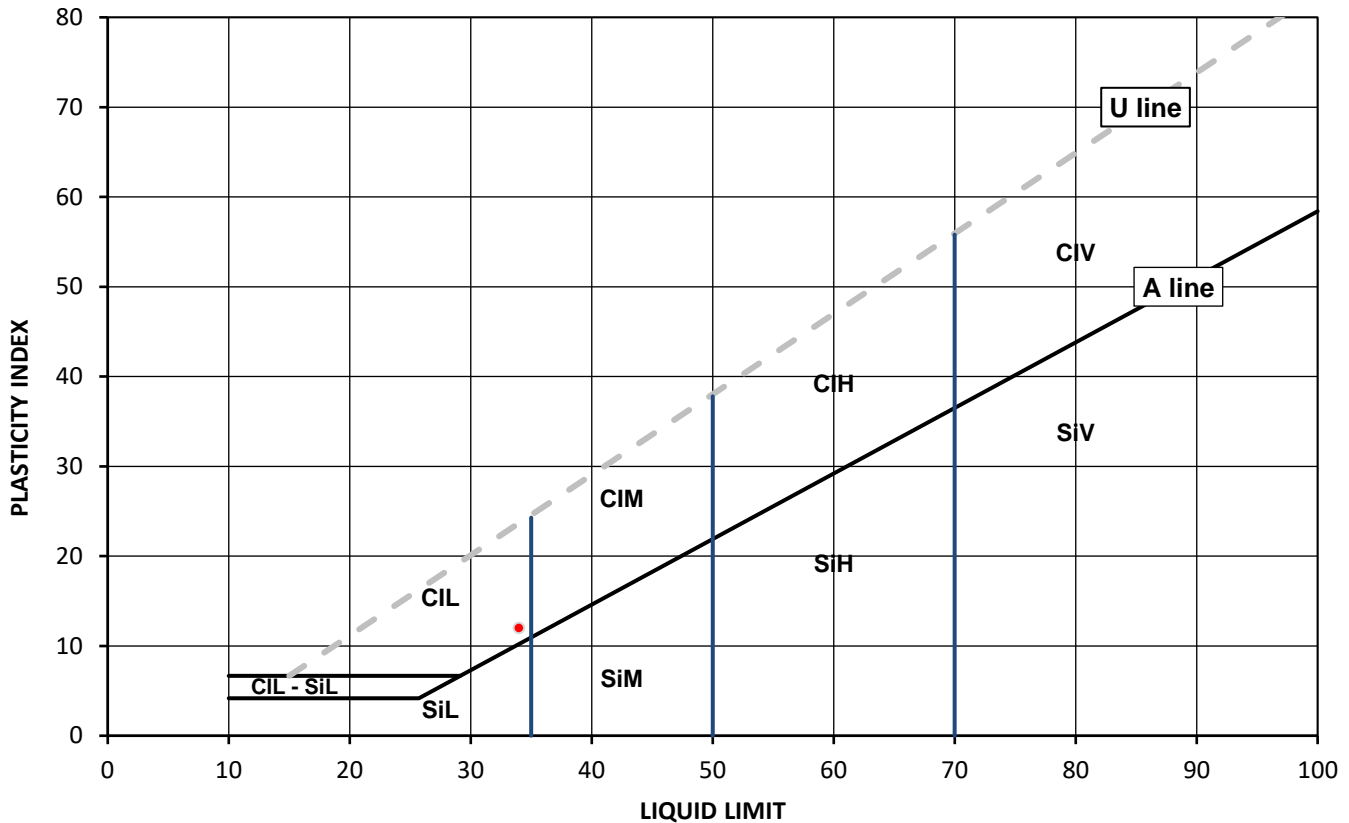
### Test Results:

Laboratory Reference: 2592813  
Hole No.: TP309  
Sample Reference: Not Given  
Sample Description: Greyish brown slightly gravelly very sandy CLAY

Depth Top [m]: 1.90  
Depth Base [m]: 2.00  
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
17	34	22	12	86



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Northampton NN4 7EB



Environmental Science

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 06/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

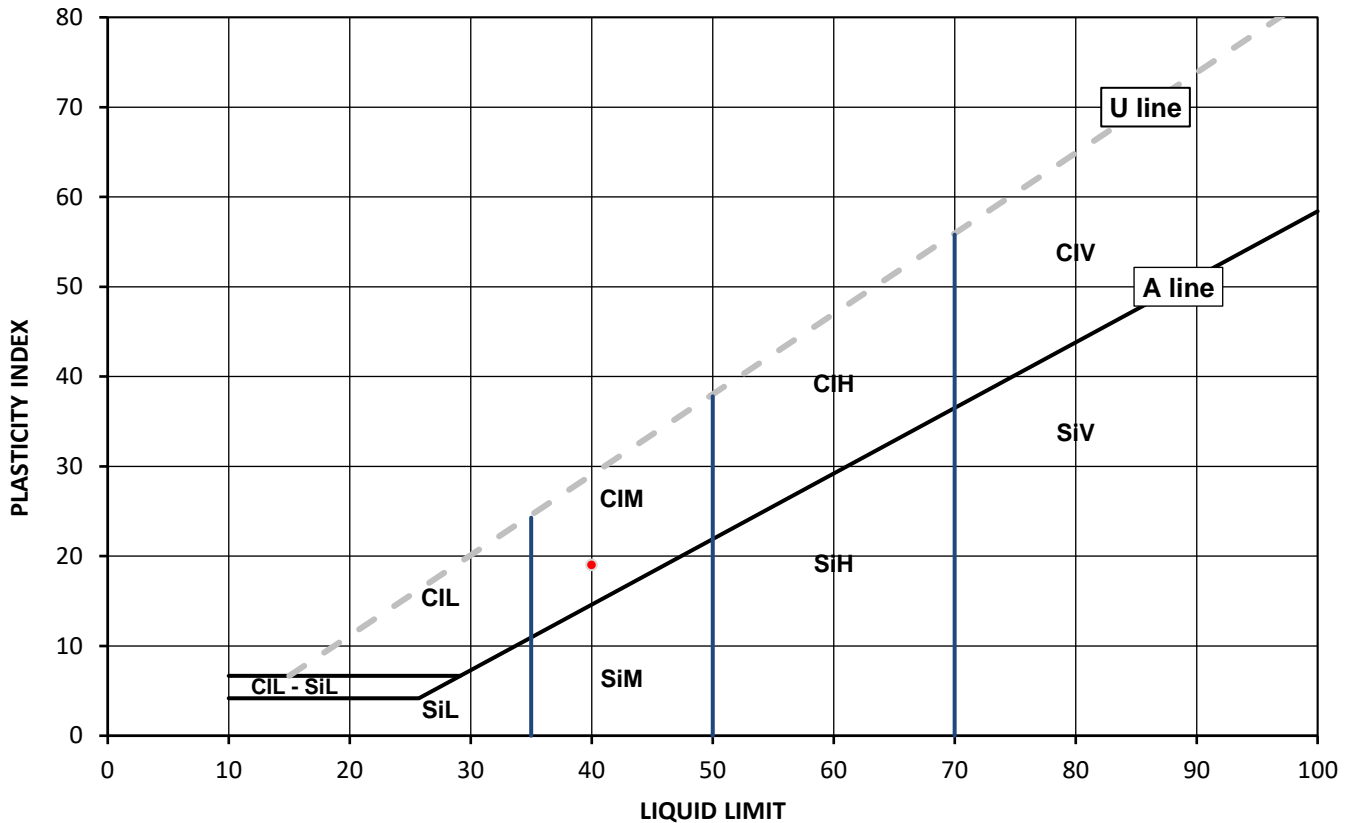
## Test Results:

Laboratory Reference: 2592814  
Hole No.: TP312  
Sample Reference: Not Given  
Sample Description: Brown slightly gravelly sandy CLAY

Depth Top [m]: 0.30  
Depth Base [m]: 0.60  
Sample Type: B

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
24	40	21	19	97



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Northampton NN4 7EB



Environmental Science

4041

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 06/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

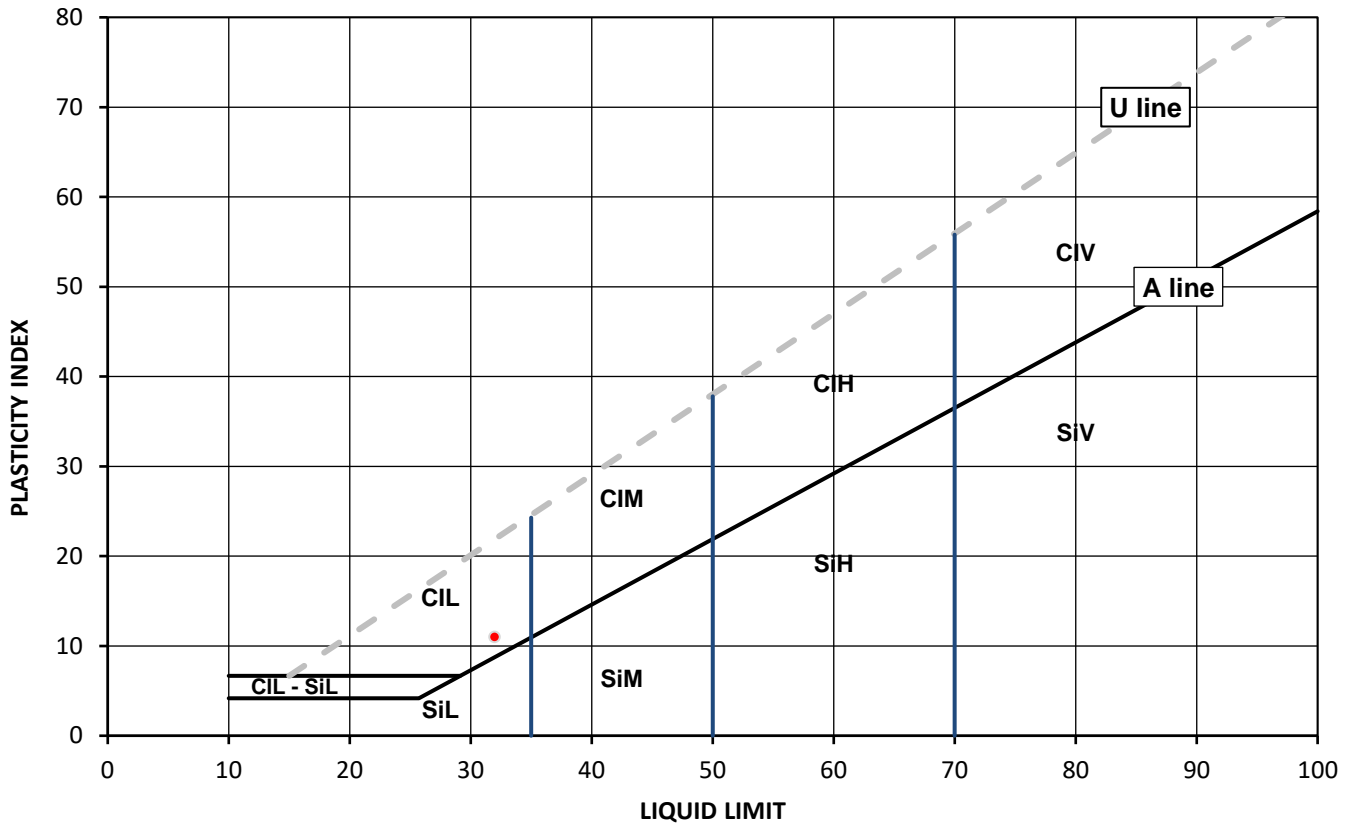
## Test Results:

Laboratory Reference: 2592816  
Hole No.: TP312  
Sample Reference: Not Given  
Sample Description: Greyish brown very sandy CLAY

Depth Top [m]: 2.00  
Depth Base [m]: 2.50  
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
24	32	21	11	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Northampton NN4 7EB



Environmental Science

4041

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Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 07/02/2023  
Date Received: 17/02/2023  
Date Tested: 24/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

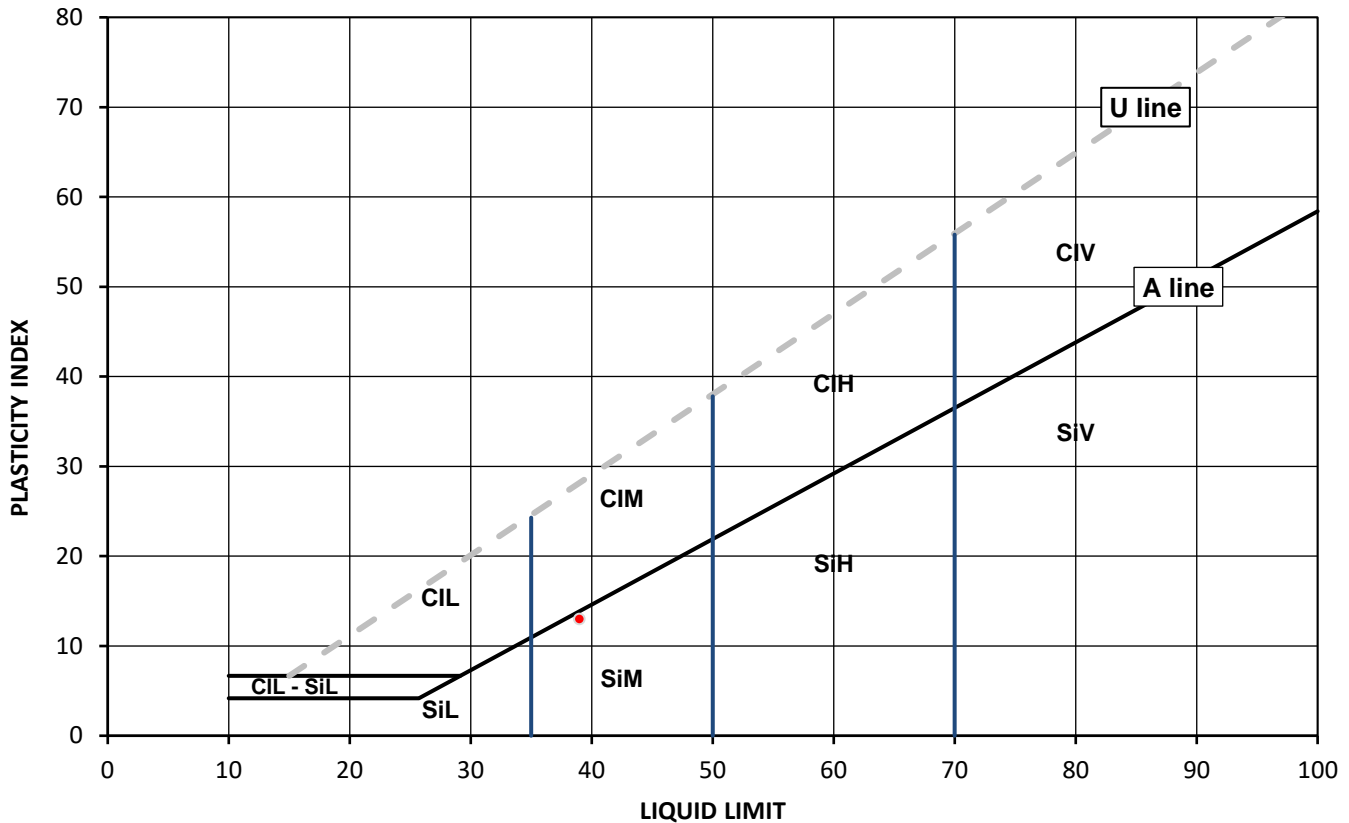
## Test Results:

Laboratory Reference: 2592818  
Hole No.: RO301  
Sample Reference: Not Given  
Sample Description: Grey slightly gravelly sandy silty CLAY

Depth Top [m]: 8.00  
Depth Base [m]: 8.00  
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
23	39	26	13	99



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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4041

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 03/02/2023  
Date Received: 17/02/2023  
Date Tested: 24/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

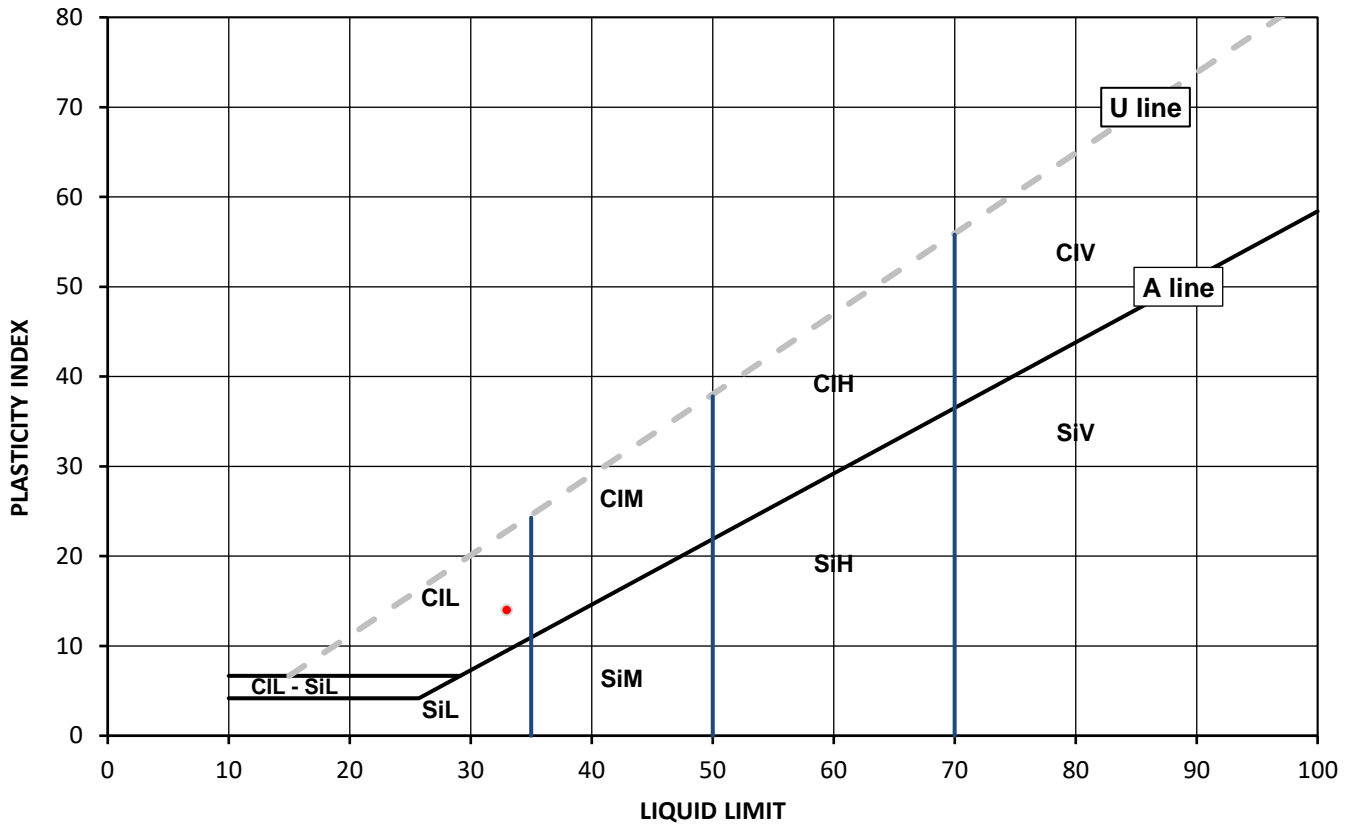
## Test Results:

Laboratory Reference: 2592821  
Hole No.: RO302  
Sample Reference: Not Given  
Sample Description: Grey very sandy CLAY

Depth Top [m]: 10.00  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
14	33	19	14	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 26/01/2023  
Date Received: 17/02/2023  
Date Tested: 24/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

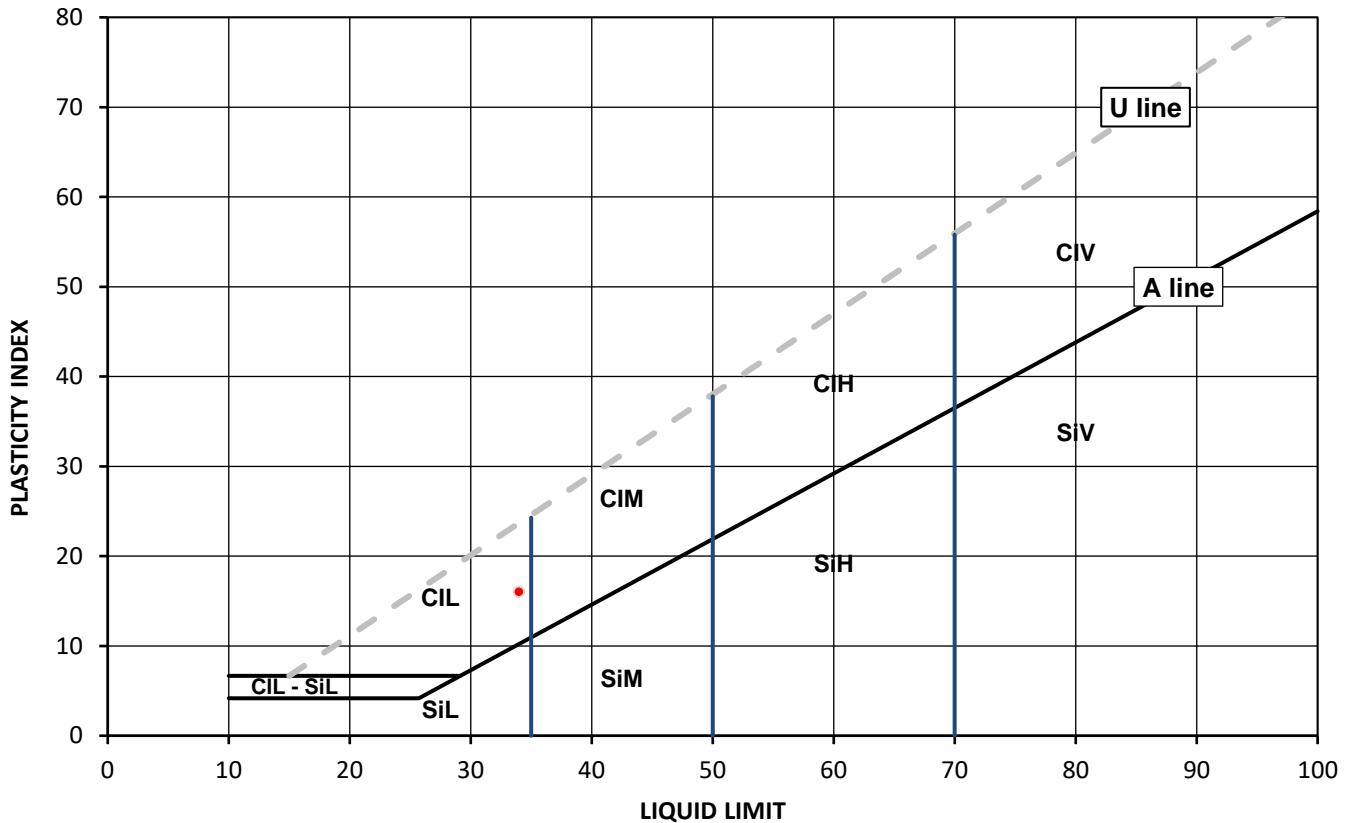
## Test Results:

Laboratory Reference: 2592822  
Hole No.: RO304  
Sample Reference: Not Given  
Sample Description: Brown slightly gravelly very sandy CLAY

Depth Top [m]: 1.50  
Depth Base [m]: Not Given  
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
22	34	18	16	92



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Client: Hydrock Consultants Ltd  
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Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 26/01/2023  
Date Received: 17/02/2023  
Date Tested: 24/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

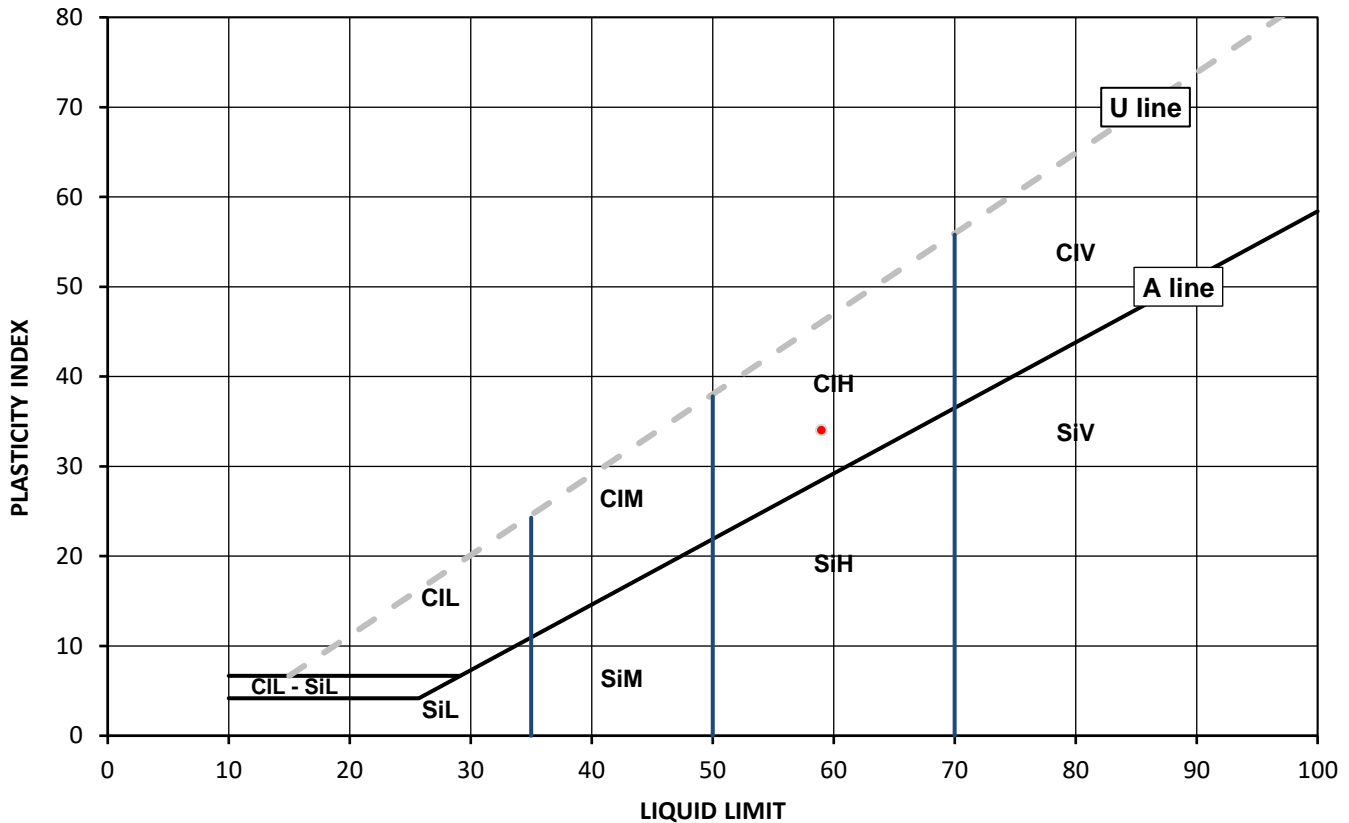
## Test Results:

Laboratory Reference: 2592824  
Hole No.: RO304  
Sample Reference: Not Given  
Sample Description: Brownish grey slightly gravelly slightly sandy CLAY

Depth Top [m]: 5.00  
Depth Base [m]: 5.45  
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [ W ] %	Liquid Limit [ WL ] %	Plastic Limit [ Wp ] %	Plasticity Index [ Ip ] %	% Passing 425µm BS Test Sieve
28	59	25	34	99



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Cl	Clay	Plasticity	L	Low	Liquid Limit	below 35
Si	Silt		M	Medium		35 to 50
			H	High		50 to 70
			V	Very high		exceeding 70
			O	Organic		append to classification for organic material ( eg CIHO )

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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4041

Client: Hydrock Consultants Ltd  
 Client Address: 2-4 Hawthorne Park, Holdenby Road,  
 Spratton, Northamptonshire,  
 NN6 8LD

Contact: Nathan Thompson  
 Site Address: Begbroke

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

**SUMMARY REPORT****SUMMARY OF CLASSIFICATION TEST RESULTS**

Tested in Accordance with:

Water Content by BS 1377-2:1990: Clause 3.2 Atterberg by BS 1377-2: 1990:  
 Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5

i2 Analytical Ltd  
 Unit 8 Harrowden Road  
 Brackmills Industrial Estate  
 Northampton NN4 7EB



Environmental Science

Client Reference: 19114

Job Number: 23-18737-1

Date Sampled: 31/01 - 07/02/2023

Date Received: 17/02/2023

Date Tested: 24/02 - 28/02/2023

Sampled By: Not Given

**Test results**

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [ W ] %	Water Content BS EN ISO 17892-2 [ W ] %	Atterberg				Density			Total Porosity# %	
		Reference	Depth Top m	Depth Base m	Type					% Passing 425um	WL %	Wp %	Ip %	bulk Mg/m3	dry Mg/m3	PD Mg/m3		
2592788	TP315	Not Given	0.40	0.70	B	Yellowish brown sandy CLAY	Atterberg 4 Point	21		76	39	18	21					
2592789	TP315	Not Given	1.00	1.40	B	Greyish brown gravelly SAND		13										
2592790	TP316	Not Given	0.30	0.50	B	Yellowish brown slightly gravelly very sandy CLAY	Atterberg 4 Point	21		74	31	17	14					
2592791	TP316	Not Given	1.00	1.40	B	Greyish brown sandy GRAVEL		13										
2592792	TP317	Not Given	0.30	0.50	B	Greyish brown slightly gravelly sandy CLAY	Atterberg 4 Point	20		97	37	18	19					
2592793	RO301	Not Given	1.00	1.50	U	Yellowish brown very gravelly SAND		12										
2592794	RO305	Not Given	4.00	4.50	U	Brown very gravelly slightly sandy CLAY	Atterberg 4 Point	15		31	46	20	26					
2592795	RO305	Not Given	5.00	Not Given	D	Grey CLAY		26										
2592796	RO305	Not Given	6.20	Not Given	D	Brownish grey CLAY	Atterberg 4 Point	27		100	64	29	35					
2592797	RO305	Not Given	8.70	Not Given	D	Grey CLAY		24										

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

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 Reporting Specialist  
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 NN6 8LD

Contact: Nathan Thompson  
 Site Address: Begbroke

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 Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5

i2 Analytical Ltd  
 Unit 8 Harrowden Road  
 Brackmills Industrial Estate  
 Northampton NN4 7EB



Environmental Science

Client Reference: 19114  
 Job Number: 23-18737-1  
 Date Sampled: 31/01 - 02/02/2023  
 Date Received: 17/02/2023  
 Date Tested: 24/02 - 27/02/2023  
 Sampled By: Not Given

**Test results**

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [ W ] %	Water Content BS EN ISO 17892-2 [ W ] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top m	Depth Base m	Type					% Passing 425um	WL	Wp	Ip	bulk Mg/m3	dry Mg/m3	PD Mg/m3			
2592798	RO305	Not Given	11.60	Not Given	D	Grey slightly gravelly very sandy CLAY	Atterberg 4 Point	24		97	26	13	13						
2592799	RO305	Not Given	12.70	Not Given	D	Grey very sandy CLAY	Atterberg 4 Point	20		100	26	18	8						
2592800	RO305	Not Given	16.50	Not Given	D	Grey CLAY	Atterberg 4 Point	25		100	60	26	34						
2592801	TP302	Not Given	0.80	1.00	B	Brown clayey SAND	Atterberg 4 Point	18		69	32	17	15						
2592802	TP303	Not Given	0.30	0.60	B	Brown sandy CLAY	Atterberg 4 Point	22		84	37	19	18						
2592803	TP303	Not Given	0.80	1.20	B	Brown gravelly SAND		7.6											
2592804	TP304	Not Given	0.60	0.80	B	Brown slightly gravelly clayey SAND	Atterberg 4 Point	18		97	25	15	10						
2592805	TP305	Not Given	0.40	0.60	B	Brown gravelly sandy CLAY		18											
2592806	TP305	Not Given	1.00	1.40	B	Yellowish brown gravelly SAND		13											
2592807	TP306	Not Given	0.60	0.80	B	Yellowish brown slightly gravelly sandy CLAY	Atterberg 4 Point	20		79	43	20	23						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

*Katarzyna Koziel*

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 Reporting Specialist  
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 Spratton, Northamptonshire,  
 NN6 8LD

Contact: Nathan Thompson  
 Site Address: Begbroke

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

## SUMMARY REPORT

### SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

Water Content by BS 1377-2:1990: Clause 3.2 Atterberg by BS 1377-2: 1990:  
 Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5

i2 Analytical Ltd  
 Unit 8 Harrowden Road  
 Brackmills Industrial Estate  
 Northampton NN4 7EB



Environmental Science

Client Reference: 19114  
 Job Number: 23-18737-1  
 Date Sampled: 06/02 - 07/02/2023  
 Date Received: 17/02/2023  
 Date Tested: 27/02/2023  
 Sampled By: Not Given

### Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [ W ] %	Water Content BS EN ISO 17892-2 [ W ] %	Atterberg				Density			Total Porosity# %	
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk Mg/m3	dry Mg/m3	PD Mg/m3		
			m	m														
2592808	TP307	Not Given	0.30	0.50	B	Greyish brown sandy CLAY	Atterberg 4 Point	28		94	47	17	30					
2592809	TP307	Not Given	1.20	1.50	B	Yellowish brown very gravelly SAND		13										
2592810	TP307	Not Given	2.20	2.40	B	Greyish gravelly sandy CLAY	Atterberg 4 Point	14		62	28	16	12					
2592811	TP308	Not Given	1.30	1.70	B	Greyish brown slightly gravelly sandy CLAY	Atterberg 4 Point	18		83	36	19	17					
2592812	TP309	Not Given	0.60	0.70	B	Yellowish brown gravelly SAND		12										
2592813	TP309	Not Given	1.90	2.00	B	Greyish brown slightly gravelly very sandy CLAY	Atterberg 4 Point	17		86	34	22	12					
2592814	TP312	Not Given	0.30	0.60	B	Brown slightly gravelly sandy CLAY	Atterberg 4 Point	24		97	40	21	19					
2592815	TP312	Not Given	1.00	1.40	B	Brown very sandy GRAVEL		11										
2592816	TP312	Not Given	2.00	2.50	B	Greyish brown very sandy CLAY	Atterberg 4 Point	24		100	32	21	11					
2592817	RO301	Not Given	4.00	4.50	U	Greyish brown slightly gravelly slightly silty CLAY		25										

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

*Katarzyna Koziel*

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 Reporting Specialist  
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## SUMMARY REPORT

### SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

Water Content by BS 1377-2:1990: Clause 3.2 Atterberg by BS 1377-2: 1990:  
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 Unit 8 Harrowden Road  
 Brackmills Industrial Estate  
 Northampton NN4 7EB



Environmental Science

Client Reference: 19114  
 Job Number: 23-18737-1  
 Date Sampled: 26/01 - 16/02/2023  
 Date Received: 17/02/2023  
 Date Tested: 24/02/2023  
 Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

#### Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [ W ] %	Water Content BS EN ISO 17892-2 [ W ] %	Atterberg				Density			Total Porosity# %
		Reference	Depth Top m	Depth Base m	Type					% Passing 425um	WL %	Wp %	Ip %	bulk Mg/m3	dry Mg/m3	PD Mg/m3	
2592818	RO301	Not Given	8.00	8.00	D	Grey slightly gravelly sandy silty CLAY	Atterberg 4 Point	23		99	39	26	13				
2592819	RO301	Not Given	11.90	Not Given	D	Grey CLAY		19									
2592820	RO302	Not Given	3.90	Not Given	D	Dark brown very gravelly CLAY		18									
2592821	RO302	Not Given	10.00	Not Given	D	Grey very sandy CLAY	Atterberg 4 Point	14		100	33	19	14				
2592822	RO304	Not Given	1.50	Not Given	D	Brown slightly gravelly very sandy CLAY	Atterberg 4 Point	22		92	34	18	16				
2592823	RO304	Not Given	4.00	4.45	D	Grey CLAY		27									
2592824	RO304	Not Given	5.00	5.45	D	Brownish grey slightly gravelly slightly sandy CLAY	Atterberg 4 Point	28		99	59	25	34				
2592825	RO301	Not Given	5.00	5.13	C	Grey LIMESTONE		2.7									

Note: # Non accredited; NP - Non plastic

Comments:

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## SUMMARY REPORT

### DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

i2 Analytical Ltd  
 Unit 8 Harrowden Road  
 Brackmills Industrial Estate  
 Northampton NN4 7EB



Environmental Science

Client Reference: 19114  
 Job Number: 23-18737-1  
 Date Sampled: 31/01 - 07/02/2023  
 Date Received: 17/02/2023  
 Date Tested: 24/02 - 28/02/2023  
 Sampled By: Not Given

### Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC %	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2592788	TP315	Not Given	0.40	0.70	B	Yellowish brown sandy CLAY		21	Sample was quartered, oven dried at 106.1 °C			
2592789	TP315	Not Given	1.00	1.40	B	Greyish brown gravelly SAND		13	Sample was quartered, oven dried at 109 °C			
2592790	TP316	Not Given	0.30	0.50	B	Yellowish brown slightly gravelly very sandy CLAY		21	Sample was quartered, oven dried at 106 °C			
2592791	TP316	Not Given	1.00	1.40	B	Greyish brown sandy GRAVEL		13	Sample was quartered, oven dried at 109 °C			
2592792	TP317	Not Given	0.30	0.50	B	Greyish brown slightly gravelly sandy CLAY		20	Sample was quartered, oven dried at 106.1 °C			
2592793	RO301	Not Given	1.00	1.50	U	Yellowish brown very gravelly SAND		12	Sample was quartered, oven dried at 106.1 °C			
2592794	RO305	Not Given	4.00	4.50	U	Brown very gravelly slightly sandy CLAY		15	Sample was quartered, oven dried at 106.1 °C			
2592795	RO305	Not Given	5.00	Not Given	D	Grey CLAY		26	Sample was quartered, oven dried at 108.6 °C			
2592796	RO305	Not Given	6.20	Not Given	D	Brownish grey CLAY		27	Sample was quartered, oven dried at 108.6 °C			
2592797	RO305	Not Given	8.70	Not Given	D	Grey CLAY		24	Sample was quartered, oven dried at 108.6 °C			

Comments:

Signed:

*Katarzyna Koziel*

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# SUMMARY REPORT

## DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

i2 Analytical Ltd  
 Unit 8 Harrowden Road  
 Brackmills Industrial Estate  
 Northampton NN4 7EB



Environmental Science

Client Reference: 19114  
 Job Number: 23-18737-1  
 Date Sampled: 31/01 - 02/02/2023  
 Date Received: 17/02/2023  
 Date Tested: 24/02 - 27/02/2023  
 Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC %	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2592798	RO305	Not Given	11.60	Not Given	D	Grey slightly gravelly very sandy CLAY		24	Sample was quartered, oven dried at 108.6 °C			
2592799	RO305	Not Given	12.70	Not Given	D	Grey very sandy CLAY		20	Sample was quartered, oven dried at 108.6 °C			
2592800	RO305	Not Given	16.50	Not Given	D	Grey CLAY		25	Sample was quartered, oven dried at 108.6 °C			
2592801	TP302	Not Given	0.80	1.00	B	Brown clayey SAND		18	Sample was quartered, oven dried at 106 °C			
2592802	TP303	Not Given	0.30	0.60	B	Brown sandy CLAY		22	Sample was quartered, oven dried at 106 °C			
2592803	TP303	Not Given	0.80	1.20	B	Brown gravelly SAND		7.6	Sample was quartered, oven dried at 109 °C			
2592804	TP304	Not Given	0.60	0.80	B	Brown slightly gravelly clayey SAND		18	Sample was quartered, oven dried at 106 °C			
2592805	TP305	Not Given	0.40	0.60	B	Brown gravelly sandy CLAY		18	Sample was quartered, oven dried at 106.1 °C			
2592806	TP305	Not Given	1.00	1.40	B	Yellowish brown gravelly SAND		13	Sample was quartered, oven dried at 106.8 °C			
2592807	TP306	Not Given	0.60	0.80	B	Yellowish brown slightly gravelly sandy CLAY		20	Sample was quartered, oven dried at 109 °C			

Comments:

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**SUMMARY REPORT****DETERMINATION OF WATER CONTENT**

Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

i2 Analytical Ltd  
 Unit 8 Harrowden Road  
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Environmental Science

Client Reference: 19114  
 Job Number: 23-18737-1  
 Date Sampled: 06/02 - 07/02/2023  
 Date Received: 17/02/2023  
 Date Tested: 27/02/2023  
 Sampled By: Not Given

**Test results**

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC %	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2592808	TP307	Not Given	0.30	0.50	B	Greyish brown sandy CLAY		28	Sample was quartered, oven dried at 106 °C			
2592809	TP307	Not Given	1.20	1.50	B	Yellowish brown very gravelly SAND		13	Sample was quartered, oven dried at 109 °C			
2592810	TP307	Not Given	2.20	2.40	B	Greyish gravelly sandy CLAY		14	Sample was quartered, oven dried at 106 °C			
2592811	TP308	Not Given	1.30	1.70	B	Greyish brown slightly gravelly sandy CLAY		18	Sample was quartered, oven dried at 106 °C			
2592812	TP309	Not Given	0.60	0.70	B	Yellowish brown gravelly SAND		12	Sample was quartered, oven dried at 109 °C			
2592813	TP309	Not Given	1.90	2.00	B	Greyish brown slightly gravelly very sandy CLAY		17	Sample was quartered, oven dried at 109 °C			
2592814	TP312	Not Given	0.30	0.60	B	Brown slightly gravelly sandy CLAY		24	Sample was quartered, oven dried at 106 °C			
2592815	TP312	Not Given	1.00	1.40	B	Brown very sandy GRAVEL		11	Sample was quartered, oven dried at 108.7 °C			
2592816	TP312	Not Given	2.00	2.50	B	Greyish brown very sandy CLAY		24	Sample was quartered, oven dried at 109 °C			
2592817	RO301	Not Given	4.00	4.50	U	Greyish brown slightly gravelly slightly silty CLAY		25	Sample was quartered, oven dried at 106.1 °C			

Comments:

Signed:

*Katarzyna Koziel*

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# SUMMARY REPORT

## DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

i2 Analytical Ltd  
 Unit 8 Harrowden Road  
 Brackmills Industrial Estate  
 Northampton NN4 7EB



Environmental Science

Client Reference: 19114  
 Job Number: 23-18737-1  
 Date Sampled: 26/01 - 16/02/2023  
 Date Received: 17/02/2023  
 Date Tested: 24/02/2023  
 Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC %	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2592818	RO301	Not Given	8.00	8.00	D	Grey slightly gravelly sandy silty CLAY		23	Sample was quartered, oven dried at 108.6 °C			
2592819	RO301	Not Given	11.90	Not Given	D	Grey CLAY		19	Sample was quartered, oven dried at 108.6 °C			
2592820	RO302	Not Given	3.90	Not Given	D	Dark brown very gravelly CLAY		18	Sample was quartered, oven dried at 108.6 °C			
2592821	RO302	Not Given	10.00	Not Given	D	Grey very sandy CLAY		14	Sample was quartered, oven dried at 108.6 °C			
2592822	RO304	Not Given	1.50	Not Given	D	Brown slightly gravelly very sandy CLAY		22	Sample was quartered, oven dried at 108.6 °C			
2592823	RO304	Not Given	4.00	4.45	D	Grey CLAY		27	Sample was quartered, oven dried at 108.6 °C			
2592824	RO304	Not Given	5.00	5.45	D	Brownish grey slightly gravelly slightly sandy CLAY		28	Sample was quartered, oven dried at 108.6 °C			
2592825	RO301	Not Given	5.00	5.13	C	Grey LIMESTONE		2.7	Sample was quartered, oven dried at 109 °C			

Comments:

Signed:

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# TEST CERTIFICATE

## DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

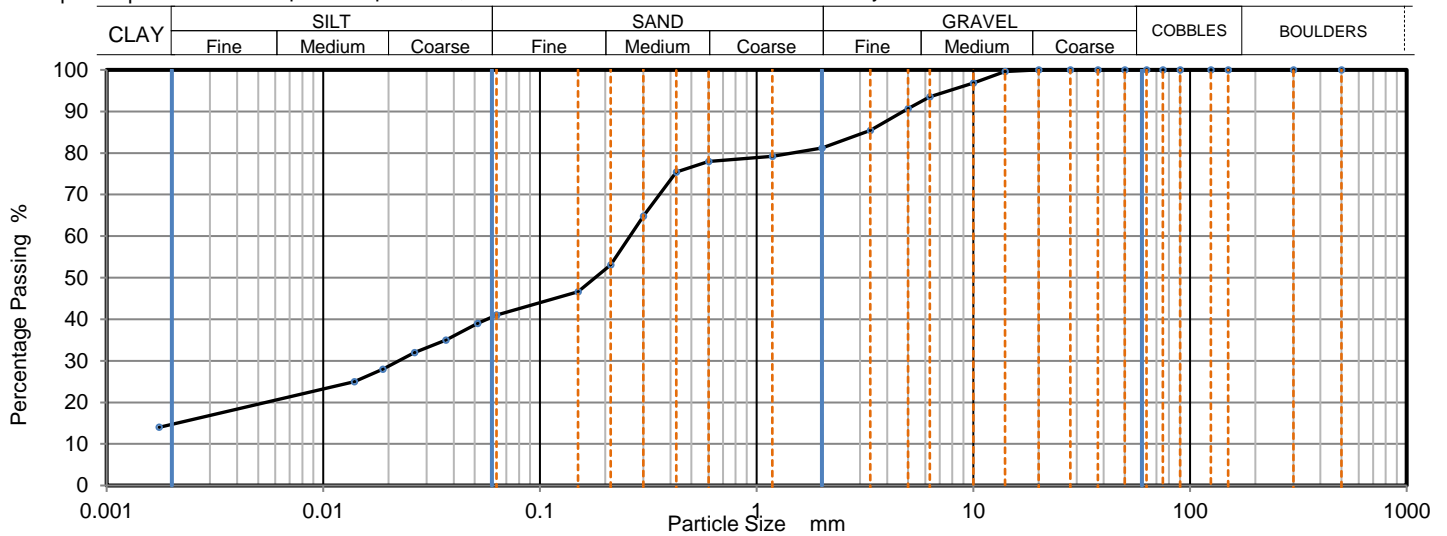
Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 02/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592788  
Hole No.: TP315  
Sample Reference: Not Given  
Sample Description: Yellowish brown sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 106.1 °C and broken down by hand.

Depth Top [m]: 0.40  
Depth Base [m]: 0.70  
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0630	41
300	100	0.0514	39
150	100	0.0368	35
125	100	0.0263	32
90	100	0.0188	28
75	100	0.0139	25
63	100	0.0117	14
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	97		
6.3	94		
5	91		
3.35	85		
2	81	Particle density (assumed) 2.65 Mg/m3	
1.18	79		
0.6	78		
0.425	75		
0.3	65		
0.212	53		
0.15	47		
0.063	41		

Sample Proportions	% dry mass
Very coarse	0
Gravel	19
Sand	41
Silt	25
Clay	15

Grading Analysis		
D100	mm	20
D60	mm	0.26
D30	mm	0.0224
D10	mm	
Uniformity Coefficient		> 150
Curvature Coefficient		

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Remarks:

Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

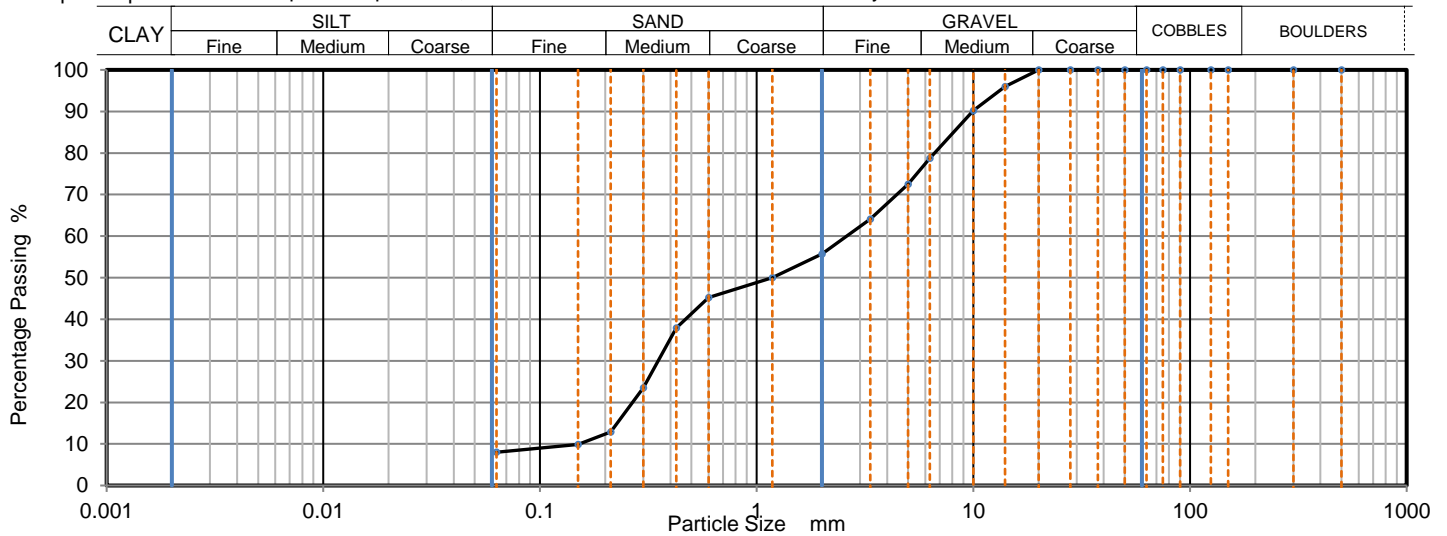
Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 02/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592789  
Hole No.: TP315  
Sample Reference: Not Given  
Sample Description: Greyish brown gravelly SAND  
Sample Preparation: Sample was quartered, oven dried at 109.0 °C and broken down by hand.

Depth Top [m]: 1.00  
Depth Base [m]: 1.40  
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	96		
10	90		
6.3	79		
5	73		
3.35	64		
2	56		
1.18	50		
0.6	45		
0.425	38		
0.3	24		
0.212	13		
0.15	10		
0.063	9		

Sample Proportions	% dry mass
Very coarse	0
Gravel	44
Sand	47
Fines <0.063mm	8

Grading Analysis		
D100	mm	20
D60	mm	2.61
D30	mm	0.351
D10	mm	0.152
Uniformity Coefficient		17
Curvature Coefficient		0.31

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

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Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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4041

Client: Hydrock Consultants Ltd  
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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

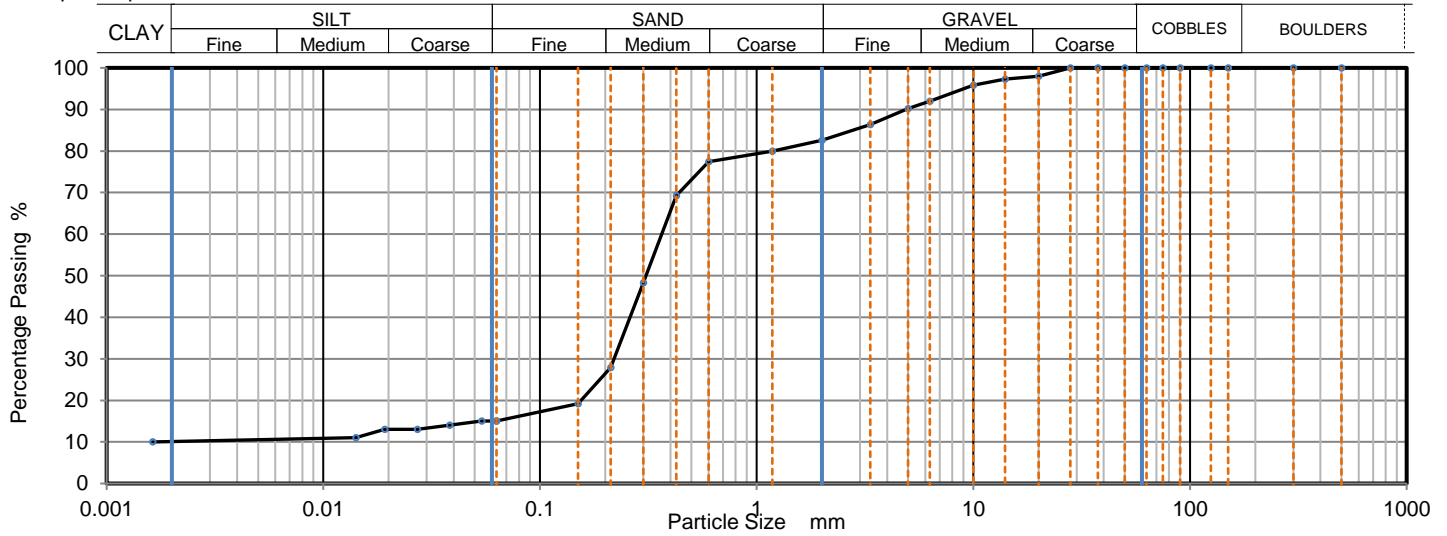
Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 31/01/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592801  
Hole No.: TP302  
Sample Reference: Not Given  
Sample Description: Brown clayey SAND  
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 0.80  
Depth Base [m]: 1.00  
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0630	15
300	100	0.0538	15
150	100	0.0382	14
125	100	0.0272	13
90	100	0.0192	13
75	100	0.0141	11
63	100	0.0116	10
50	100		
37.5	100		
28	100		
20	98		
14	97		
10	96		
6.3	92		
5	90		
3.35	86		
2	83	Particle density (assumed) 2.65 Mg/m <sup>3</sup>	
1.18	80		
0.6	77		
0.425	69		
0.3	48		
0.212	28		
0.15	19		
0.063	15		

Sample Proportions	% dry mass
Very coarse	0
Gravel	17
Sand	67
Silt	6
Clay	10

Grading Analysis		
D100	mm	28
D60	mm	0.364
D30	mm	0.22
D10	mm	0.00246
Uniformity Coefficient		150
Curvature Coefficient		54

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Remarks:

Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF PARTICLE SIZE DISTRIBUTION

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Unit 8 Harrowden Road  
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Environmental Science

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Client: Hydrock Consultants Ltd  
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Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

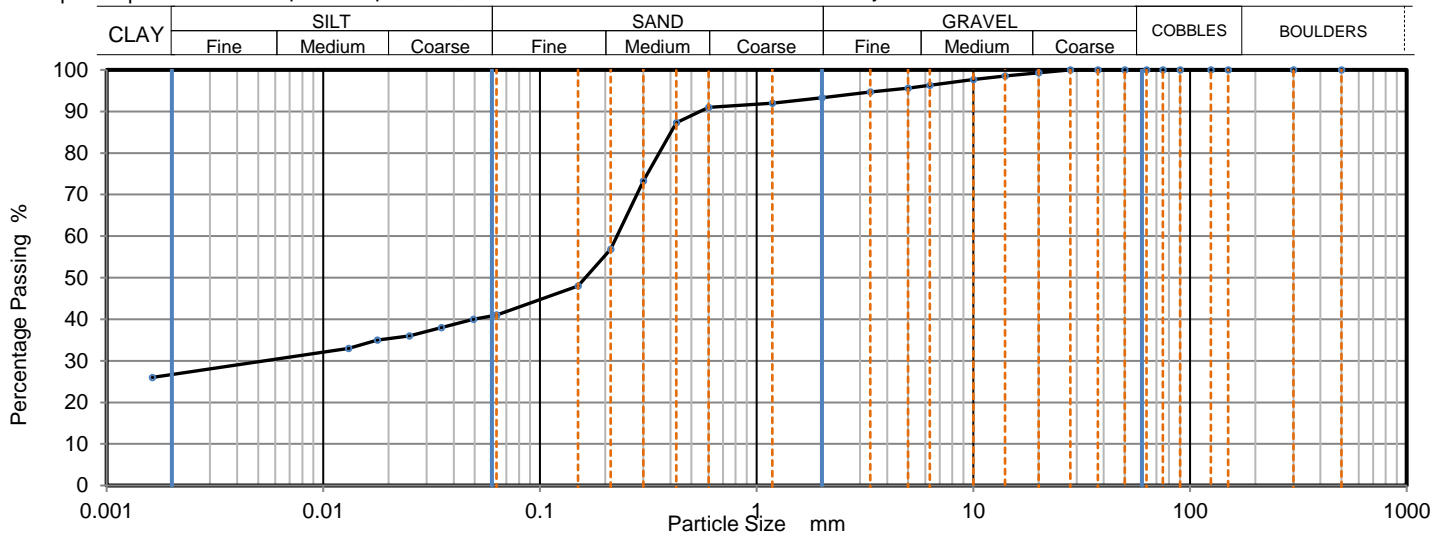
Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 02/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592802  
Hole No.: TP303  
Sample Reference: Not Given  
Sample Description: Brown sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 0.30  
Depth Base [m]: 0.60  
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0630	41
300	100	0.0493	40
150	100	0.0351	38
125	100	0.0250	36
90	100	0.0178	35
75	100	0.0131	33
63	100	0.0016	26
50	100		
37.5	100		
28	100		
20	99		
14	99		
10	98		
6.3	96		
5	96		
3.35	95		
2	93	Particle density (assumed) 2.65 Mg/m3	
1.18	92		
0.6	91		
0.425	87		
0.3	73		
0.212	57		
0.15	48		
0.063	41		

Sample Proportions	% dry mass
Very coarse	0
Gravel	7
Sand	52
Silt	14
Clay	27

Grading Analysis		
D100	mm	28
D60	mm	0.226
D30	mm	0.005
D10	mm	
Uniformity Coefficient		> 140
Curvature Coefficient		

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Remarks:

Signed:

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Reporting Specialist  
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# TEST CERTIFICATE

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i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

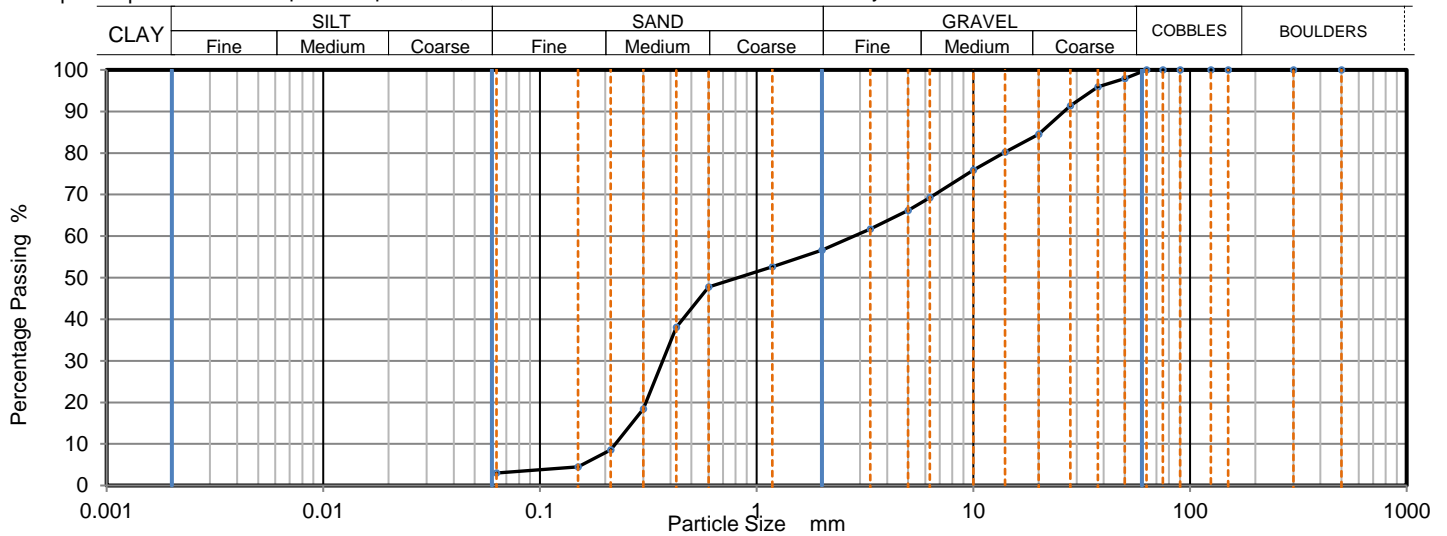
Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 02/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592803  
Hole No.: TP303  
Sample Reference: Not Given  
Sample Description: Brown gravelly SAND  
Sample Preparation: Sample was quartered, oven dried at 109.0 °C and broken down by hand.

Depth Top [m]: 0.80  
Depth Base [m]: 1.20  
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	98		
37.5	96		
28	91		
20	85		
14	80		
10	76		
6.3	69		
5	66		
3.35	62		
2	57		
1.18	53		
0.6	48		
0.425	38		
0.3	18		
0.212	9		
0.15	5		
0.063	4		

Sample Proportions	% dry mass
Very coarse	0
Gravel	43
Sand	53
Fines <0.063mm	4

Grading Analysis		
D100	mm	63
D60	mm	2.83
D30	mm	0.368
D10	mm	0.222
Uniformity Coefficient		13
Curvature Coefficient		0.22

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

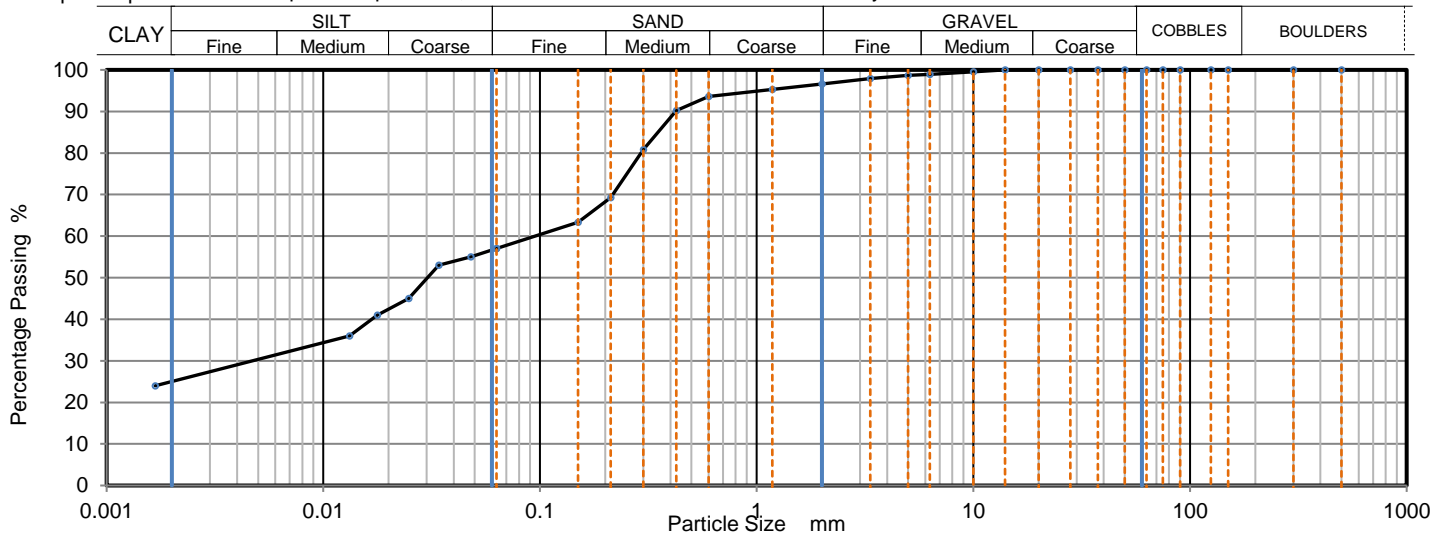
Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 06/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592808  
Hole No.: TP307  
Sample Reference: Not Given  
Sample Description: Greyish brown sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 0.30  
Depth Base [m]: 0.50  
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0630	57
300	100	0.0480	55
150	100	0.0342	53
125	100	0.0248	45
90	100	0.0178	41
75	100	0.0132	36
63	100	0.0017	24
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	99		
5	99		
3.35	98		
2	97	Particle density (assumed) 2.65 Mg/m3	
1.18	95		
0.6	94		
0.425	90		
0.3	81		
0.212	69		
0.15	63		
0.063	57		

Sample Proportions	% dry mass
Very coarse	0
Gravel	3
Sand	39
Silt	33
Clay	25

Grading Analysis		
D100	mm	14
D60	mm	0.0931
D30	mm	0.00501
D10	mm	
Uniformity Coefficient		> 56
Curvature Coefficient		

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Remarks:

Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

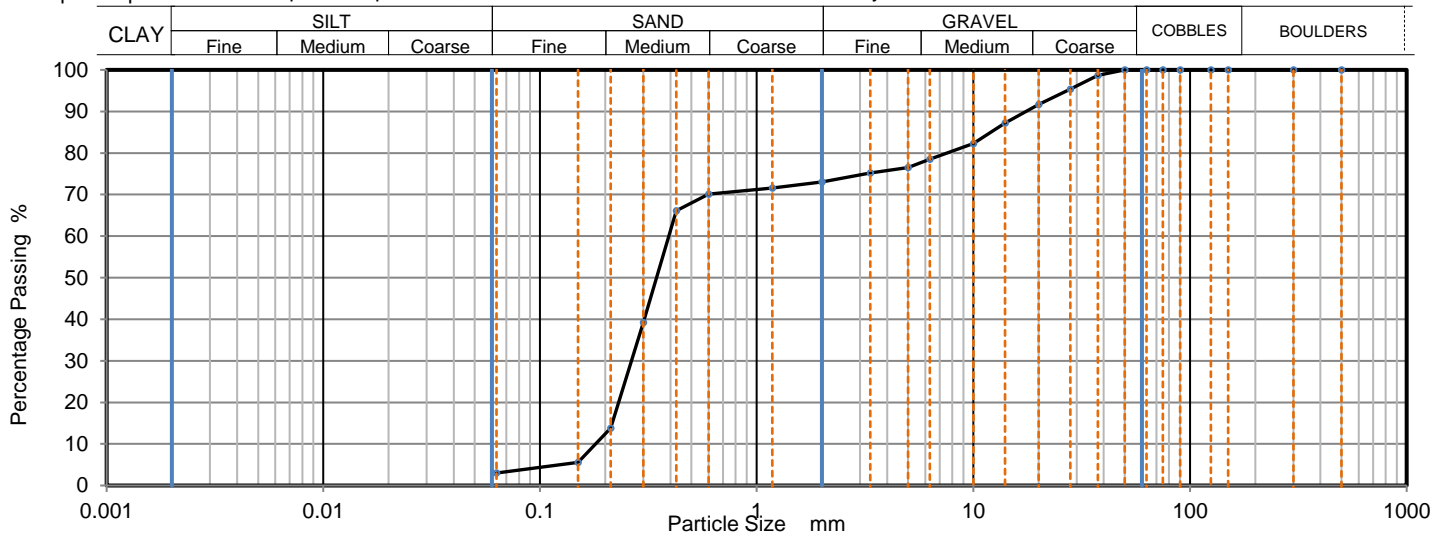
Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 06/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592809  
Hole No.: TP307  
Sample Reference: Not Given  
Sample Description: Yellowish brown very gravelly SAND  
Sample Preparation: Sample was quartered, oven dried at 109.0 °C and broken down by hand.

Depth Top [m]: 1.20  
Depth Base [m]: 1.50  
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	99		
28	95		
20	92		
14	87		
10	82		
6.3	79		
5	77		
3.35	75		
2	73		
1.18	72		
0.6	70		
0.425	66		
0.3	39		
0.212	14		
0.15	6		
0.063	4		

Sample Proportions	% dry mass
Very coarse	0
Gravel	27
Sand	69
Fines <0.063mm	4

Grading Analysis		
D100	mm	50
D60	mm	0.393
D30	mm	0.264
D10	mm	0.18
Uniformity Coefficient		2.2
Curvature Coefficient		0.99

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

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Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

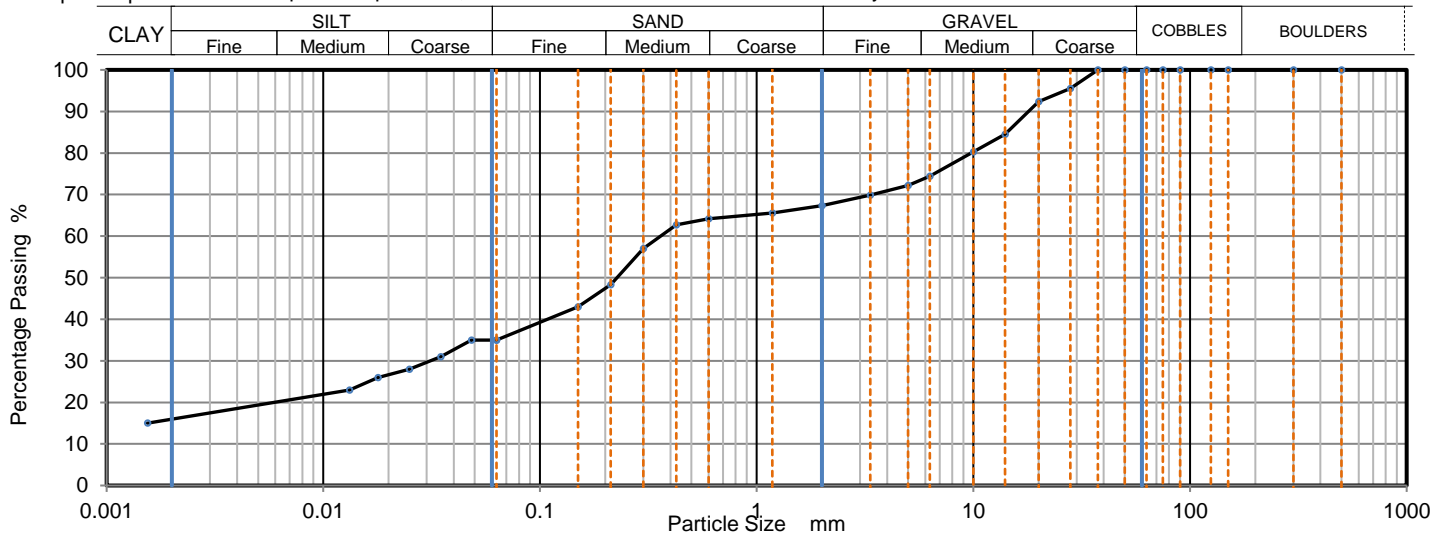
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Job Number: 23-18737-1  
Date Sampled: 06/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592810  
Hole No.: TP307  
Sample Reference: Not Given  
Sample Description: Greyish gravelly sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 106.0 °C and broken down by hand.

Depth Top [m]: 2.20  
Depth Base [m]: 2.40  
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0630	35
300	100	0.0483	35
150	100	0.0348	31
125	100	0.0250	28
90	100	0.0179	26
75	100	0.0132	23
63	100	0.0015	15
50	100		
37.5	100		
28	96		
20	92		
14	85		
10	80		
6.3	74		
5	72		
3.35	70		
2	67	Particle density (assumed) 2.65 Mg/m <sup>3</sup>	
1.18	66		
0.6	64		
0.425	63		
0.3	57		
0.212	48		
0.15	43		
0.063	35		

Sample Proportions	% dry mass
Very coarse	0
Gravel	33
Sand	33
Silt	18
Clay	16

Grading Analysis		
D100	mm	37.5
D60	mm	0.361
D30	mm	0.0309
D10	mm	
Uniformity Coefficient		> 230
Curvature Coefficient		

Uniformity Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Remarks:

Signed:

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Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 31/01/2023  
Date Received: 17/02/2023  
Date Tested: 28/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592801  
Hole No.: TP302  
Sample Reference: Not Given  
Sample Description: Brown clayey SAND

Depth Top [m]: 0.80  
Depth Base [m]: 1.00  
Sample Type: B

### Specimen Preparation:

Condition Remoulded  
Details Recompacted with specified standard effort using 2.5kg rammer

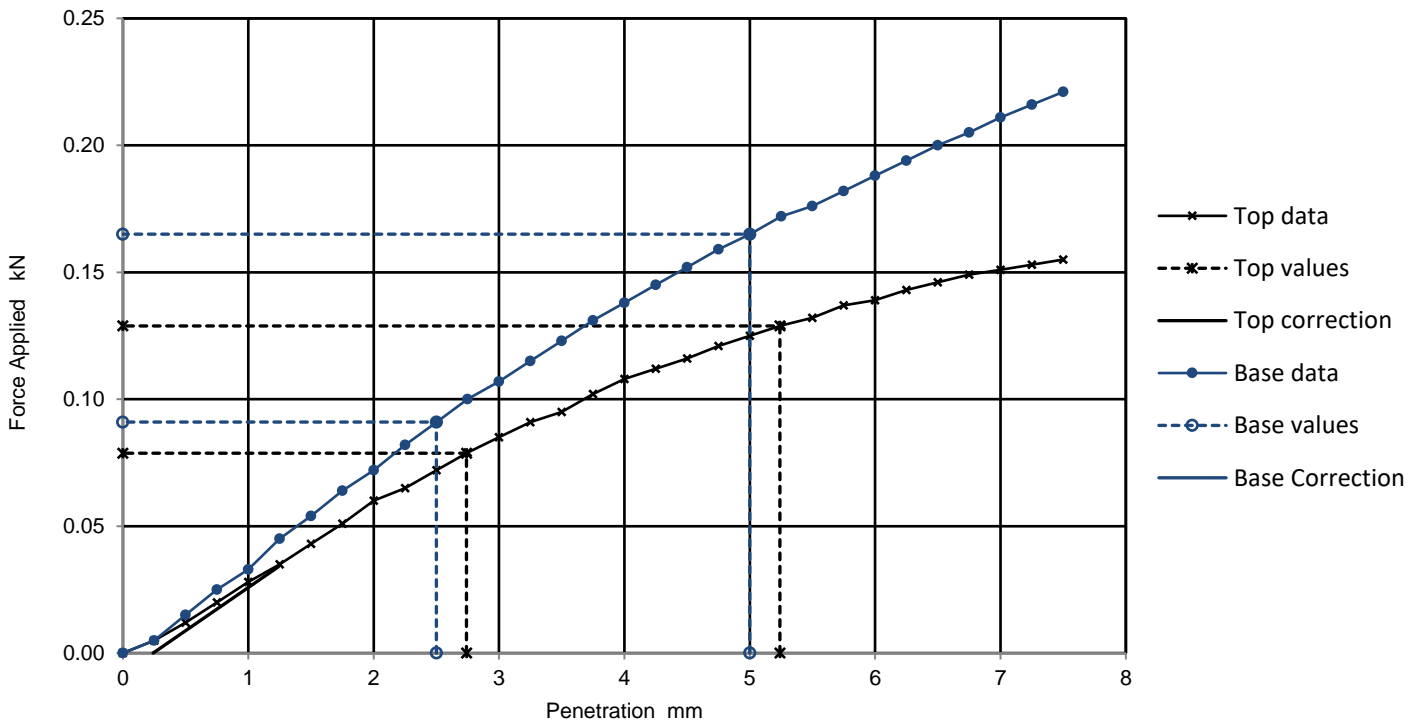
Soaking details  
Period of soaking 8 days  
Time to surface 3 days  
Amount of swell recorded -0.08 mm  
Dry density after soaking 1.76 Mg/m<sup>3</sup>

Material retained on 20mm sieve removed 3 %

Initial Specimen details  
Bulk density 2.08 Mg/m<sup>3</sup>  
Dry density 1.76 Mg/m<sup>3</sup>  
Moisture content 18 %

Surcharge applied 8 kg  
4.8 kPa

Force v Penetration Plots



### Results

TOP  
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
Yes	0.6	0.6	0.6	
No	0.7	0.8	0.8	

Moisture Content %
19
19

### Remarks:

Test/ Specimen specific remarks:

Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 31/01/2023  
Date Received: 17/02/2023  
Date Tested: 28/02/2023  
Sampled By: Not Given

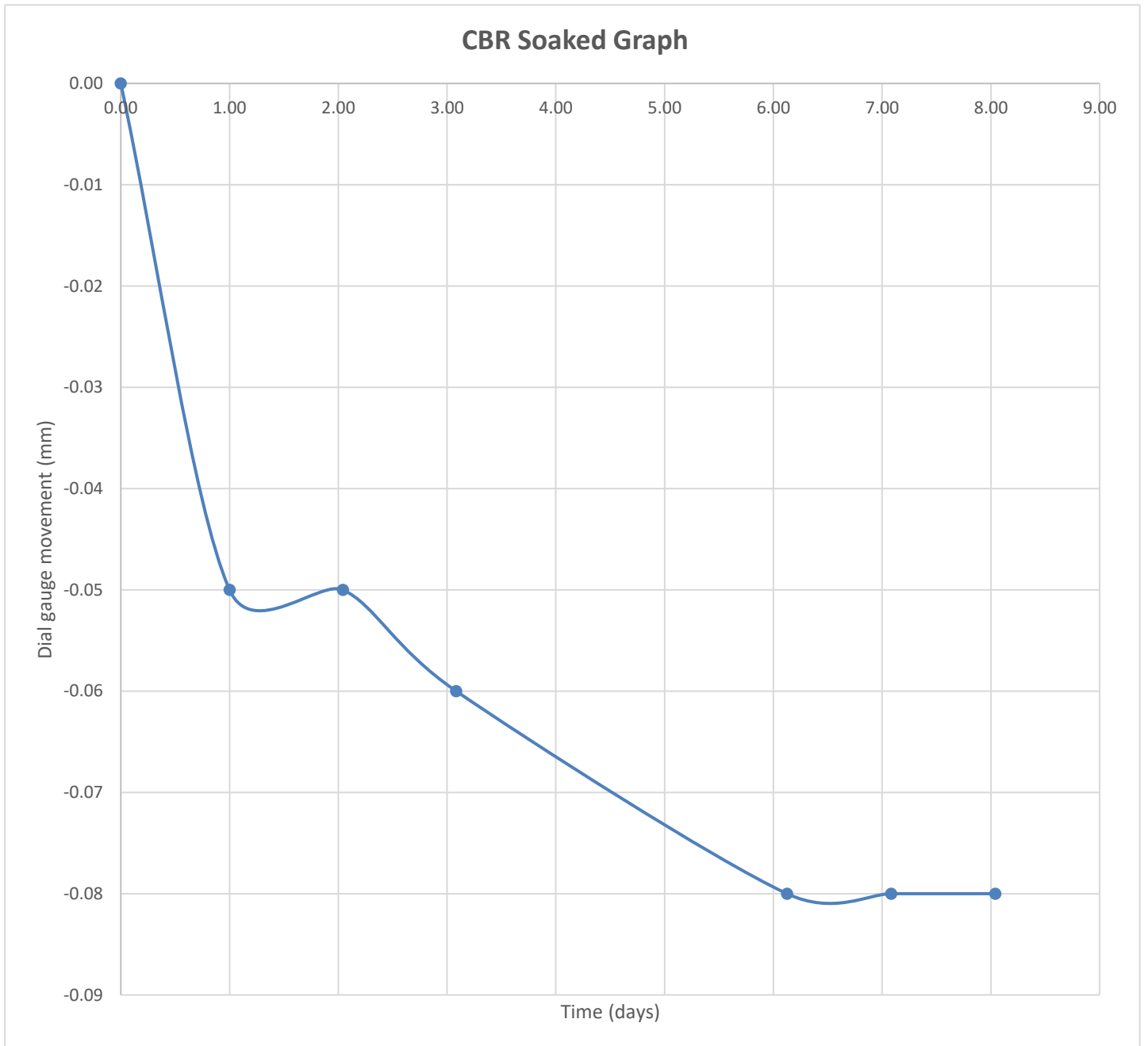
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592801  
Hole No.: TP302  
Sample Reference: Not Given  
Sample Description: Brown clayey SAND

Depth Top [m]: 0.80  
Depth Base [m]: 1.00  
Sample Type: B

### CBR Soaked Graph



Remarks:

Test/ Specimen  
specific remarks:

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Signed:

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Reporting Specialist  
for and on behalf of i2 Analytical Ltd



# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
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Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
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NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 02/02/2023  
Date Received: 17/02/2023  
Date Tested: 28/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592803  
Hole No.: TP303  
Sample Reference: Not Given  
Sample Description: Brown gravelly SAND

Depth Top [m]: 0.80  
Depth Base [m]: 1.20  
Sample Type: B

### Specimen Preparation:

Condition Remoulded  
Details Recompacted with specified standard effort using 2.5kg rammer

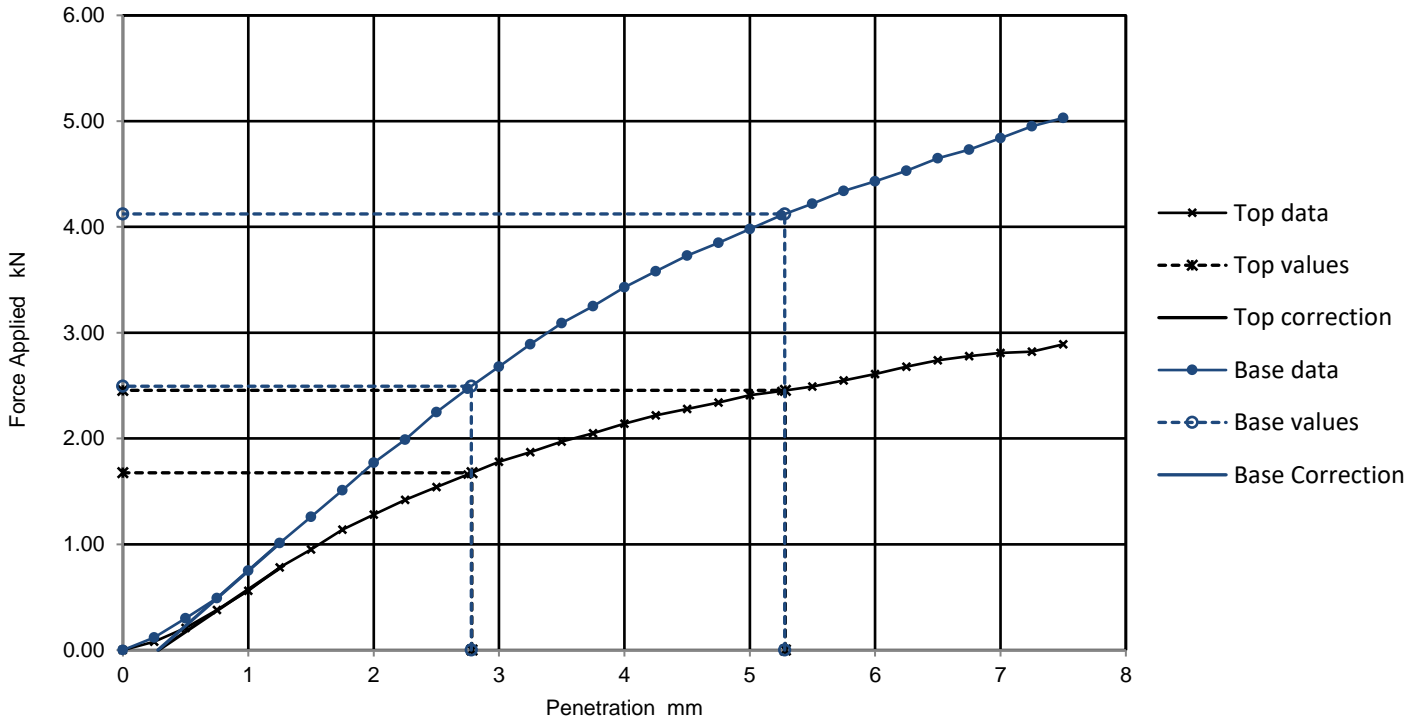
Soaking details  
Period of soaking 6 days  
Time to surface 3 days  
Amount of swell recorded -0.03 mm  
Dry density after soaking 1.90 Mg/m<sup>3</sup>

Material retained on 20mm sieve removed 14 %

Initial Specimen details  
Bulk density 2.06 Mg/m<sup>3</sup>  
Dry density 1.90 Mg/m<sup>3</sup>  
Moisture content 8.6 %

Surcharge applied 8 kg  
4.8 kPa

Force v Penetration Plots



Results

TOP  
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
Yes	13.0	12.0	13.0	
Yes	19.0	21.0	21.0	

Moisture Content %
14
13

Remarks:

Test/ Specimen specific remarks:

Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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4041

# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

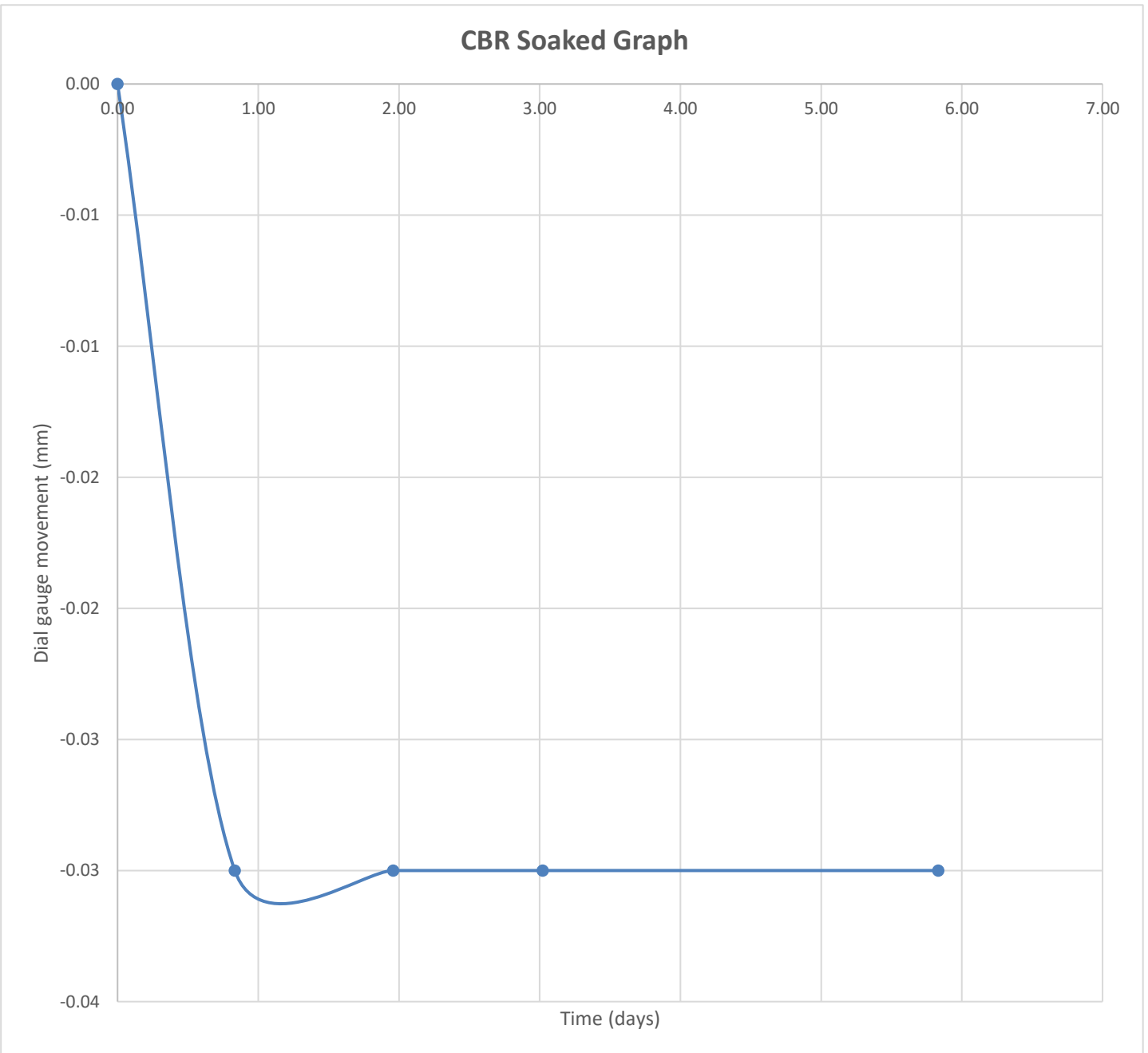
Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 02/02/2023  
Date Received: 17/02/2023  
Date Tested: 28/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592803  
Hole No.: TP303  
Sample Reference: Not Given  
Sample Description: Brown gravelly SAND

Depth Top [m]: 0.80  
Depth Base [m]: 1.20  
Sample Type: B



Remarks:

Test/ Specimen  
specific remarks:

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Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd





# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 31/01/2023  
Date Received: 17/02/2023  
Date Tested: 28/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592804  
Hole No.: TP304  
Sample Reference: Not Given  
Sample Description: Brown slightly gravelly clayey SAND

Depth Top [m]: 0.60  
Depth Base [m]: 0.80  
Sample Type: B

### Specimen Preparation:

Condition Remoulded  
Details Recompacted with specified standard effort using 2.5kg rammer

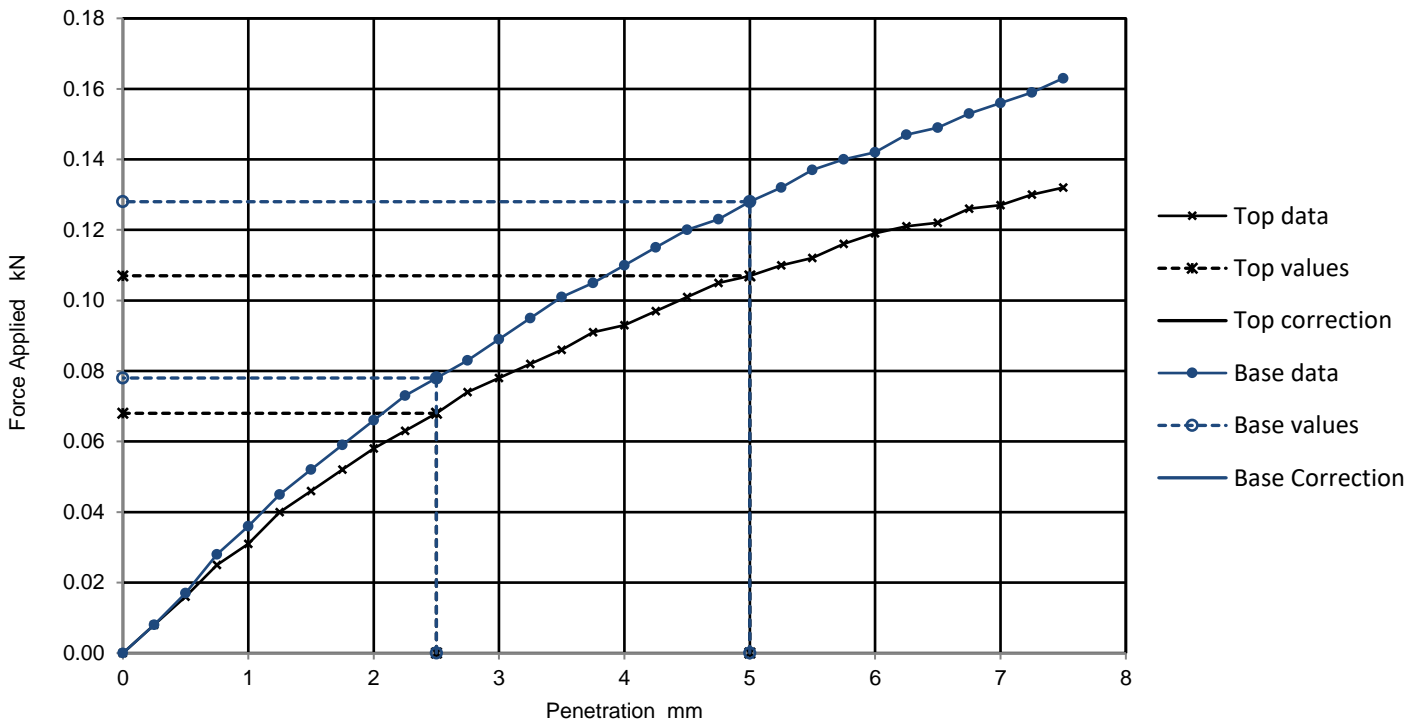
Soaking details  
Period of soaking 9 days  
Time to surface 3 days  
Amount of swell recorded -0.65 mm  
Dry density after soaking 1.74 Mg/m<sup>3</sup>

Material retained on 20mm sieve removed 0 %

Initial Specimen details  
Bulk density 2.07 Mg/m<sup>3</sup>  
Dry density 1.73 Mg/m<sup>3</sup>  
Moisture content 20 %

Surcharge applied 8 kg  
4.8 kPa

Force v Penetration Plots



### Results

TOP  
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.5	0.5	0.5	0.6
No	0.6	0.6	0.6	

Moisture Content %
19
18

### Remarks:

Test/ Specimen specific remarks:

Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 31/01/2023  
Date Received: 17/02/2023  
Date Tested: 28/02/2023  
Sampled By: Not Given

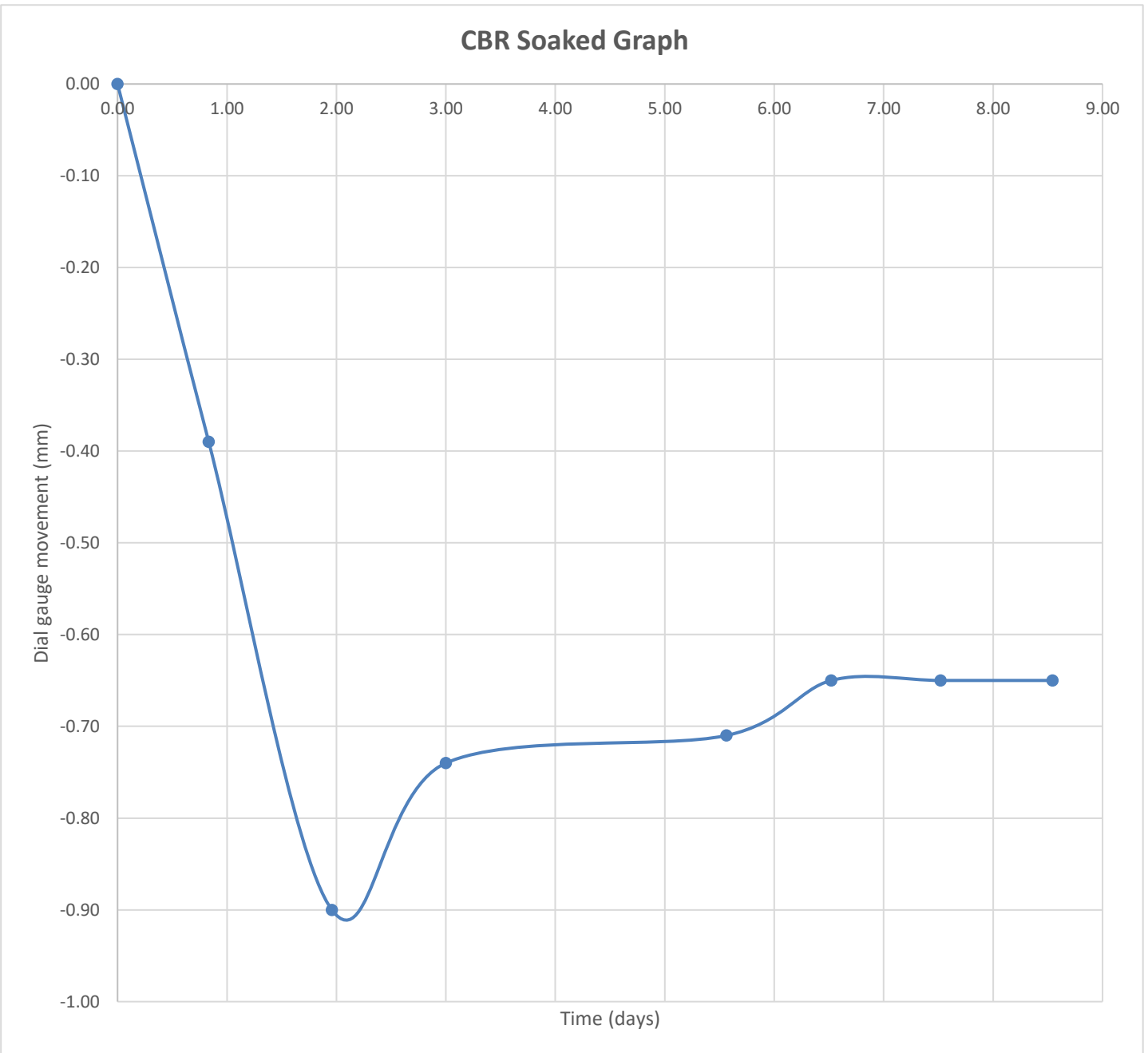
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592804  
Hole No.: TP304  
Sample Reference: Not Given  
Sample Description: Brown slightly gravelly clayey SAND

Depth Top [m]: 0.60  
Depth Base [m]: 0.80  
Sample Type: B

### CBR Soaked Graph



Remarks:

Test/ Specimen  
specific remarks:

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Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd



# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 31/01/2023  
Date Received: 17/02/2023  
Date Tested: 28/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592806  
Hole No.: TP305  
Sample Reference: Not Given  
Sample Description: Yellowish brown gravelly SAND

Depth Top [m]: 1.00  
Depth Base [m]: 1.40  
Sample Type: B

### Specimen Preparation:

Condition Remoulded  
Details Recompacted with specified standard effort using 2.5kg rammer

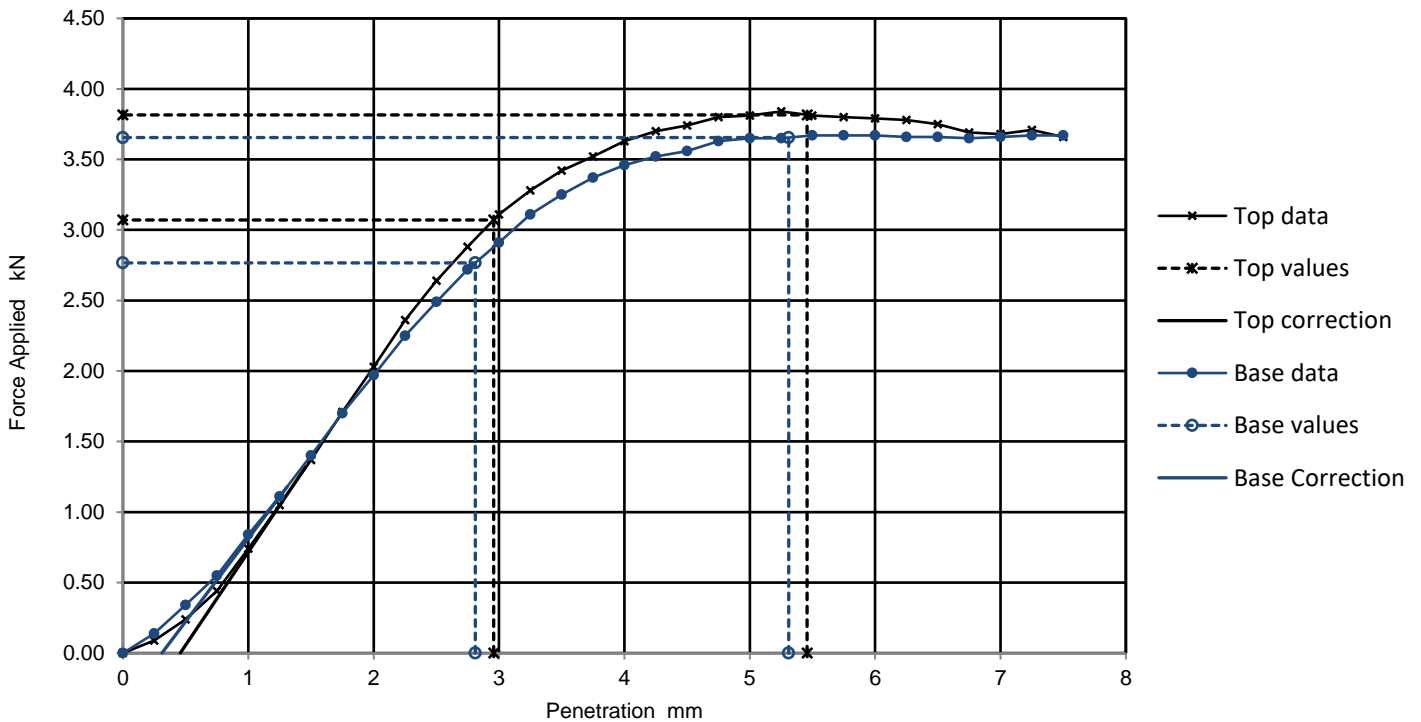
Soaking details  
Period of soaking 8 days  
Time to surface 3 days  
Amount of swell recorded -0.04 mm  
Dry density after soaking 1.87 Mg/m<sup>3</sup>

Material retained on 20mm sieve removed 12 %

Initial Specimen details  
Bulk density 2.11 Mg/m<sup>3</sup>  
Dry density 1.87 Mg/m<sup>3</sup>  
Moisture content 13 %

Surcharge applied 8 kg  
4.8 kPa

Force v Penetration Plots



### Results

TOP  
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
Yes	23.0	19.0	23.0	22.0
Yes	21.0	18.0	21.0	

Moisture Content %
15
14

### Remarks:

Test/ Specimen specific remarks:

Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 31/01/2023  
Date Received: 17/02/2023  
Date Tested: 28/02/2023  
Sampled By: Not Given

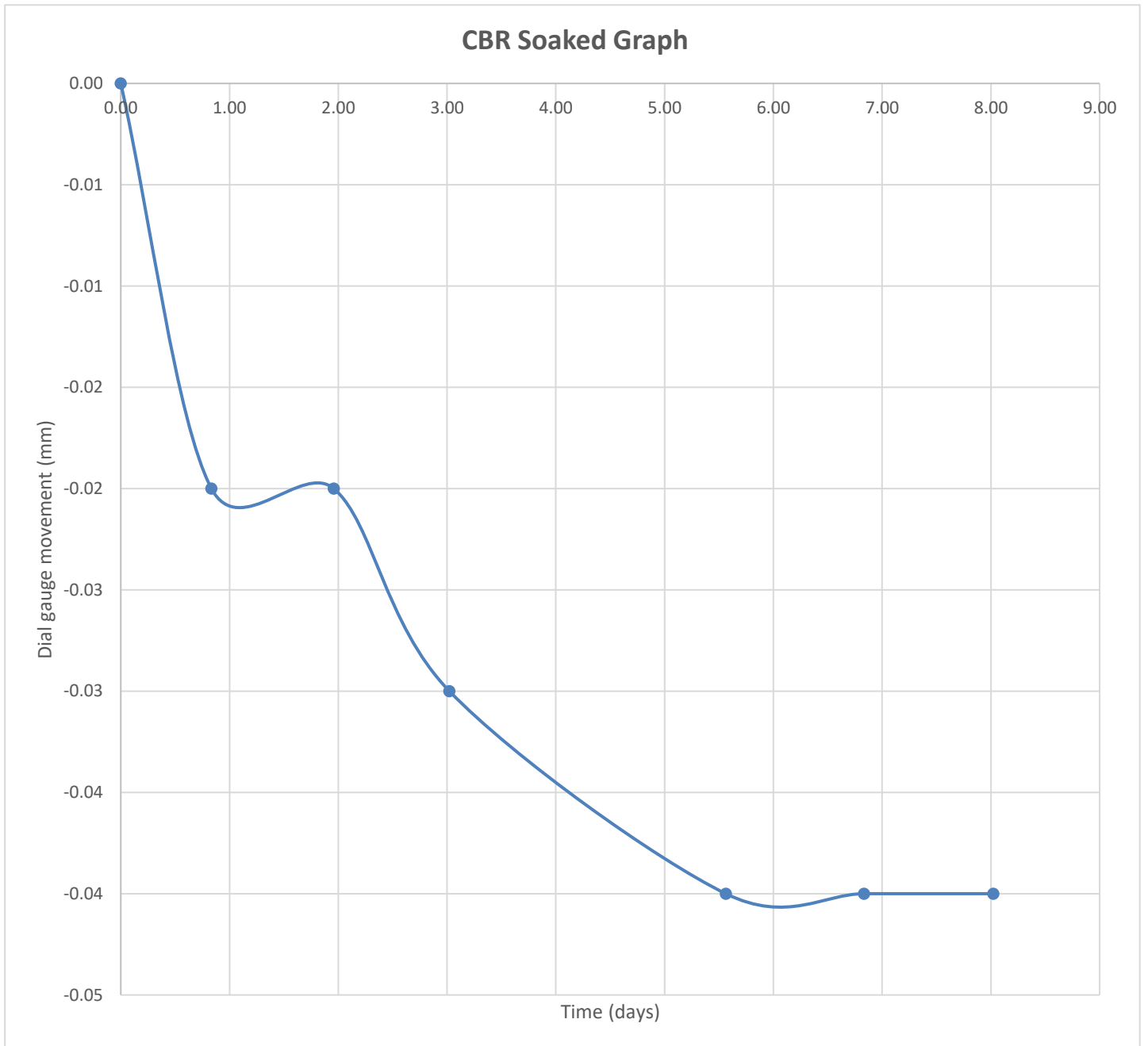
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592806  
Hole No.: TP305  
Sample Reference: Not Given  
Sample Description: Yellowish brown gravelly SAND

Depth Top [m]: 1.00  
Depth Base [m]: 1.40  
Sample Type: B

### CBR Soaked Graph



Remarks:

Test/ Specimen  
specific remarks:

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Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd





# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 06/02/2023  
Date Received: 17/02/2023  
Date Tested: 28/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592812  
Hole No.: TP309  
Sample Reference: Not Given  
Sample Description: Yellowish brown gravelly SAND

Depth Top [m]: 0.60  
Depth Base [m]: 0.70  
Sample Type: B

### Specimen Preparation:

Condition Remoulded  
Details Recompacted with specified standard effort using 2.5kg rammer

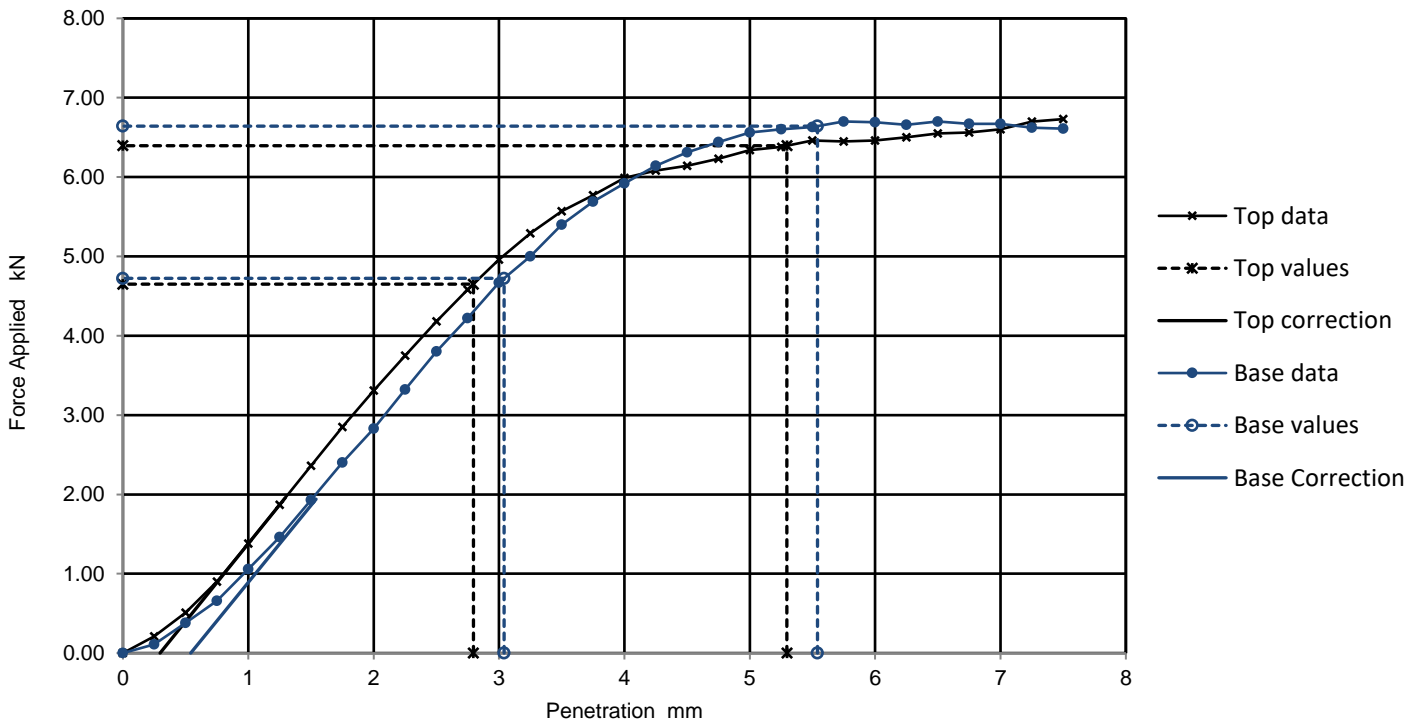
Soaking details  
Period of soaking 11 days  
Time to surface 3 days  
Amount of swell recorded -0.12 mm  
Dry density after soaking 1.94 Mg/m<sup>3</sup>

Material retained on 20mm sieve removed 7 %

Initial Specimen details  
Bulk density 2.18 Mg/m<sup>3</sup>  
Dry density 1.94 Mg/m<sup>3</sup>  
Moisture content 12 %

Surcharge applied 8 kg  
4.8 kPa

Force v Penetration Plots



### Results

TOP  
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
Yes	35.0	32.0	35.0	36.0
Yes	36.0	33.0	36.0	

Moisture Content %
12
13

### Remarks:

Test/ Specimen specific remarks:

Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR) SOAKED

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 06/02/2023  
Date Received: 17/02/2023  
Date Tested: 28/02/2023  
Sampled By: Not Given

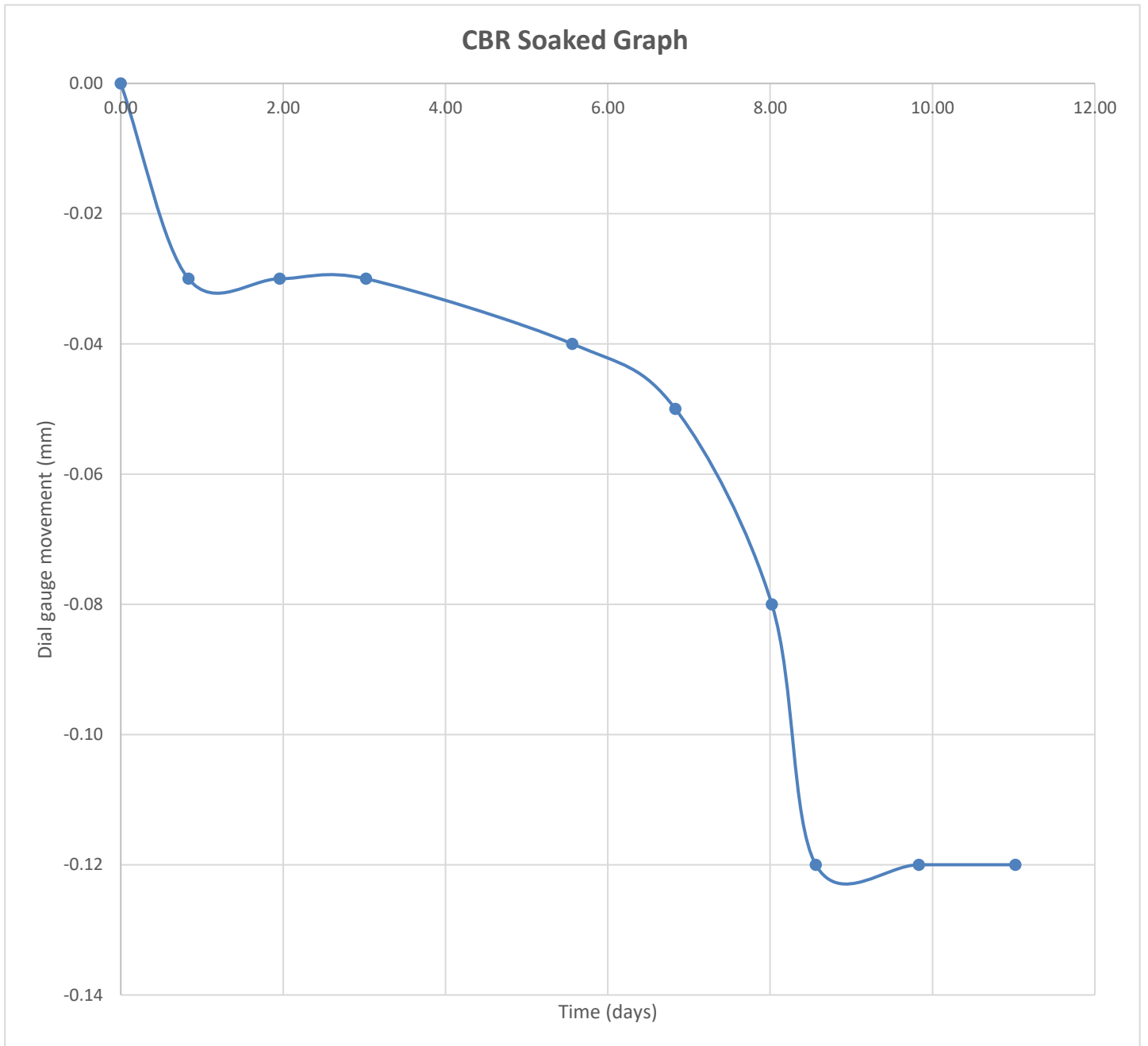
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2592812  
Hole No.: TP309  
Sample Reference: Not Given  
Sample Description: Yellowish brown gravelly SAND

Depth Top [m]: 0.60  
Depth Base [m]: 0.70  
Sample Type: B

### CBR Soaked Graph



Remarks:

Test/ Specimen  
specific remarks:

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Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd



# SUMMARY REPORT

## DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 16/02/2023  
Date Received: 17/02/2023  
Date Tested: 03/03/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks # (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
2592825	RO301	Not Given	5.00	5.13	C	Grey LIMESTONE	WC = 2.7%	1	D	U	YES	66.5	89.7	89.0	78.0	14.9	83.6	2.12	2.68
2592829	RO302	Not Given	5.35	5.50	C	Grey LIMESTONE	WC = 2.0%	1	D	U	YES	74.0	89.9	89.0	75.0	15.7	82.1	2.32	2.90
2592830	RO302	Not Given	13.00	13.15	C	Grey LIMESTONE	WC = 2.7%	1	D	U	YES	61.5	89.5	89.0	86.0	12.5	87.7	1.62	2.08
2592831	RO302	Not Given	14.40	14.55	C	Grey LIMESTONE	WC = 6.4%	1	D	U	YES	78.0	89.3	89.0	85.0	4.1	87.1	0.54	0.69
2592832	RO302	Not Given	19.38	19.48	C	Grey LIMESTONE	WC = 4.6%	1	A	U	YES	-	88.9	65.0	59.0	7.8	81.7	1.16	1.45
2592833	RO303	Not Given	5.60	5.75	C	Grey LIMESTONE	WC = 2.5%	1	D	U	YES	106.3	89.6	90.0	82.0	15.2	85.7	2.07	2.64
2592835	RO303	Not Given	14.75	14.90	C	Brownish grey LIMESTONE	WC = 2.8%	1	D	U	YES	71.1	89.3	89.0	85.0	12.4	87.1	1.63	2.10
2592836	RO303	Not Given	20.20	20.35	C	Light grey LIMESTONE	WC = 5.2%	1	D	U	YES	75.2	88.9	88.0	80.0	10.2	84.3	1.43	1.81
2592837	RO304	Not Given	7.75	7.85	C	Grey LIMESTONE	WC = 1.3%	1	A	L	YES	-	89.6	57.0	48.0	3.8	74.0	0.68	0.82
2592838	RO304	Not Given	12.50	12.65	C	Grey to light grey LIMESTONE	WC = 6.0%	1	A	P	YES	-	87.2	63.0	40.0	3.6	66.6	0.80	0.91

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;  
Dimensions: Dps - Distance between platens ( platen separation ), Dps' - at failure ( see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;  
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Comments:

Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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4041

Client: Hydrock Consultants Ltd  
 Client Address: 2-4 Hawthorne Park, Holdenby Road,  
 Spratton, Northamptonshire,  
 NN6 8LD  
 Contact: Nathan Thompson  
 Site Address: Begbroke

# SUMMARY REPORT

## DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd  
 Unit 8 Harrowden Road  
 Brackmills Industrial Estate  
 Northampton NN4 7EB



Environmental Science

Client Reference: 19114  
 Job Number: 23-18737-1  
 Date Sampled: 16/02/2023  
 Date Received: 17/02/2023  
 Date Tested: 03/03/2023  
 Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks # (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Ln	W	Dps	Dps'			Is	Is(50)
2592839	RO304	Not Given	16.30	16.50	C	Grey LIMESTONE	WC = 4.9%	1	I	U	YES	83.4	81.5	80.0	68.0	4.1	84.0	0.58	0.73
2592840	RO304	Not Given	19.70	19.80	C	Grey LIMESTONE	WC = 2.1%	1	A	U	YES	-	89.9	54.0	52.0	3.9	77.1	0.66	0.80
2592841	RO305	Not Given	19.10	19.20	C	Grey LIMESTONE	WC = 1.8%	1	I	U	YES	60.1	85.0	60.0	53.0	19.9	75.7	3.46	4.17

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;  
 Dimensions: Dps - Distance between platens ( platen separation ), Dps' - at failure ( see ISRM note 6), Ln - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;  
 Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Comments:

Signed:

Katarzyna Koziel  
 Reporting Specialist  
 for and on behalf of i2 Analytical Ltd

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# SUMMARY REPORT

## DETERMINATION OF UNIAXIAL COMPRESSIVE STRENGTH OF ROCK MATERIALS

Tested in Accordance with: ISRM, 2007, p153, part 1

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD

Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 16/02/2023  
Date Received: 17/02/2023  
Date Tested: 06/03/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Specimen Dimensions (2)				Bulk density (2) Mg/m3	Water Content (1) %	Uniaxial Compression (3)			
		Reference	Depth Top m	Depth Base m	Type			Diameter mm	Length mm	H/D	Orientation of sample			Condition	Stress Rate Mpa/s	Mode of failure	UCS Mpa
2592826	RO301	Not Given	7.15	7.35	C	Grey LIMESTONE	Sample is below recommended length to diameter ratio.	88.7	109.7	1.2	Vertical	2.67	1.8	as received	0.0809	AC	42.4
2592827	RO301	Not Given	12.75	13.00	C	Light grey LIMESTONE	Sample is below recommended length to diameter ratio.	89.1	209.3	2.3	Vertical	2.62	1.5	as received	0.0802	AC	24.4
2592828	RO301	Not Given	18.60	18.73	C	Light grey LIMESTONE	Sample is below recommended length to diameter ratio.	89.4	95.2	1.1	Vertical	2.49	3.5	as received	0.0796	MS + AC	27.2
2592834	RO303	Not Given	8.00	8.21	C	Grey LIMESTONE	Sample is below recommended length to diameter ratio.	88.7	206.5	2.3	Vertical	2.68	2.8	as received	0.0809	MS + AC	35.2

Note: 1 - ISRM p87 test 1, water content at 105 ± 3 °C - not accredited, specimen as tested for UCS, 2 - ISRM p86 clause (vii), Caliper method used for determination of bulk volume and derivation of bulk density, 3 - ISRM p153 part 1, determination of Uniaxial Compressive Strength ( UCS ) of Rock Materials, above notes apply unless annotated otherwise in the remarks. Compaction machine: VJ Tech AUTOCON - VJT 51-3011; Mode of failure legend: S - Single shear, MS - multiple shear, AC - Axial cleavage, F - Fragmented

Comments:

Signed:

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF THE UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION WITHOUT MEASUREMENT OF PORE PRESSURE

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Tested in Accordance with: BS 1377-7: 1990: Clause 8

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD

Contact: Nathan Thompson  
Site Address: Begbroke

Client Reference: 19114  
Job Number: 23-18737-1  
Date Sampled: 07/02/2023  
Date Received: 17/02/2023  
Date Tested: 27/02/2023  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

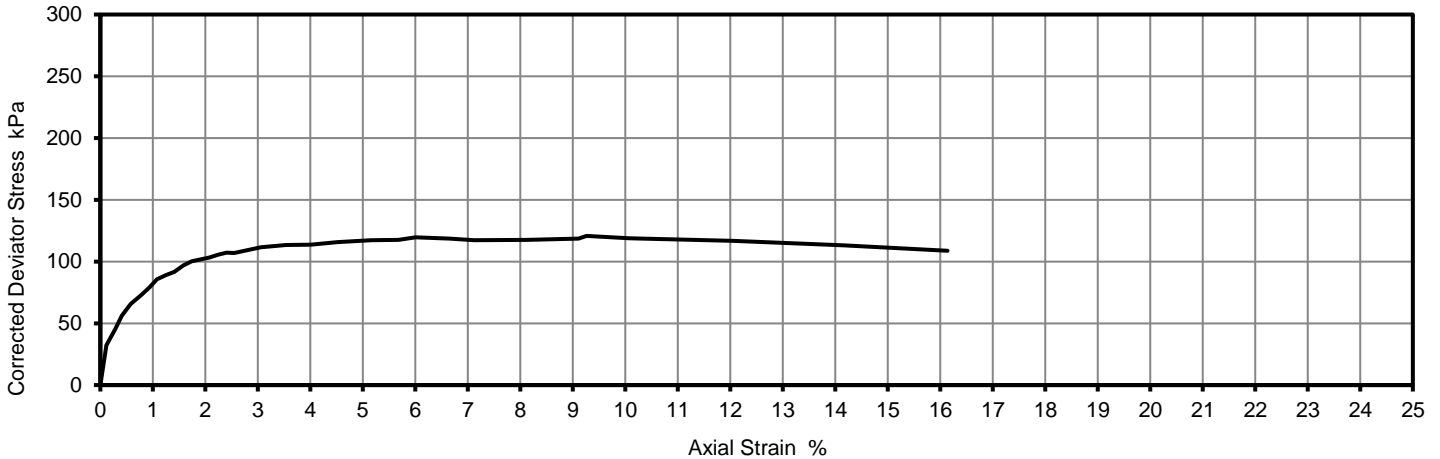
### Test Results:

Laboratory Reference: 2592817  
Hole No.: RO301  
Sample Reference: Not Given  
Sample Description: Greyish brown slightly gravelly slightly silty CLAY  
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

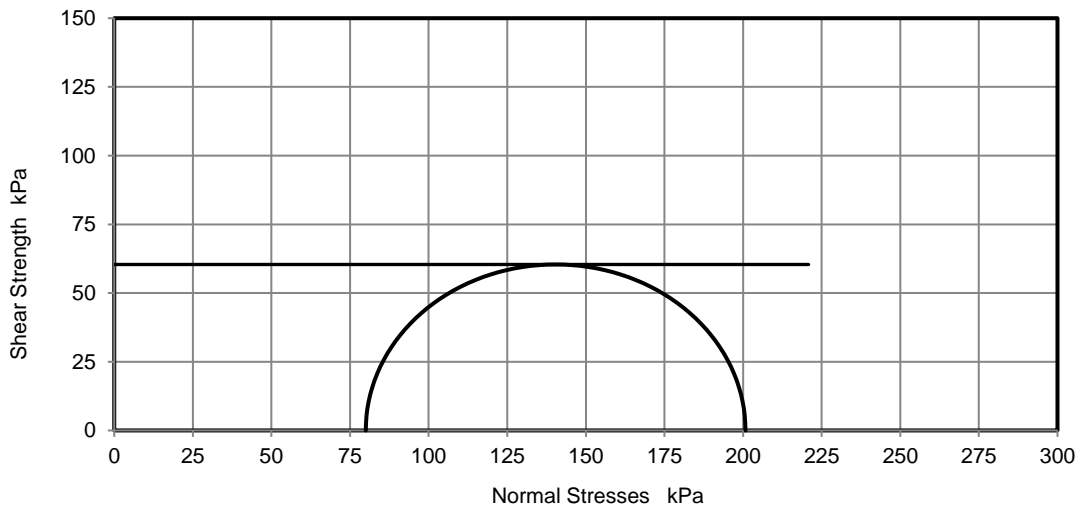
Depth Top [m]: 4.00  
Depth Base [m]: 4.50  
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.10	Cell Pressure	80	kPa
Diameter	37.71	Axial Strain at failure	9.3	%
Bulk Density	1.90	Deviator Stress, ( $\sigma_1 - \sigma_3$ ) <sub>f</sub>	121	kPa
Moisture Content	25	Undrained Shear Strength, cu	60	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.51	Mode of Failure	Brittle	
Membrane Correction	1.12	Latex membrane thickness	0.20	mm

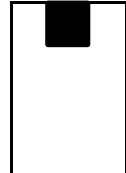
### Deviator Stress v Axial Strain



### Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377. This is provided for information only.

### Remarks:

Signed:

*Katarzyna Koziel*

Katarzyna Koziel  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.









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## **Analytical Report Number : 23-18753**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	17/02/2023
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	17/02/2023
<b>Your order number:</b>	PO24161	<b>Analysis completed by:</b>	06/03/2023
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	06/03/2023
<b>Samples Analysed:</b>	20 soil samples		

*Izabela Wójcik*  
**Signed:** \_\_\_\_\_

Izabela Wójcik  
Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 23-18753  
 Project / Site name: Begbroke  
 Your Order No: PO24161

Lab Sample Number	2592896	2592897	2592898	2592899	2592900			
Sample Reference	TP315	TP315	TP316	TP317	RO301			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.40-0.70	1.00-1.40	1.00-1.40	0.30-0.50	1.00-1.50			
Date Sampled	02/02/2023	02/02/2023	02/02/2023	02/02/2023	07/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	50
Moisture Content	%	0.01	NONE	17	7.5	7.5	13	8.6
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.4	0.4	0.3

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	8.2	8.1	8	7.9
Total Sulphate as SO <sub>4</sub>	mg/kg	50	MCERTS	220	310	370	210	570
Total Sulphate as SO <sub>4</sub>	%	0.005	MCERTS	0.022	0.031	0.037	0.021	0.057
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.023	0.0087	0.013	0.024	0.011
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	23.3	8.7	13.3	24.2	11
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	2.7	6.8	7	5.9	3.2
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	1.3	3.4	3.5	3	1.6
Total Sulphur	mg/kg	50	MCERTS	140	210	320	270	320
Total Sulphur	%	0.005	MCERTS	0.014	0.021	0.032	0.027	0.032
Ammoniacal Nitrogen as NH <sub>4</sub>	mg/kg	0.5	MCERTS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ammonium as NH <sub>4</sub> (10:1 leachate equivalent)	mg/l	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Water Soluble Nitrate (2:1) as NO <sub>3</sub>	mg/kg	2	NONE	8.5	2.9	2	3.5	3.8
Water Soluble Nitrate (2:1) as NO <sub>3</sub> (leachate equivalent)	mg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

#### Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Magnesium (leachate equivalent)	mg/l	2.5	NONE	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-18753  
 Project / Site name: Begbroke  
 Your Order No: PO24161

Lab Sample Number	2592901	2592902	2592903	2592904	2592905			
Sample Reference	RO305	RO305	RO305	RO305	RO305			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	4.00-4.50	8.70	11.60	12.70	16.50			
Date Sampled	31/01/2023	31/01/2023	31/01/2023	31/01/2023	31/01/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.9	17	14	16	17
Total mass of sample received	kg	0.001	NONE	0.3	0.4	0.4	0.4	0.4

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	9	8.2	8.8	9.2
Total Sulphate as SO4	mg/kg	50	MCERTS	640	1100##	1800	1200	1600
Total Sulphate as SO4	%	0.005	MCERTS	0.064	0.108##	0.181	0.116	0.162
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.062	0.99##	0.8	0.68	0.7
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	61.9	988##	802	684	698
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	12	130	130	92	190
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	6.2	63	65	46	97
Total Sulphur	mg/kg	50	MCERTS	7600	23000	17000	9900	55000
Total Sulphur	%	0.005	MCERTS	0.763	2.35	1.66	0.993	5.47
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	5.7	8.6	5.9	5.1	8.8
Ammonium as NH4 (10:1 leachate equivalent)	mg/l	0.05	MCERTS	0.57	0.86	0.59	0.51	0.88
Water Soluble Nitrate (2:1) as NO3	mg/kg	2	NONE	2.2	< 2.0	< 2.0	< 2.0	14
Water Soluble Nitrate (2:1) as NO3 (leachate equivalent)	mg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	7.1

#### Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	7	30	30	23	11
Magnesium (leachate equivalent)	mg/l	2.5	NONE	3.5	15	15	11	5.3

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-18753  
 Project / Site name: Begbroke  
 Your Order No: PO24161

Lab Sample Number	2592906	2592907	2592908	2592909	2592910			
Sample Reference	TP302	TP307	TP307	TP308	RO301			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.80-1.00	1.20-1.50	2.20-2.40	1.30-1.70	8.00-8.00			
Date Sampled	31/01/2023	06/02/2023	06/02/2023	06/02/2023	07/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	11	12	14	17
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	8.4	8.2	8.1	9.1
Total Sulphate as SO4	mg/kg	50	MCERTS	80	120	310	320	1200
Total Sulphate as SO4	%	0.005	MCERTS	0.008	0.012	0.031	0.032	0.122
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0081	0.0026	0.01	0.016	0.73
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	8.1	2.6	10.4	15.6	727
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	1.8	1.6	1.5	3.1	120
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	0.9	0.8	0.8	1.5	59
Total Sulphur	mg/kg	50	MCERTS	480	92	200	240	5800
Total Sulphur	%	0.005	MCERTS	0.048	0.009	0.02	0.024	0.58
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	< 0.5	< 0.5	< 0.5	< 0.5	11
Ammonium as NH4 (10:1 leachate equivalent)	mg/l	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	1.06
Water Soluble Nitrate (2:1) as NO3	mg/kg	2	NONE	2.5	< 2.0	< 2.0	2.3	< 2.0
Water Soluble Nitrate (2:1) as NO3 (leachate equivalent)	mg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

#### Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	10
Magnesium (leachate equivalent)	mg/l	2.5	NONE	< 2.5	< 2.5	< 2.5	< 2.5	5.1

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number: 23-18753  
 Project / Site name: Begbroke  
 Your Order No: PO24161

Lab Sample Number	2592911	2592912	2592913	2592914	2592915			
Sample Reference	RO301	RO301	RO303	RO304	RO304			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	11.90	5.00-5.13	8.00-8.21	16.30-16.50	19.70-19.80			
Date Sampled	07/02/2023	16/02/2023	16/02/2023	16/02/2023	16/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	2.2	3.4	3.3	1.8
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.2	0.4	0.4

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.6	7.8	7.8	8.1	8
Total Sulphate as SO4	mg/kg	50	MCERTS	2100	1700	3200	2800	3000
Total Sulphate as SO4	%	0.005	MCERTS	0.21	0.174	0.323	0.284	0.301
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.97	0.61	1.2	0.85	0.91
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	967	610	1180	851	906
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	130	110	210	190	220
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	64	55	100	93	110
Total Sulphur	mg/kg	50	MCERTS	12000	11000	13000	4100	4600
Total Sulphur	%	0.005	MCERTS	1.18	1.06	1.25	0.407	0.456
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	7.1	< 0.5	1.7	3.7	1.2
Ammonium as NH4 (10:1 leachate equivalent)	mg/l	0.05	MCERTS	0.71	< 0.05	0.17	0.37	0.12
Water Soluble Nitrate (2:1) as NO3	mg/kg	2	NONE	< 2.0	< 2.0	< 2.0	4.7	< 2.0
Water Soluble Nitrate (2:1) as NO3 (leachate equivalent)	mg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

#### Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	39	21	49	33	31
Magnesium (leachate equivalent)	mg/l	2.5	NONE	20	11	25	17	15

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

**Analytical Report Number : 23-18753**  
**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2592896	TP315	None Supplied	0.40-0.70	Brown clay and sand with gravel.
2592897	TP315	None Supplied	1.00-1.40	Brown sand with gravel.
2592898	TP316	None Supplied	1.00-1.40	Brown sand with gravel.
2592899	TP317	None Supplied	0.30-0.50	Brown clay and sand.
2592900	RO301	None Supplied	1.00-1.50	Brown gravelly sand with stones.
2592901	RO305	None Supplied	4.00-4.50	Brown clay and sand with gravel.
2592902	RO305	None Supplied	8.7	Brown clay.
2592903	RO305	None Supplied	11.6	Brown clay and sand.
2592904	RO305	None Supplied	12.7	Brown clay and sand.
2592905	RO305	None Supplied	16.5	Brown clay and sand with vegetation.
2592906	TP302	None Supplied	0.80-1.00	Brown sandy clay with gravel.
2592907	TP307	None Supplied	1.20-1.50	Brown sandy clay with gravel.
2592908	TP307	None Supplied	2.20-2.40	Brown clay and sand with gravel.
2592909	TP308	None Supplied	1.30-1.70	Brown clay and sand with gravel.
2592910	RO301	None Supplied	8.00-8.00	Brown clay.
2592911	RO301	None Supplied	11.9	Brown clay and sand.
2592912	RO301	None Supplied	5.00-5.13	Non Soil#
2592913	RO303	None Supplied	8.00-8.21	Non Soil#
2592914	RO304	None Supplied	16.30-16.50	Non Soil#
2592915	RO304	None Supplied	19.70-19.80	Non Soil#

Analytical Report Number : 23-18753  
Project / Site name: Begbroke

**Water matrix abbreviations:**

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	MCERTS
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES.	In-house method based on TRL 447	L038-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Nitrate, water soluble, in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Ammonium as NH4 in soil	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method, 10:1 water extraction.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	MCERTS
Total Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total Sulphur in soil as %	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Water Soluble Nitrate (leachate equivalent)	Determination of nitrate by reaction with sodium salicylate and colorimetry.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	D	NONE
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

**For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).**

**For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).**

**For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**



**Analytical Report Number : 23-18753**  
**Project / Site name: Begbroke**

**Water matrix abbreviations:**

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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#Unaccredited sample matrix.

##Despite repeating Total Sulphate and Water Soluble Sulphate analysis, the results remain contradictory.



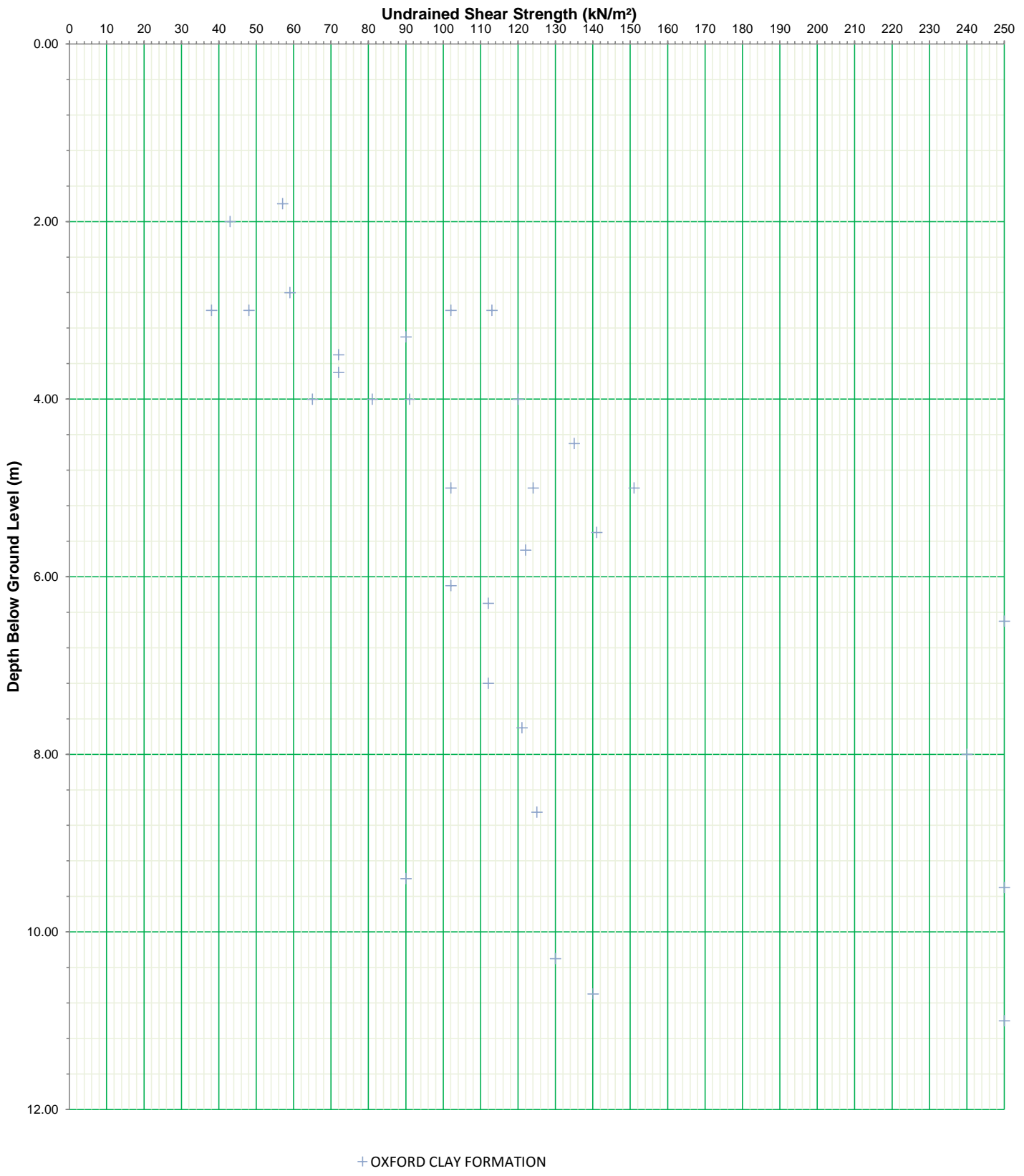
## *Geotechnical Plots*

# UNDRAINED SHEAR STRENGTH vs DEPTH ( Oxford Clay)

**Site:**  
Begbroke

**Client:**  
Oxford University Development

<b>Contract No.</b>	C-19114-C
<b>Hand Shear Vane</b>	

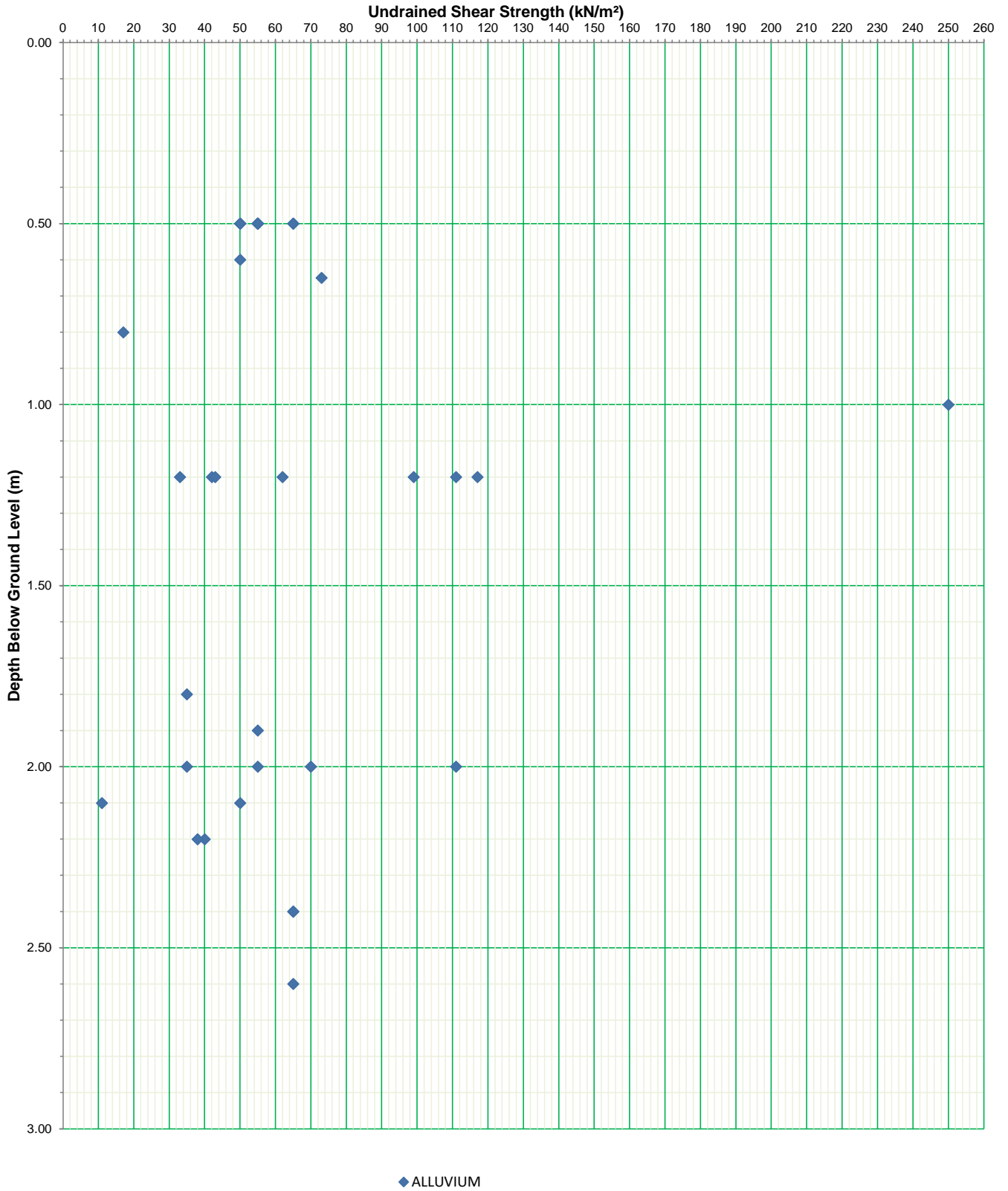


# UNDRAINED SHEAR STRENGTH vs DEPTH. HSV & Correlated N60 Alluvium

Site:  
Begbroke

Oxford University Development

Contract No.	C-19114-C
Hand Shear Vane	

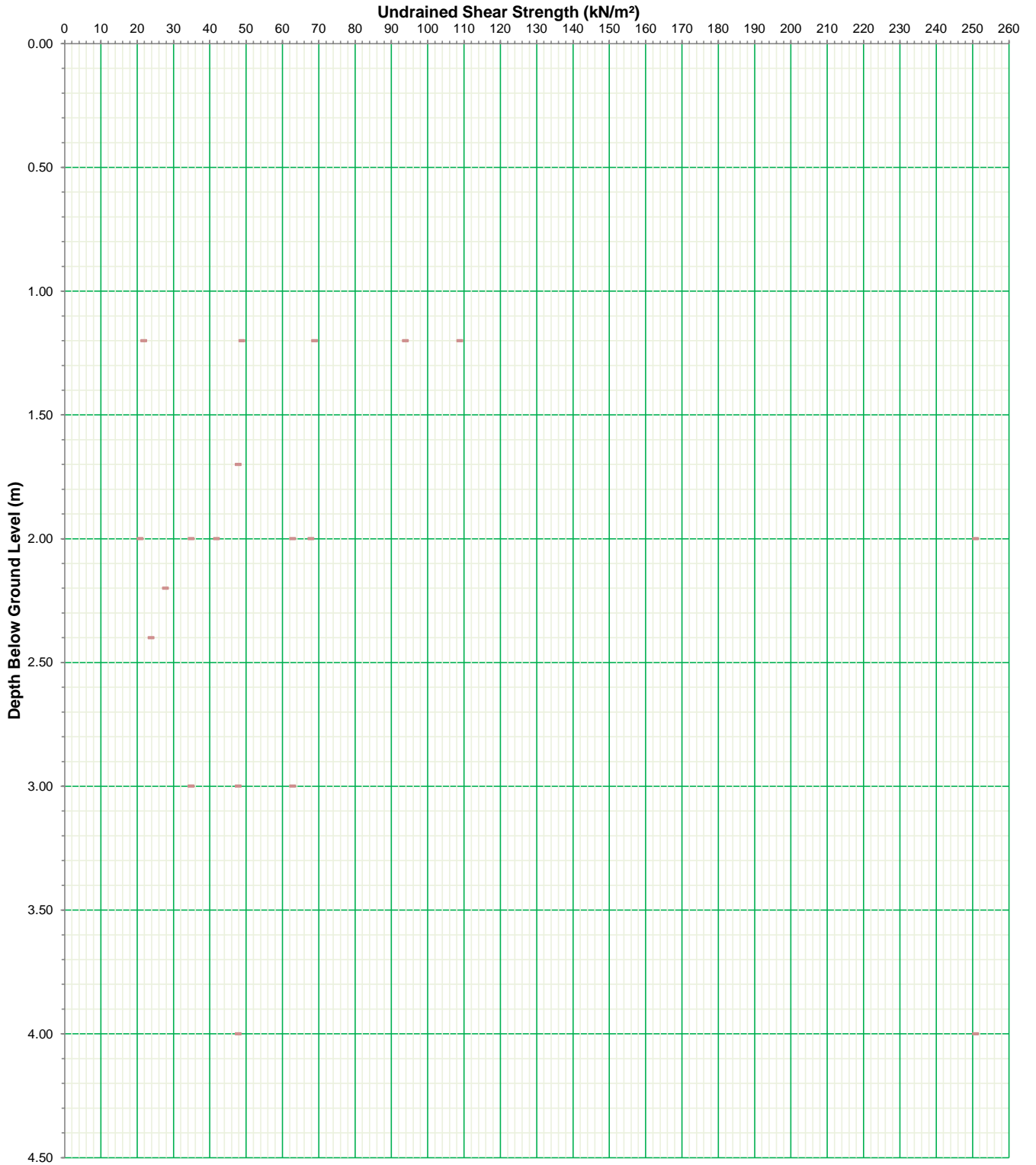






# UNDRAINED SHEAR STRENGTH vs DEPTH. HSV & Correlated N60 Alluvium

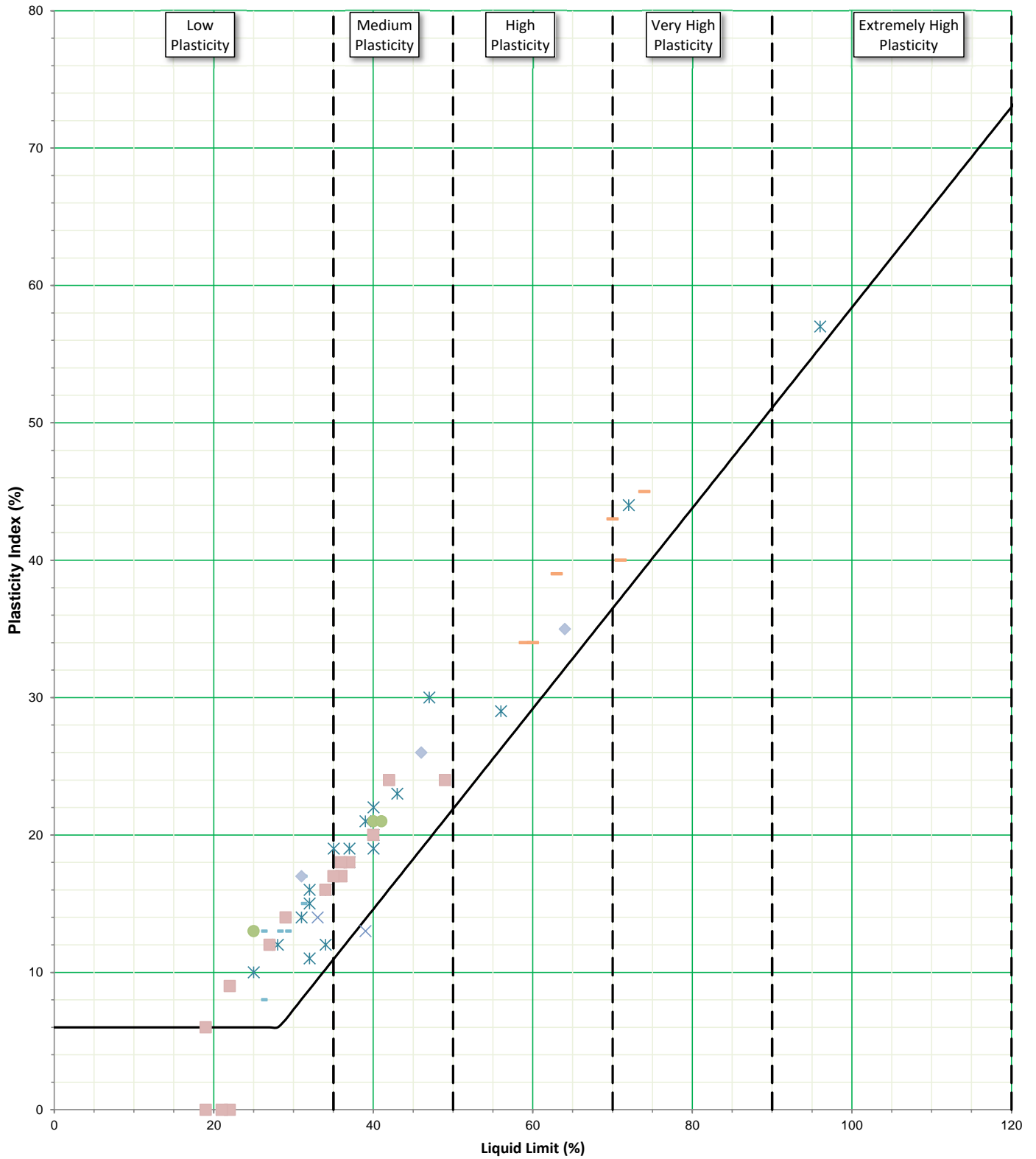
Site: Begbroke	Oxford University Development	Contract No.	C-19114-C
		Hand Shear Vane	



- RIVER TERRACE DEPOSITS



Site: Begbroke Client: Oxford University Development Contract No. C-19114-C  
All Data

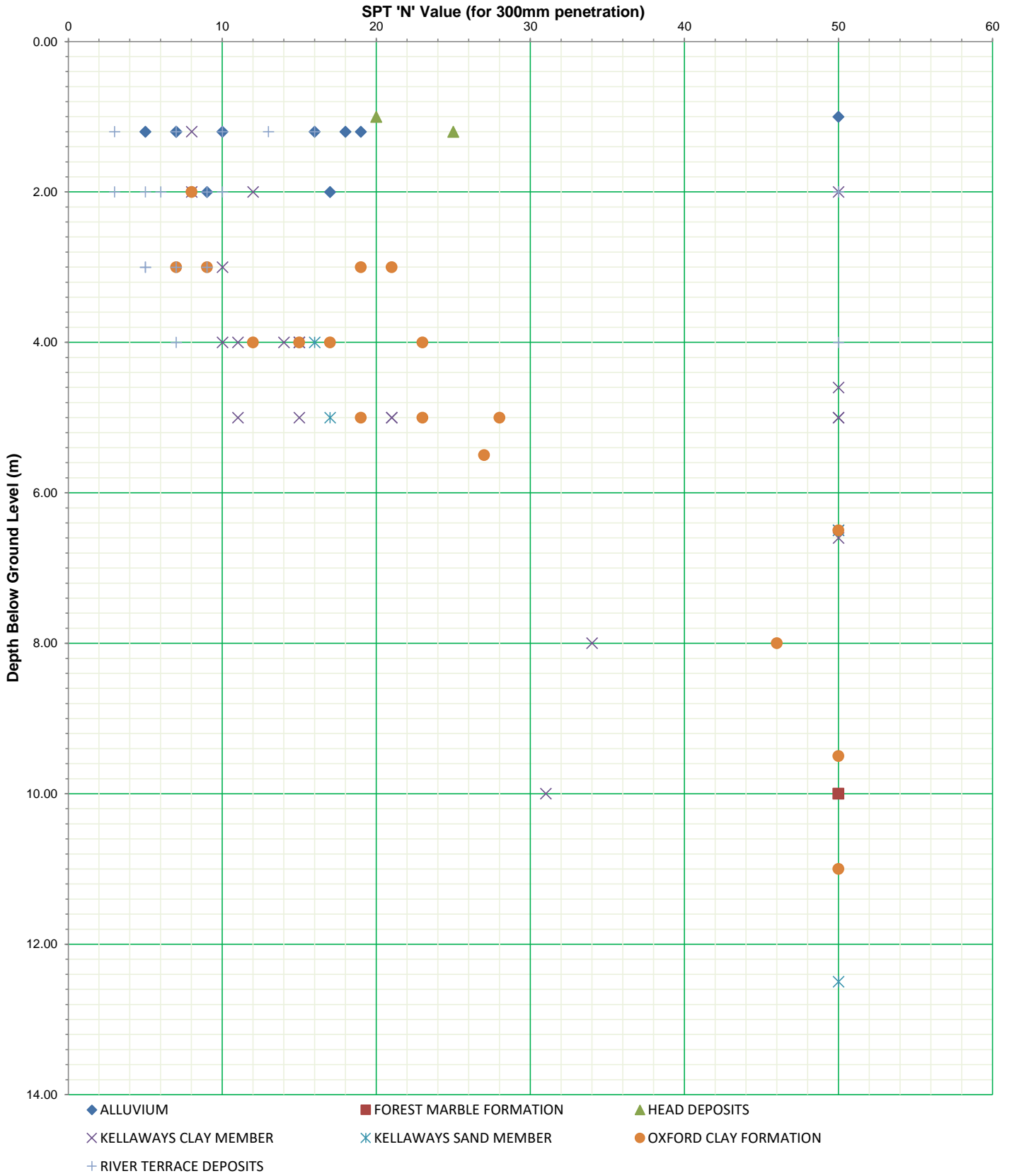


- × ALLUVIUM
- ▲ CORNBRAsh LIMESTONE FORMATION
- × FOREST MARBLE FORMATION
- × GLACIAL WASHOUT TILL?
- HEAD DEPOSITS
- KELLAWAYS SAND MEMBER
- KELLAWAYS CLAY MEMBER
- ◆ OXFORD CLAY FORMATION
- RIVER TERRACE DEPOSITS

Site:  
Begbroke

Client:  
Oxford University Development

Contract No.	C-19114-C
All Data	





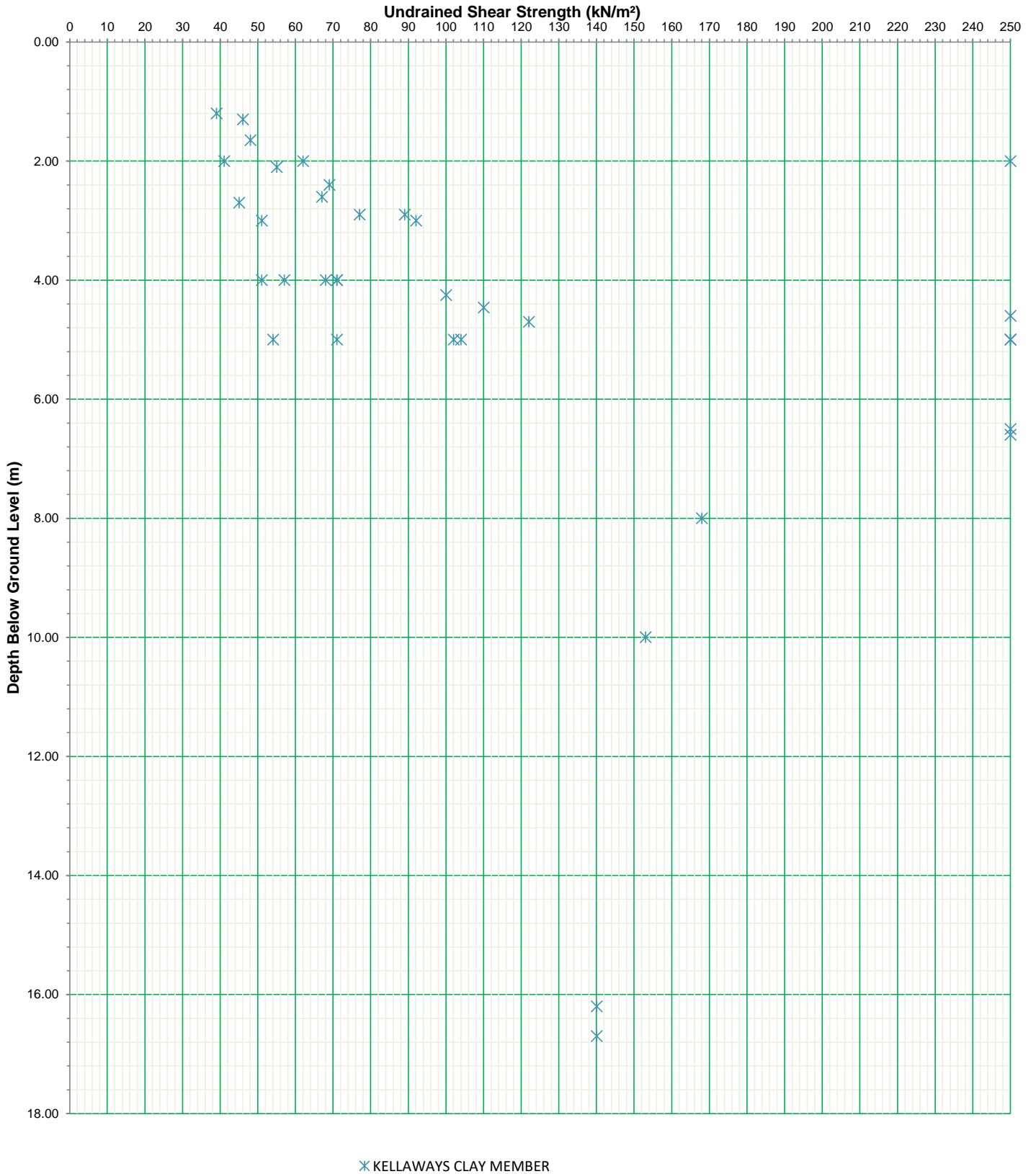


# UNDRAINED SHEAR STRENGTH vs DEPTH ( Kellaways Clay)

Site: Begbroke

Client: Oxford University Development

Contract No. C-19114-C  
Hand Shear Vane



<b>Client</b> Oxford University Developments Ltd	<b>Location or material to which this assessment applies</b> White Limestone Formation
<b>Project</b> Begbroke	
<b>Job numb</b> 19114	

## Concrete in aggressive ground

After BRE Special Digest 1, 2005

### Soil data

	(Adjusted) water soluble sulfate (mg/l)	Total potential sulfate (%)	Water soluble magnesium (mg/l)
Number of tests	1	1	0
No. tests in 20% data set	0	0	
No. tests with suspected pyrite		1	
Maximum value	906	1.4	
Mean of highest two values	906	1	
Mean of highest 20%			
<b>Characteristic Value</b>	<b>906</b>	<b>1.4</b>	

	[no pyrite]	[pyrite suspected]
<b>DS Class</b>	<b>DS-2</b>	<b>DS-4</b>

If pyrite suspected, DS Class limited to DS-4

Is pyrite assumed to be present? **Yes** Adopted DS Class = DS-4

### Water data

	(Adjusted) soluble sulfate (mg/l)	Soluble magnesium (mg/l)
<b>Characteristic Value</b> (Maximum Level)	0	0
<b>DS Class</b>		

### pH data

	Soil	Water
Number of tests	1	0
No. tests in 20% data set	0	
Lowest pH	8.0	
Mean of lowest 20%		
<b>Characteristic value</b>	<b>8.0</b>	

**Design value** 8.0

Number of soil pH results less than 5.5 0

**DS Class design value**

Based on higher of soil and water data

**ACEC Class design value**

Natural ground DS-4  
Mobile groundwater AC-4

<b>Client</b> Oxford University Developments Ltd	<b>Location or material to which this assessment applies</b> Alluvium
<b>Project</b> Begbroke	
<b>Job numb</b> 19114	

## Concrete in aggressive ground

After BRE Special Digest 1, 2005

### Soil data

	(Adjusted) water soluble sulfate (mg/l)	Total potential sulfate (%)	Water soluble magnesium (mg/l)
Number of tests	8	8	0
No. tests in 20% data set	2	2	
No. tests with suspected pyrite		0	
Maximum value	322	0.3	
Mean of highest two values	262	0	
Mean of highest 20%			
<b>Characteristic Value</b>	<b>262</b>	<b>0</b>	

	[no pyrite]	[pyrite suspected]
<b>DS Class</b>	<b>DS-1</b>	<b>DS-1</b>

If pyrite suspected, DS Class limited to DS-1

Is pyrite assumed to be present? **No** Adopted DS Class = DS-1

### Water data

	(Adjusted) soluble sulfate (mg/l)	Soluble magnesium (mg/l)
<b>Characteristic Value (Maximum Level)</b>	0	0
<b>DS Class</b>		

### pH data

	Soil	Water
Number of tests	8	0
No. tests in 20% data set	2	
Lowest pH	7.6	
Mean of lowest 20%	7.6	
<b>Characteristic value</b>	<b>7.6</b>	

**Design value** 7.6

Number of soil pH results less than 5.5 0

### DS Class design value

Based on higher of soil and water data

### ACEC Class design value

Natural ground DS-1  
Mobile groundwater AC-1 \*

\* increase to AC-2z in flowing water (pure or with >15mg/l carbon dioxide)



<b>Client</b> Oxford University Developments Ltd	<b>Location or material to which this assessment applies</b> Cornbrash Limestone Formation
<b>Project</b> Begbroke	
<b>Job numb</b> 19114	

## Concrete in aggressive ground After BRE Special Digest 1, 2005

### Soil data

	(Adjusted) water soluble sulfate (mg/l)	Total potential sulfate (%)	Water soluble magnesium (mg/l)
Number of tests	2	2	0
No. tests in 20% data set	0	0	
No. tests with suspected pyrite		1	
Maximum value	610	3.2	
Mean of highest two values	309	2	
Mean of highest 20%			
<b>Characteristic Value</b>	<b>610</b>	<b>3.2</b>	

	[no pyrite]	[pyrite suspected]
<b>DS Class</b>	<b>DS-2</b>	<b>DS-5</b>

If pyrite suspected, DS Class limited to DS-4

Is pyrite assumed to be present? **No** Adopted DS Class = DS-2

### Water data

	(Adjusted) soluble sulfate (mg/l)	Soluble magnesium (mg/l)
<b>Characteristic Value (Maximum Level)</b>	0	0
<b>DS Class</b>		

### pH data

	Soil	Water
Number of tests	2	0
No. tests in 20% data set	0	
Lowest pH	7.8	
Mean of lowest 20%		
<b>Characteristic value</b>	<b>7.8</b>	

**Design value** 7.8

Number of soil pH results less than 5.5 0

### DS Class design value

Based on higher of soil and water data

### ACEC Class design value

Natural ground DS-2  
Mobile groundwater AC-2

<b>Client</b> Oxford University Developments Ltd	<b>Location or material to which this assessment applies</b> Forest Marble Formation
<b>Project</b> Begbroke	
<b>Job numb</b> 19114	

## Concrete in aggressive ground

After BRE Special Digest 1, 2005

### Soil data

	(Adjusted) water soluble sulfate (mg/l)	Total potential sulfate (%)	Water soluble magnesium (mg/l)
Number of tests	4	4	0
No. tests in 20% data set	1	1	
No. tests with suspected pyrite		4	
Maximum value	1180	3.8	
Mean of highest two values	1074	4	
Mean of highest 20%			
<b>Characteristic Value</b>	<b>1180</b>	<b>3.8</b>	

	[no pyrite]	[pyrite suspected]
<b>DS Class</b>	<b>DS-2</b>	<b>DS-5</b>

If pyrite suspected, DS Class limited to DS-4

Is pyrite assumed to be present? **Yes** Adopted DS Class = DS-4

### Water data

	(Adjusted) soluble sulfate (mg/l)	Soluble magnesium (mg/l)
<b>Characteristic Value</b> (Maximum Level)	0	0
<b>DS Class</b>		

### pH data

	Soil	Water
Number of tests	4	0
No. tests in 20% data set	1	
Lowest pH	7.8	
Mean of lowest 20%	7.8	
<b>Characteristic value</b>	<b>7.8</b>	

**Design value** 7.8

Number of soil pH results less than 5.5 0

**DS Class design value**

**ACEC Class design value**

Based on higher of soil and water data

DS-4

Natural ground  
Mobile groundwater

AC-4

<b>Client</b> Oxford University Developments Ltd	<b>Location or material to which this assessment applies</b> Glacial Washout Till
<b>Project</b> Begbroke	
<b>Job numb</b> 19114	

## Concrete in aggressive ground

After BRE Special Digest 1, 2005

### Soil data

	(Adjusted) water soluble sulfate (mg/l)	Total potential sulfate (%)	Water soluble magnesium (mg/l)
Number of tests	1	1	0
No. tests in 20% data set	0	0	
No. tests with suspected pyrite		0	
Maximum value	15.6	0.1	
Mean of highest two values	16	0	
Mean of highest 20%			
<b>Characteristic Value</b>	<b>15.6</b>	<b>0.1</b>	

	[no pyrite]	[pyrite suspected]
<b>DS Class</b>	<b>DS-1</b>	<b>DS-1</b>

If pyrite suspected, DS Class limited to DS-1

Is pyrite assumed to be present? **Yes** Adopted DS Class = DS-1

### Water data

	(Adjusted) soluble sulfate (mg/l)	Soluble magnesium (mg/l)
<b>Characteristic Value (Maximum Level)</b>	0	0
<b>DS Class</b>		

### pH data

	Soil	Water
Number of tests	1	0
No. tests in 20% data set	0	
Lowest pH	8.1	
Mean of lowest 20%		
<b>Characteristic value</b>	<b>8.1</b>	

**Design value** 8.1

Number of soil pH results less than 5.5 0

### DS Class design value

Based on higher of soil and water data

### ACEC Class design value

Natural ground DS-1  
Mobile groundwater AC-1 \*

\* increase to AC-2z in flowing water (pure or with >15mg/l carbon dioxide)

<b>Client</b> Oxford University Developments Ltd	<b>Location or material to which this assessment applies</b> Head Deposits
<b>Project</b> Begbroke	
<b>Job numb</b> 19114	

## Concrete in aggressive ground

After BRE Special Digest 1, 2005

### Soil data

	(Adjusted) water soluble sulfate (mg/l)	Total potential sulfate (%)	Water soluble magnesium (mg/l)
Number of tests	2	2	0
No. tests in 20% data set	0	0	
No. tests with suspected pyrite		0	
Maximum value	10.6	0.1	
Mean of highest two values	10	0	
Mean of highest 20%			
<b>Characteristic Value</b>	<b>10.6</b>	<b>0.1</b>	

	[no pyrite]	[pyrite suspected]
<b>DS Class</b>	<b>DS-1</b>	<b>DS-1</b>

If pyrite suspected, DS Class limited to DS-1

Is pyrite assumed to be present? **No** Adopted DS Class = DS-1

### Water data

	(Adjusted) soluble sulfate (mg/l)	Soluble magnesium (mg/l)
<b>Characteristic Value</b> (Maximum Level)	0	0
<b>DS Class</b>		

### pH data

	Soil	Water
Number of tests	2	0
No. tests in 20% data set	0	
Lowest pH	7.2	
Mean of lowest 20%		
<b>Characteristic value</b>	<b>7.2</b>	

**Design value** 7.2

Number of soil pH results less than 5.5 0

### DS Class design value

Based on higher of soil and water data

### ACEC Class design value

Natural ground DS-1  
Mobile groundwater AC-1 \*

\* increase to AC-2z in flowing water (pure or with >15mg/l carbon dioxide)



<b>Client</b> Oxford University Developments Ltd	<b>Location or material to which this assessment applies</b> Kellaways Clay
<b>Project</b> Begbroke	
<b>Job numb</b> 19114	

## Concrete in aggressive ground

After BRE Special Digest 1, 2005

### Soil data

	(Adjusted) water soluble sulfate (mg/l)	Total potential sulfate (%)	Water soluble magnesium (mg/l)
Number of tests	5	5	0
No. tests in 20% data set	1	1	
No. tests with suspected pyrite		3	
Maximum value	3070	16.4	
Mean of highest two values	1884	15	
Mean of highest 20%			
<b>Characteristic Value</b>	<b>1884</b>	<b>15</b>	

	[no pyrite]	[pyrite suspected]
<b>DS Class</b>	<b>DS-3</b>	<b>DS-5</b>

If pyrite suspected, DS Class limited to DS-4

Is pyrite assumed to be present? **Yes** Adopted DS Class = DS-4

### Water data

	(Adjusted) soluble sulfate (mg/l)	Soluble magnesium (mg/l)
<b>Characteristic Value</b> (Maximum Level)	0	0
<b>DS Class</b>		

### pH data

	Soil	Water
Number of tests	5	0
No. tests in 20% data set	1	
Lowest pH	7.3	
Mean of lowest 20%	7.3	
<b>Characteristic value</b>	<b>7.3</b>	

**Design value** 7.3

Number of soil pH results less than 5.5 0

### DS Class design value

Based on higher of soil and water data

### ACEC Class design value

Natural ground DS-4  
Mobile groundwater AC-4

<b>Client</b> Oxford University Developments Ltd	<b>Location or material to which this assessment applies</b> Kellaways Sand
<b>Project</b> Begbroke	
<b>Job numb</b> 19114	

## Concrete in aggressive ground

After BRE Special Digest 1, 2005

### Soil data

	(Adjusted) water soluble sulfate (mg/l)	Total potential sulfate (%)	Water soluble magnesium (mg/l)
Number of tests	5	5	0
No. tests in 20% data set	1	1	
No. tests with suspected pyrite		3	
Maximum value	802	5	
Mean of highest two values	743	4	
Mean of highest 20%			
<b>Characteristic Value</b>	<b>743</b>	<b>4</b>	

	[no pyrite]	[pyrite suspected]
<b>DS Class</b>	<b>DS-2</b>	<b>DS-5</b>

If pyrite suspected, DS Class limited to DS-4

Is pyrite assumed to be present? **Yes** Adopted DS Class = DS-4

### Water data

	(Adjusted) soluble sulfate (mg/l)	Soluble magnesium (mg/l)
<b>Characteristic Value</b> (Maximum Level)	0	0
<b>DS Class</b>		

### pH data

	Soil	Water
Number of tests	5	0
No. tests in 20% data set	1	
Lowest pH	7.5	
Mean of lowest 20%	7.5	
<b>Characteristic value</b>	<b>7.5</b>	

**Design value** 7.5

Number of soil pH results less than 5.5 0

### DS Class design value

Based on higher of soil and water data

### ACEC Class design value

Natural ground DS-4  
Mobile groundwater AC-4

<b>Client</b> Oxford University Developments Ltd	<b>Location or material to which this assessment applies</b> Oxford Clay
<b>Project</b> Begbroke	
<b>Job numb</b> 19114	

## Concrete in aggressive ground

After BRE Special Digest 1, 2005

### Soil data

	(Adjusted) water soluble sulfate (mg/l)	Total potential sulfate (%)	Water soluble magnesium (mg/l)
Number of tests	2	2	0
No. tests in 20% data set	0	0	
No. tests with suspected pyrite		2	
Maximum value	3070	12.9	
Mean of highest two values	1550	7	
Mean of highest 20%			
<b>Characteristic Value</b>	<b>3070</b>	<b>12.9</b>	

	[no pyrite]	[pyrite suspected]
<b>DS Class</b>	<b>DS-3</b>	<b>DS-5</b>

If pyrite suspected, DS Class limited to DS-4

Is pyrite assumed to be present? **Yes** Adopted DS Class = DS-4

### Water data

	(Adjusted) soluble sulfate (mg/l)	Soluble magnesium (mg/l)
<b>Characteristic Value</b> (Maximum Level)	0	0
<b>DS Class</b>		

### pH data

	Soil	Water
Number of tests	2	0
No. tests in 20% data set	0	
Lowest pH	7.3	
Mean of lowest 20%		
<b>Characteristic value</b>	<b>7.3</b>	

**Design value** 7.3

Number of soil pH results less than 5.5 0

**DS Class design value**

**ACEC Class design value**

Based on higher of soil and water data

DS-4

Natural ground

Mobile groundwater

AC-4

<b>Client</b> Oxford University Developments Ltd	<b>Location or material to which this assessment applies</b> River Terrace Deposits
<b>Project</b> Begbroke	
<b>Job numb</b> 19114	

## Concrete in aggressive ground

After BRE Special Digest 1, 2005

### Soil data

	(Adjusted) water soluble sulfate (mg/l)	Total potential sulfate (%)	Water soluble magnesium (mg/l)
Number of tests	15	15	0
No. tests in 20% data set	3	3	
No. tests with suspected pyrite		0	
Maximum value	307	0.2	
Mean of highest two values	174	0	
Mean of highest 20%	100	0	
<b>Characteristic Value</b>	<b>100</b>	<b>0.1</b>	

	[no pyrite]	[pyrite suspected]
<b>DS Class</b>	<b>DS-1</b>	<b>DS-1</b>

If pyrite suspected, DS Class limited to DS-1

Is pyrite assumed to be present? **No** Adopted DS Class = DS-1

### Water data

	(Adjusted) soluble sulfate (mg/l)	Soluble magnesium (mg/l)
<b>Characteristic Value (Maximum Level)</b>	0	0
<b>DS Class</b>		

### pH data

	Soil	Water
Number of tests	15	0
No. tests in 20% data set	3	
Lowest pH	7.2	
Mean of lowest 20%	7.3	
<b>Characteristic value</b>	<b>7.3</b>	

**Design value** 7.3

Number of soil pH results less than 5.5 0

### DS Class design value

Based on higher of soil and water data

### ACEC Class design value

Natural ground DS-1  
Mobile groundwater AC-1 \*

\* increase to AC-2z in flowing water (pure or with >15mg/l carbon dioxide)















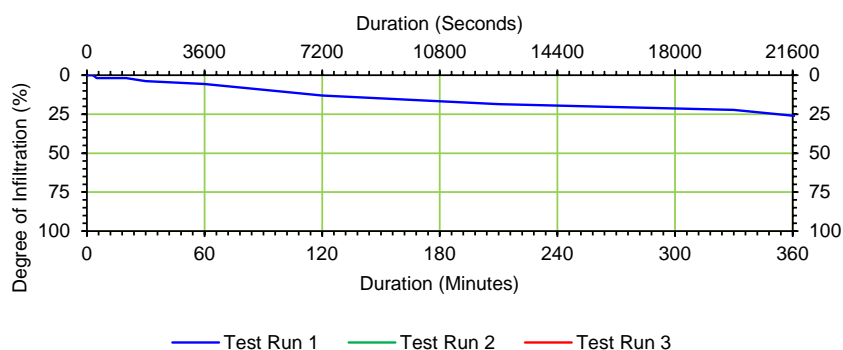
### 1 DAY INFILTRATION ASSESSMENT - WORKSHEET

Site: BEGBROKE SCIENCE PARK

Client: OXFORD UNIVERSITY DEVELOPMENT

Test Location SA03 Date of start 29/09/2021 Date at end 01/10/2021

Test Run 1				Test Run 2				Test Run 3			
Pit Dimensions (m)				Pit Dimensions (m)				Pit Dimensions (m)			
Trial Pit Length (L)		2.200m		Trial Pit Length (L)				Trial Pit Length (L)			
Trial Pit Breadth / Width (B)		0.500m		Trial Pit Breadth / Width (B)				Trial Pit Breadth / Width (B)			
Effective Depth (D)		1.000m		Effective Depth (D)				Effective Depth (D)			
Time at Start of Filling				Time at Start of Filling				Time at Start of Filling			
Time at End of Filling		9.45		Time at End of Filling				Time at End of Filling			
Depth from Surface to Water (D <sub>TW</sub> )		0.460m		Depth below Surface to Water (D <sub>TW</sub> )				Depth below Surface to Water (D <sub>TW</sub> )			
Water Depth (W <sub>D</sub> )		0.540m		Water Depth (W <sub>D</sub> )		-		Water Depth (W <sub>D</sub> )		-	
Maximum Fill Volume (V <sub>w</sub> )		0.594m <sup>3</sup>		Maximum Fill Volume (V <sub>w</sub> )		-		Maximum Fill Volume (V <sub>w</sub> )		-	
Gravel used to backfill Test Pit		Yes		Gravel used to backfill Test Pit				Gravel used to backfill Test Pit			
Porosity of Gravel Backfill (P <sub>i</sub> )		0.300		Porosity of Gravel Backfill (P <sub>i</sub> )				Porosity of Gravel Backfill (P <sub>i</sub> )			
Corrected Water Volume (V <sub>wc</sub> )		0.178m <sup>3</sup>		Corrected Water Volume (V <sub>wc</sub> )		-		Corrected Water Volume (V <sub>wc</sub> )		-	
Time to soakaway				Time to soakaway				Time to soakaway			
Time		Depth to water	Duration	Time		Depth to water	Duration	Time		Depth to water	Duration
Day	Time	(m bgl)	Seconds	Day	Time	(m bgl)	Seconds	Day	Time	(m bgl)	Seconds
1	9.450	0.460	0								
1	9.460	0.460	60								
1	9.470	0.460	120								
1	9.480	0.460	180								
1	9.500	0.470	300								
1	9.520	0.470	420								
1	9.550	0.470	600								
1	10.050	0.470	1200								
1	10.150	0.480	1800								
1	10.450	0.490	3600								
1	11.150	0.510	5400								
1	11.450	0.530	7200								
1	12.150	0.540	9000								
1	13.150	0.560	12600								
1	14.150	0.570	16200								
1	15.150	0.580	19800								
1	15.450	0.600	21600								
2	8.450	0.760	82800								
2	11.150	0.780	91800								
2	15.150	0.800	106200								
3	8.450	0.830	169200								
3	12.450	0.840	183600								
			183600								
25% water loss (75% full)		0.595m		25% water loss (75% full)		-		25% water loss (75% full)		-	
50% water loss (50% full)		0.730m		50% water loss (50% full)		-		50% water loss (50% full)		-	
75% water loss (25% full)		0.865m		75% water loss (25% full)		-		75% water loss (25% full)		-	
25% time (seconds)		21150 sec		25% time (seconds)		-		25% time (seconds)		-	
75% time (seconds)		-		75% time (seconds)		-		75% time (seconds)		-	
Vp 75-25		0.089m <sup>3</sup>		Vp 75-25		-		Vp 75-25		-	
ap 50 (Actual area from test)		2.558m <sup>3</sup>		ap 50 (Actual area from test)		-		ap 50 (Actual area from test)		-	
tp 75 - 25				tp 75 - 25				tp 75 - 25			
Soil Infiltration Rate		-		Soil Infiltration Rate		-		Soil Infiltration Rate		-	



Form completed by		
Tested By	PRINT	MH
	SIGN	MH
	DATE	08/10/2021
Calculated By	PRINT	MH
	SIGN	MH
	DATE	08/10/2021
Checked by	PRINT	NT
	SIGN	NT
	DATE	08/10/2021













# Appendix E Site Monitoring Data and Ground Gas Risk Assessment

*Site Monitoring Data*



Monitoring round		Well Details				Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)							Local conditions		
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Landfill R1	24/08/21	11:23	BH01	S	GL	3.37		9.98	-	-	1023	R	0.14	-	0.2	0.1	0.1	13.0	13.0	8.4	8.4	6	0	-	OK
Landfill R1	24/08/21	14:18	BH02	S	GL	3.02		8.75	-	-	1023	R	0.00	-	0.2	0.1	0.1	8.8	8.7	12.2	12.3	2	0	-	OK
Landfill R1	24/08/21	11:51	BH03	S	GL	3.35		8.11	-	-	1025	R	0.02	-	0.2	0.1	0.1	14.8	14.7	5.9	5.9	10	0	-	OK
Landfill R1	24/08/21	11:16	WS01	S	GL	Dry	D*	3.24	-	-	1023	R	0.05	-	0.2	0.1	0.1	12.8	12.8	9.6	9.6	1	0	-	OK
Landfill R1	24/08/21	12:54	WS02	S	GL	Dry	D	3.69	-	-	1025	R	0.02	-	0.3	0.1	0.1	3.2	3.2	17.4	17.5	1	0	-	DRY
Landfill R1	24/08/21	13:01	WS03	S	GL	Dry	D	2.69	-	-	1024	R	0.02	-	0.3	0.1	0.1	8.9	8.9	12.5	12.5	3	0	-	DRY
Landfill R1	24/08/21	12:33	WS04	S	GL	Dry	D	3.07	-	-	1024	R	0.00	-	0.2	0.3	0.3	15.5	15.5	1.8	1.8	4	0	-	DRY
Landfill R1	24/08/21	11:31	WS05	S	GL	2.59		3.17	-	-	1023	R	0.04	-	0.3	0.1	0.1	8.2	8.2	12.8	12.8	1	0	-	OK
Landfill R1	24/08/21	11:39	WS06	S	GL	1.88		2.10	-	-	1024	R	0.07	-	0.1	0.1	0.1	8.5	8.4	12.0	12.0	2	0	-	OK
Landfill R1	24/08/21	11:58	WS07	S	GL	Dry	D*	2.54	-	-	1025	R	0.12	-	0.2	0.1	0.1	3.1	3.1	16.5	17.5	0	0	-	OK
Landfill R1	24/08/21	12:23	WS08	S	GL	Dry	D	3.91	-	-	1025	R	0.02	-	0.2	0.1	0.1	7.5	7.5	14.8	14.8	1	0	-	DRY
Landfill R1	24/08/21	12:08	WS09	S	GL	Dry	D	3.05	-	-	1025	R	0.02	-	0.1	0.1	0.1	3.1	3.1	18.3	18.4	1	0	-	DRY
Landfill R1	24/08/21	12:43	WS10	S	GL	Dry	D	3.11	-	-	1024	R	0.04	-	0.2	0.1	0.1	6.1	6.1	12.4	12.4	0	0	-	DRY
Landfill R2	07/09/21	10:43	BH01	S	GL	3.91		9.98	-	-	1014	F	0.07	-	0.2	0.1	0.1	11.6	11.6	9.0	9.0	1	0	-	CO MAXED OUT AT 248ppm BEFORE SETTLING BACK TO 0
Landfill R2	07/09/21	11:27	BH02	S	GL	3.02		8.75	-	-	1015	F	0.02	-	0.1	0.1	0.1	9.7	9.7	11.8	11.9	5	0	-	OK
Landfill R2	07/09/21	11:03	BH03	S	GL	3.38		8.11	-	-	1014	F	0.05	-	-0.5	0.1	0.1	8.0	8.0	12.7	12.7	6	0	-	OK
Landfill R2	07/09/21	10:39	WS01	S	GL	Dry	D	3.15	-	-	1014	F	0.02	-	0.2	0.1	0.1	13.3	13.3	10.7	10.7	1	0	-	DRY
Landfill R2	07/09/21	11:42	WS02	S	GL	Dry	D	3.60	-	-	1015	F	0.25	-	0.2	0.1	0.1	3.8	3.8	16.9	16.9	1	0	-	DRY
Landfill R2	07/09/21	11:48	WS03	S	GL	Dry	D	2.62	-	-	1015	F	0.05	-	0.2	0.1	0.1	9.0	9.0	11.6	11.6	3	0	-	DRY
Landfill R2	07/09/21	11:31	WS04	S	GL	Dry	D	3.01	-	-	1015	F	0.02	-	0.2	0.2	0.2	16.3	16.3	1.1	1.1	4	0	-	DRY
Landfill R2	07/09/21	10:51	WS05	S	GL	2.61		3.17	-	-	1014	F	0.02	-	0.1	0.1	0.1	4.2	4.2	16.3	16.4	0	0	-	OK
Landfill R2	07/09/21	10:57	WS06	S	GL	Dry	D*	2.10	-	-	1014	F	-0.04	-	0.1	0.1	0.1	7.1	7.1	12.8	12.8	1	0	-	OK
Landfill R2	07/09/21	11:09	WS07	S	GL	Dry	D*	2.54	-	-	1015	F	0.04	-	0.2	0.1	0.1	3.9	3.9	16.4	16.4	0	0	-	OK
Landfill R2	07/09/21	11:22	WS08	S	GL	Dry	D	3.88	-	-	1015	F	-0.05	-	0.1	0.1	0.1	7.2	7.2	14.4	14.5	1	0	-	DRY
Landfill R2	07/09/21	11:15	WS09	S	GL	Dry	D	2.96	-	-	1015	F	0.07	-	0.2	0.1	0.1	3.2	3.2	17.5	17.5	1	0	-	DRY
Landfill R2	07/09/21	11:37	WS10	S	GL	Dry	D	3.05	-	-	1015	F	0.02	-	0.2	0.1	0.1	3.7	3.6	14.4	15.7	0	0	-	DRY
Landfill R3	14/09/21	12:17	BH01	S	GL	3.96		9.98	-	-	1004	F	-0.12	-	0.1	0.1	0.1	11.5	11.5	9.7	9.7	0	0	-	SAMPLE
Landfill R3	14/09/21	13:03	BH02	S	GL	3.04		8.75	-	-	1005	F	0.00	-	0.1	0.1	0.1	10.6	10.6	11.8	11.8	2	0	-	SAMPLE
Landfill R3	14/09/21	12:34	BH03	S	GL	3.39		8.11	-	-	1004	F	0.07	-	-1.3	0.1	0.1	8.1	8.1	13.3	13.4	3	0	-	SAMPLE
Landfill R3	14/09/21	12:04	WS01	S	GL	Dry	D	3.15	-	-	1004	F	-0.09	-	0.1	0.1	0.1	11.3	11.3	12.8	12.8	0	0	-	DRY
Landfill R3	14/09/21	13:21	WS02	S	GL	Dry	D*	3.69	-	-	1005	F	-0.07	-	0.2	0.1	0.1	3.7	3.7	17.6	17.7	0	0	-	OK
Landfill R3	14/09/21	13:26	WS03	S	GL	Dry	D*	2.69	-	-	1005	F	0.14	-	0.1	0.1	0.1	7.3	7.3	14.6	14.6	0	0	-	OK
Landfill R3	14/09/21	13:13	WS04	S	GL	Dry	D*	3.07	-	-	1005	F	-0.25	-	0.1	0.3	0.3	14.1	14.1	4.1	4.1	0	0	-	OK
Landfill R3	14/09/21	12:23	WS05	S	GL	2.63		3.10	-	-	1004	F	-0.04	-	0.1	0.1	0.1	4.8	4.8	16.5	16.5	0	0	-	OK
Landfill R3	14/09/21	12:28	WS06	S	GL	1.89		2.10	-	-	1004	F	0.12	-	0.1	0.1	0.1	6.0	6.0	14.9	14.9	0	0	-	OK
Landfill R3	14/09/21	12:49	WS07	S	GL	Dry	D*	2.54	-	-	1004	F	0.02	-	0.1	0.1	0.1	3.4	3.4	17.5	17.5	0	0	-	OK
Landfill R3	14/09/21	12:59	WS08	S	GL	Dry	D*	3.91	-	-	1005	F	0.02	-	0.1	0.1	0.1	7.2	7.2	15.1	15.1	0	0	-	OK
Landfill R3	14/09/21	12:54	WS09	S	GL	Dry	D*	3.05	-	-	1004	F	-0.11	-	0.1	0.1	0.1	3.4	3.4	18.5	18.5	0	0	-	OK
Landfill R3	14/09/21	13:17	WS10	S	GL	Dry	D*	3.11	-	-	1005	F	-0.05	-	0.1	0.1	0.1	9.1	4.0	13.6	15.9	0	0	-	OK
Landfill R4	21/09/21	11:38	BH01	S	GL	3.97		9.98	-	-	1023	R	0.05	-	0.1	0.1	0.1	9.9	9.9	12.3	12.3	3	1	-	OK
Landfill R4	21/09/21	12:23	BH02	S	GL	3.05		8.75	-	-	1024	R	-0.04	-	0.1	0.1	0.1	6.1	6.1	15.6	15.6	3	0	-	OK
Landfill R4	21/09/21	12:00	BH03	S	GL	3.42		8.11	-	-	1024	R	0.05	-	-1.0	0.1	0.1	5.5	5.5	15.7	15.8	3	0	-	OK
Landfill R4	21/09/21	11:33	WS01	S	GL	Dry	D	3.15	-	-	1023	R	-0.35	-	0.1	0.1	0.1	6.6	6.6	15.3	15.3	0	1	-	DRY
Landfill R4	21/09/21	12:39	WS02	S	GL	Dry	D*	3.69	-	-	1025	R	0.00	-	0.2	0.1	0.1	4.4	4.4	16.6	16.6	1	0	-	OK
Landfill R4	21/09/21	12:45	WS03	S	GL	Dry	D	2.65	-	-	1024	R	0.02	-	0.2	0.1	0.1	8.5	8.5	12.5	12.5	2	0	-	OK
Landfill R4	21/09/21	12:29	WS04	S	GL	Dry	D	3.00	-	-	1025	R	0.12	-	0.2	0.1	0.1	5.3	5.3	13.1	13.2	2	0	-	DRY
Landfill R4	21/09/21	11:44	WS05	S	GL	2.71		3.10	-	-	1023	R	-0.07	-	0.1	0.1	0.1	4.3	4.3	16.7	16.7	0	1	-	OK
Landfill R4	21/09/21	11:54	WS06	S	GL	Dry	D*	2.10	-	-	1024	R	-0.07	-	0.1	0.1	0.1	7.1	7.0	13.5	13.6	0	0	-	OK
Landfill R4	21/09/21	12:06	WS07	S	GL	Dry	D*	2.54	-	-	1024	R	0.02	-	0.2	0.1	0.1	3.1	3.1	17.6	17.6	0	0	-	OK
Landfill R4	21/09/21	12:18	WS08	S	GL	Dry	D	4.83	-	-	1024	R	-0.05	-	0.2	0.1	0.1	7.0	7.0	14.5	14.5	1	0	-	DRY
Landfill R4	21/09/21	12:11	WS09	S	GL	Dry	D	2.97	-	-	1024	R	-0.12	-	0.2	0.1	0.1	3.3	3.3	17.9	17.9	1	0	-	DRY
Landfill R4	21/09/21	12:34	WS10	S	GL	Dry	D	3.05	-	-	1025	R	0.07	-	0.2	0.1	0.1	3.5	3.5	16.3	16.3	1	0	-	DRY
Landfill R5	28/09/21	12:07	BH01	S	GL	3.98		9.98	-	-	1006	R	0.04	-	0.1	0.1	0.1	13.6	12.0	11.5	11.5	2	1	-	OK
Landfill R5	28/09/21	12:45	BH02	S	GL	3.07		8.75	-	-	1007	R	0.09	-	0.1	0.1	0.1	5.6	5.6	16.4	16.5	3	0	-	OK
Landfill R5	28/09/21	12:23	BH03	S	GL	3.45		8.11	-	-	1007	R	0.04	-	-0.2	0.1	0.1	5.7	5.7	15.6	15.7	3	1	-	OK
Landfill R5	28/09/21	12:02	WS01	S	GL	Dry	D	3.15	-	-	1006	R	-0.16	-	0.1	0.1	0.1	2.5	2.5	19.4	19.4	0	0	-	DRY
Landfill R5	28/09/21	13:01	WS02	S	GL	Dry	D*	3.69	-	-	1007	R	0.04	-	0.1	0.1	0.1	4.8	4.8	17.0	17.1	0	0	-	OK
Landfill R5	28/09/21	13:08	WS03	S	GL	Dry	D	2.65	-	-	1007	R	0.21	-	0.2	0.1	0.1	9.5	9.5	12.9	13.0	1	0	-	DRY
Landfill R5	28/09/21	12:50	WS04	S	GL	Dry	D	3.00	-	-	1007	R	0.07	-	0.1	0.1	0.1	6.4	6.4	12.5	12.5	1	0	-	DRY
Landfill R5	28/09/21	12:14	WS05	S	GL	2.88		3.10	-	-	1007	R	0.02	-	0.1	0.1	0.1	1.1	0.4	17.8	20.3	0	0	-	OK
Landfill R5	28/09/21	12:18																							

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R)/ steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Landfill R5	28/09/21	12:34	WS07	S	GL	Dry	D*	2.54	-	-	1007	R	0.04	-	0.2	0.1	0.1	2.4	2.4	18.8	18.8	0	0	-	OK
Landfill R5	28/09/21	12:40	WS08	S	GL	Dry	D	4.83	-	-	1007	R	-0.07	-	0.1	0.1	0.1	5.8	5.8	16.6	16.7	0	0	-	DRY
Landfill R5	28/09/21	12:29	WS09	S	GL	Dry	D	2.97	-	-	1007	R	-0.05	-	0.2	0.1	0.1	3.5	3.5	18.2	18.3	0	0	-	DRY
Landfill R5	28/09/21	12:54	WS10	S	GL	Dry	D	3.05	-	-	1007	R	0.05	-	0.2	0.1	0.1	5.4	5.4	14.8	14.9	0	0	-	DRY
Landfill R6	05/10/21	11:49	BH01	S	GL	3.96		9.98	-	-	993	R	0.16	-	0.1	0.1	0.1	15.1	15.1	9.7	9.7	2	0	-	OK
Landfill R6	05/10/21	12:24	BH02	S	GL	3.08		8.75	-	-	994	R	-0.07	-	0.2	0.1	0.1	3.9	3.9	18.3	18.4	1	0	-	OK
Landfill R6	05/10/21	12:05	BH03	S	GL	3.42		8.11	-	-	993	R	0.09	-	0.2	0.1	0.1	5.1	5.1	16.2	16.2	2	0	-	OK
Landfill R6	05/10/21	11:45	WS01	S	GL	Dry	D	3.15	-	-	992	R	0.09	-	0.2	0.1	0.1	3.2	3.2	18.5	18.6	0	0	-	DRY
Landfill R6	05/10/21	12:37	WS02	S	GL	3.47		3.69	-	-	994	R	0.09	-	0.1	0.1	0.1	6.1	5.9	15.4	15.4	0	0	-	OK
Landfill R6	05/10/21	12:42	WS03	S	GL	Dry	D	2.65	-	-	994	R	0.11	-	0.2	0.1	0.1	10.4	10.4	10.5	10.6	0	0	-	DRY
Landfill R6	05/10/21	12:28	WS04	S	GL	Dry	D	3.00	-	-	994	R	0.05	-	0.2	0.1	0.1	4.3	4.3	15.9	15.9	0	0	-	DRY
Landfill R6	05/10/21	11:55	WS05	S	GL	Dry	D*	3.10	-	-	993	R	0.07	-	0.2	0.1	0.1	4.6	1.7	17.5	19.1	0	0	-	OK
Landfill R6	05/10/21	12:00	WS06	S	GL	1.89		2.10	-	-	993	R	-0.05	-	0.1	0.1	0.1	7.5	7.4	13.8	13.8	0	0	-	OK
Landfill R6	05/10/21	12:09	WS07	S	GL	Dry	D*	2.54	-	-	993	R	0.07	-	0.2	0.1	0.1	1.8	1.8	19.2	19.4	0	0	-	OK
Landfill R6	05/10/21	12:19	WS08	S	GL	Dry	D	4.83	-	-	994	R	0.05	-	0.2	0.1	0.1	5.7	5.7	15.8	15.8	0	0	-	DRY
Landfill R6	05/10/21	12:14	WS09	S	GL	Dry	D	2.97	-	-	994	R	0.14	-	0.2	0.1	0.1	3.9	3.9	18.0	18.0	0	0	-	DRY
Landfill R6	05/10/21	12:32	WS10	S	GL	Dry	D	3.05	-	-	994	R	0.02	-	0.2	0.1	0.1	1.0	1.0	19.4	20.3	0	0	-	DRY
Wider Site R1	12/09/22	13:52	BH201	S	GL	4.18		5.00	-	-	1003	F	-0.07	-	0.2	0.1	0.1	0.8	0.8	20.1	20.1	1	1	-	
Wider Site R1	12/09/22	14:12	BH202	S	GL	3.21		5.24	-	-	1004	F	-0.12	-	0.1	0.1	0.1	0.7	0.7	20.3	20.4	2	0	-	
Wider Site R1	12/09/22	15:50	BH203	S	GL	3.53		6.00	-	-	1004	F	0.05	-	0.1	0.1	0.1	0.9	0.9	20.1	20.1	2	0	-	
Wider Site R1	12/09/22	16:20	BH204	S	GL	2.63		5.13	-	-	1003	F	0.11	-	0.1	0.1	0.1	0.8	0.8	20.4	20.6	1	0	-	
Wider Site R1	12/09/22	15:58	BH205	S	GL	1.15		4.12	-	-	1004	F	-0.07	-	0.1	0.1	0.1	0.6	0.6	20.6	20.6	3	0	-	
Wider Site R1	13/09/22	13:07	WS201	S	GL	Dry	D	1.80	-	-	1005	F	5.79	-	0.1	0.1	0.1	2.1	0.7	19.7	19.9	0	1	-	
Wider Site R1	13/09/22	13:22	WS202	S	GL	1.57		2.98	-	-	1005	F	0.09	-	0.1	0.1	0.1	1.1	1.1	19.8	19.8	1	0	-	
Wider Site R1	13/09/22	14:30	WS203	S	GL	Dry	D	1.97	-	-	1004	F	8.93	-	0.3	0.1	0.1	0.7	0.7	19.7	20.4	1	0	-	
Wider Site R1	13/09/22	14:15	WS205	S	GL	1.42		2.95	-	-	1005	F	0.00	-	0.1	0.1	0.1	3.6	3.1	18.1	18.1	1	0	-	
Wider Site R1	13/09/22	15:00	WS206	S	GL	2.14		4.20	-	-	1005	F	0.00	-	0.3	0.1	0.1	1.7	1.7	19.5	19.5	1	0	-	
Wider Site R1	15/09/22	10:11	WS207	S	GL	1.84		2.12	-	-	1007	R	0.07	-	-0.1	0.1	0.1	0.4	0.4	20.8	20.8	0	0	-	
Wider Site R1	15/09/22	10:28	WS208	S	GL	0.56		2.20	-	-	1007	R	0.16	-	3.2	0.1	0.1	0.7	0.7	20.6	20.6	13	0	-	
Wider Site R1	13/09/22	15:36	WS209	S	GL	1.62		3.29	-	-	1005	F	0.05	-	0.3	0.1	0.1	2.0	2.0	19.7	19.7	1	0	-	
Wider Site R1	13/09/22	15:55	WS210	S	GL	0.75		4.58	-	-	1005	F	-1.04	-	-4.4	0.1	0.1	0.4	0.3	20.8	21.0	7	0	-	
Wider Site R1	13/09/22	12:47	WS211	S	GL	1.01		5.01	-	-	1005	F	-0.02	-	0.0	0.1	0.1	2.5	2.5	19.0	19.0	1	1	-	
Wider Site R1	13/09/22	13:53	WS213	S	GL	Dry	D	3.60	-	-	1005	F	0.04	-	0.2	0.1	0.1	0.9	0.7	20.5	20.5	1	0	-	
Wider Site R1	13/09/22	15:18	WS214	S	GL	Dry	D	0.97	-	-	1004	F	0.07	-	0.3	0.1	0.1	1.1	1.1	20.4	20.4	1	0	-	
Wider Site R1	15/09/22	10:40	WS215	S	GL	0.90		2.53	-	-	1007	R	0.02	-	0.2	0.1	0.1	0.2	0.2	20.8	20.8	0	0	-	
Wider Site R1	12/09/22	12:51	WS216	S	GL	Dry	D*	4.05	-	-	1004	F	-0.07	-	0.1	0.1	0.1	1.9	1.9	19.7	19.7	0	0	-	
Wider Site R1	12/09/22	13:25	WS217	S	GL	Dry	D	2.02	-	-	1003	F	0.09	-	0.2	0.1	0.1	1.3	1.3	19.2	19.3	1	1	-	
Wider Site R1	15/09/22	11:40	WS218	S	GL	Dry	D	2.07	-	-	1007	R	-0.05	-	0.2	0.1	0.1	0.8	0.8	20.7	20.7	0	0	-	
Wider Site R1	15/09/22	11:25	WS219	S	GL	Dry	D	4.93	-	-	1007	R	0.04	-	0.2	0.1	0.1	1.5	1.5	20.1	20.1	0	0	-	
Wider Site R1	15/09/22	10:57	WS220	S	GL	2.77		3.00	-	-	1007	R	0.04	-	0.2	0.1	0.1	0.6	0.6	20.7	20.7	0	0	-	
Wider Site R1	12/09/22	13:08	WS221	S	GL	Dry	D	1.99	-	-	1003	F	0.00	-	0.3	0.1	0.1	1.0	0.9	19.9	19.9	0	1	-	
Wider Site R1	12/09/22	13:34	WS222	S	GL	Dry	D	2.43	-	-	1003	F	-0.05	-	0.2	0.1	0.1	0.9	0.9	19.9	19.9	1	1	-	
Wider Site R1	15/09/22	11:33	WS223	S	GL	Dry	D	2.97	-	-	1007	R	0.02	-	0.2	0.1	0.1	0.5	0.5	20.9	20.9	0	0	-	
Wider Site R1	15/09/22	12:36	WS224	S	GL	Dry	D	1.33	-	-	1007	R	0.04	-	0.2	0.1	0.1	1.0	1.0	20.3	20.3	0	0	-	
Wider Site R1	12/09/22	13:15	WS225	S	GL	Dry	D	1.98	-	-	1003	F	-0.14	-	0.4	0.1	0.1	0.9	0.9	19.4	19.6	1	1	-	
Wider Site R1	12/09/22	13:45	WS226	S	GL	Dry	D	1.12	-	-	1003	F	0.00	-	0.2	0.1	0.1	0.4	0.4	20.2	20.3	1	1	-	
Wider Site R1	12/09/22	13:40	WS227	S	GL	Dry	D	2.73	-	-	1003	F	-0.02	-	0.2	0.1	0.1	1.0	1.0	20.0	20.0	1	1	-	
Wider Site R1	12/09/22	15:40	WS228	S	GL	Dry	D	0.97	-	-	1003	F	0.07	-	0.2	0.1	0.1	0.4	0.4	20.8	20.8	1	0	-	
Wider Site R1	12/09/22	15:35	WS229	S	GL	Dry	D	1.95	-	-	1003	F	0.05	-	0.1	0.1	0.1	0.5	0.5	20.8	20.9	1	0	-	
Wider Site R1	12/09/22	14:06	WS230	S	GL	Dry	D	1.09	-	-	1003	F	0.07	-	0.2	0.1	0.1	0.6	0.6	20.5	20.5	1	0	-	
Wider Site R1	12/09/22	14:19	WS231	S	GL	4.49		5.07	-	-	1004	F	0.04	-	0.2	0.1	0.1	0.8	0.8	20.4	20.4	2	0	-	
Wider Site R1	15/09/22	11:09	WS232	S	GL	1.46		3.42	-	-	1007	R	0.02	-	0.2	0.1	0.1	0.4	0.4	20.8	20.8	0	0	-	
Wider Site R1	15/09/22	12:46	WS234	S	GL	1.25		1.62	-	-	1007	R	0.05	-	0.2	0.1	0.1	0.3	0.1	21.0	21.3	0	0	-	
Wider Site R1	22/09/22	10:53	WS235	S	GL	1.36		4.91	-	-	1014	F	0.02	-	0.3	0.1	0.1	1.9	1.7	19.1	19.2	0	0	-	
Wider Site R1	22/09/22	10:35	WS236	S	GL	Dry	D	1.95	-	-	1014	F	0.04	-	0.3	0.1	0.1	2.2	2.2	19.6	19.6	0	0	-	
Wider Site R1	12/09/22	15:26	WS237	S	GL	Dry	D	1.01	-	-	1003	F	0.05	-	0.3	0.1	0.1	0.2	0.2	21.0	21.0	1	0	-	
Wider Site R1	12/09/22	14:33	WS238	S	GL	3.84		5.06	-	-	1003	F	0.02	-	0.2	0.1	0.1	1.3	0.9	19.8	20.1	2	0	-	
Wider Site R1	15/09/22	11:57	WS239	S	GL	1.38		2.23	-	-	1007	R	0.05	-	0.2	0.1	0.1	0.8	0.8	20.7	20.7	0	0	-	
Wider Site R1	15/09/22	12:10	WS240	S	GL	Dry	D	1.10	-	-	1007	R	-0.02	-	0.2	0.1	0.1	1.2	1.2	20.6	20.6	0	0	-	
Wider Site R1	15/09/22	12:22	WS240	S	GL	1.36		2.20	-	-	1007	R	0.07	-	0.2	0.1	0.1	1.9	1.9	19.6	19.6	0	0	-	
Wider Site R1	15/09/22	13:19	WS241	S	GL	1.59		1.																	

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)							Local conditions		
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R)/ steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Wider Site R1	12/09/22	16:12	WS246	S	GL	1.44		4.55	-	-	1004	F	0.12	-	0.2	0.1	0.1	0.7	0.7	20.5	20.5	2	0	-	
Wider Site R1	12/09/22	16:26	WS247	S	GL	Dry	D*	0.89	-	-	1003	F	0.16	-	0.2	0.1	0.1	0.5	0.5	20.2	20.2	1	0	-	
Wider Site R1	15/09/22	15:40	WS248	S	GL	Dry	D	2.02	-	-	1007	R	0.12	-	0.2	0.1	0.1	0.7	0.7	20.8	20.8	0	0	-	
Wider Site R1	15/09/22	13:51	WS249	S	GL	Dry	D	0.97	-	-	1007	R	0.14	-	0.2	0.1	0.1	0.6	0.6	20.9	20.9	0	0	-	
Wider Site R1	15/09/22	14:20	WS250	S	GL	Dry	D	0.84	-	-	1007	R	0.04	-	0.2	0.1	0.1	0.5	0.5	21.2	21.2	0	0	-	
Wider Site R1	15/09/22	13:36	WS251	S	GL	0.90		2.95	-	-	1007	R	0.11	-	0.2	0.1	0.1	0.2	0.2	21.2	21.2	0	0	-	
Wider Site R1	15/09/22	14:07	WS252	S	GL	Dry	D	5.05	-	-	1007	R	0.05	-	-4.5	0.1	0.1	0.1	0.1	21.2	21.2	1	0	-	
Wider Site R2	26/09/22	14:37	BH201	S	GL	3.69		5.90	-	-	996	F	0.00	-	0.3	0.1	0.1	1.1	1.1	20.9	20.9	0	0	-	
Wider Site R2	26/09/22	13:50	BH202	S	GL	3.95		5.74	-	-	996	F	-0.07	-	0.3	0.1	0.1	0.7	0.7	21.0	21.0	0	0	-	
Wider Site R2	27/09/22	13:01	BH203	S	GL	Dry	D*	5.94	-	-	995	F	0.07	-	0.3	0.1	0.1	0.7	0.7	21.2	21.3	0	0	-	
Wider Site R2	27/09/22	12:36	BH204	S	GL	3.43		5.99	-	-	996	F	0.04	-	0.3	0.1	0.1	1.0	1.0	21.0	21.0	0	0	-	
Wider Site R2	27/09/22	12:48	BH205	S	GL	-		6.03	-	-	996	F	0.02	-	0.2	0.1	0.1	0.2	0.2	21.2	21.4	0	0	-	
Wider Site R2	26/09/22	11:07	WS201	S	GL	Dry	D	1.86	-	-	995	F	-0.07	-	0.3	0.1	0.1	1.5	1.4	19.7	19.7	0	0	-	
Wider Site R2	26/09/22	11:18	WS202	S	GL	Dry	D	1.98	-	-	996	F	-0.05	-	0.3	0.1	0.1	1.3	1.3	20.4	20.4	0	0	-	
Wider Site R2	26/09/22	11:42	WS203	S	GL	Dry	D	1.98	-	-	995	F	0.09	-	0.3	0.1	0.1	0.8	0.8	20.8	20.8	0	0	-	
Wider Site R2	26/09/22	12:09	WS205	S	GL	Dry	D	2.92	-	-	996	F	0.00	-	0.3	0.1	0.1	3.4	3.3	18.7	18.7	0	0	-	
Wider Site R2	26/09/22	11:34	WS213	S	GL	Dry	D	3.60	-	-	996	F	0.02	-	0.3	0.1	0.1	0.6	0.6	20.9	20.9	0	0	-	
Wider Site R2	26/09/22	13:24	WS214	S	GL	Dry	D	0.98	-	-	996	F	0.05	-	0.3	0.1	0.1	0.4	0.4	21.7	21.7	0	0	-	
Wider Site R2	26/09/22	13:07	WS219	S	GL	4.34		4.96	-	-	996	F	0.00	-	0.3	0.1	0.1	1.5	1.5	20.6	20.6	0	0	-	
Wider Site R2	26/09/22	15:19	WS221	S	GL	Dry	D	1.98	-	-	997	F	0.00	-	0.3	0.1	0.1	2.1	2.1	20.9	20.9	0	0	-	
Wider Site R2	26/09/22	14:12	WS222	S	GL	Dry	D	1.98	-	-	996	F	0.09	-	0.3	0.1	0.1	1.2	1.1	20.8	20.8	0	0	-	
Wider Site R2	27/09/22	11:42	WS224	S	GL	Dry	D*	1.36	-	-	996	F	-0.02	-	0.3	0.1	0.1	0.8	0.2	20.9	21.4	0	0	-	
Wider Site R2	26/09/22	15:14	WS225	S	GL	Dry	D	1.98	-	-	997	F	0.04	-	0.3	0.1	0.1	0.9	0.9	21.0	21.3	0	0	-	
Wider Site R2	26/09/22	14:55	WS226	S	GL	Dry	D	1.11	-	-	997	F	0.12	-	0.3	0.1	0.1	0.6	0.6	21.3	21.3	0	0	-	
Wider Site R2	27/09/22	13:08	WS228	S	GL	Dry	D	0.97	-	-	995	F	0.05	-	0.3	0.1	0.1	0.8	0.8	21.5	21.5	0	0	-	
Wider Site R2	27/09/22	13:14	WS229	S	GL	Dry	D	1.93	-	-	995	F	0.12	-	0.3	0.1	0.1	0.9	0.9	21.3	21.4	0	0	-	
Wider Site R2	27/09/22	14:27	WS231	S	GL	Dry	D	4.50	-	-	994	F	0.07	-	0.3	0.1	0.1	2.5	2.5	20.0	20.0	0	0	-	
Wider Site R2	26/09/22	13:42	WS232	S	GL	1.47		3.95	-	-	996	F	-0.07	-	0.3	0.1	0.1	0.8	0.8	21.2	21.2	0	0	-	
Wider Site R2	27/09/22	11:50	WS234	S	GL	1.22		1.60	-	-	996	F	0.07	-	0.3	0.1	0.1	0.1	0.1	21.6	21.6	0	0	-	
Wider Site R2	26/09/22	15:46	WS235	S	GL	1.36		4.93	-	-	997	F	0.04	-	0.3	0.1	0.1	1.7	1.7	19.9	19.9	0	0	-	
Wider Site R2	26/09/22	15:39	WS236	S	GL	Dry	D	1.93	-	-	997	F	0.07	-	0.3	0.1	0.1	1.1	1.1	21.0	21.0	0	0	-	
Wider Site R2	27/09/22	13:29	WS237	S	GL	Dry	D	0.93	-	-	995	F	0.04	-	0.3	0.1	0.1	0.5	0.5	21.7	21.7	0	0	-	
Wider Site R2	27/09/22	14:15	WS238	S	GL	3.95		5.93	-	-	995	F	0.05	-	0.3	0.1	0.1	2.0	2.0	20.2	20.2	0	0	-	
Wider Site R2	27/09/22	12:04	WS239	S	GL	1.39		2.21	-	-	996	F	0.00	-	0.3	0.1	0.1	0.8	0.8	21.2	21.2	0	0	-	
Wider Site R2	27/09/22	11:57	WS240	S	GL	Dry	D	1.07	-	-	996	F	0.11	-	0.3	0.1	0.1	1.3	1.3	21.0	21.0	0	0	-	
Wider Site R2	27/09/22	11:04	WS241	S	GL	1.56		1.93	-	-	996	F	-0.04	-	0.3	0.1	0.1	1.3	1.3	20.3	20.3	0	0	-	
Wider Site R2	26/09/22	15:53	WS242	S	GL	0.79		3.56	-	-	997	F	0.04	-	0.3	0.1	0.1	1.2	1.2	20.7	20.7	0	0	-	
Wider Site R2	27/09/22	13:55	WS243	S	GL	Dry	D	0.97	-	-	995	F	0.09	-	0.3	0.1	0.1	1.7	0.9	20.9	21.1	0	0	-	
Wider Site R2	27/09/22	12:19	WS244	S	GL	Dry	D	0.84	-	-	996	F	0.05	-	0.3	0.1	0.1	0.6	0.6	21.3	21.3	0	0	-	
Wider Site R2	27/09/22	12:56	WS245	S	GL	1.15		2.47	-	-	996	F	-0.02	-	-0.2	0.1	0.1	0.1	0.1	21.5	21.5	0	0	-	
Wider Site R2	27/09/22	14:07	WS246	S	GL	1.48		4.43	-	-	995	F	0.09	-	0.3	0.1	0.1	1.1	0.7	20.5	21.3	0	0	-	
Wider Site R2	27/09/22	12:24	WS247	S	GL	Dry	D	0.87	-	-	996	F	0.05	-	0.3	0.1	0.1	1.2	1.2	20.6	20.6	0	0	-	
Wider Site R2	27/09/22	11:21	WS248	S	GL	Dry	D*	1.59	-	-	996	F	0.05	-	0.3	0.1	0.1	0.6	0.6	21.0	21.1	0	0	-	
Wider Site R2	27/09/22	10:41	WS249	S	GL	Dry	D	0.97	-	-	996	F	0.02	-	0.2	0.1	0.1	0.7	0.7	20.7	20.8	0	0	-	
Wider Site R2	27/09/22	10:48	WS250	S	GL	Dry	D	0.84	-	-	996	F	0.04	-	0.3	0.1	0.1	0.6	0.6	20.9	20.9	0	0	-	
Wider Site R3	10/10/22	16:35	BH201	S	GL	4.29		5.00	-	-	1014	R	0.02	-	0.2	0.1	0.1	0.8	0.8	20.1	20.1	0	0	-	
Wider Site R3	10/10/22	12:12	BH202	S	GL	3.28		5.23	-	-	1014	R	0.05	-	0.3	0.1	0.1	0.6	0.6	21.5	21.7	0	0	-	
Wider Site R3	10/10/22	15:19	BH203	S	GL	3.54		6.00	-	-	1014	R	0.12	-	0.2	0.1	0.1	0.4	0.4	20.5	20.5	1	0	-	
Wider Site R3	10/10/22	14:49	BH204	S	GL	2.63		5.10	-	-	1016	R	-0.09	-	0.2	0.1	0.1	0.8	0.8	21.4	21.6	0	0	-	
Wider Site R3	10/10/22	15:26	BH205	S	GL	1.15		4.12	-	-	1014	R	0.00	-	0.2	0.1	0.1	0.3	0.3	21.0	21.0	0	0	-	
Wider Site R3	10/10/22	09:37	WS201	S	GL	Dry	D	1.86	-	-	1012	R	0.14	-	0.2	0.1	0.1	0.9	0.8	20.0	20.5	0	0	-	
Wider Site R3	10/10/22	09:44	WS202	S	GL	Dry	D	1.97	-	-	1012	R	0.04	-	0.0	0.1	0.1	0.7	0.7	20.4	20.4	0	1	-	
Wider Site R3	10/10/22	10:46	WS203	S	GL	Dry	D	1.98	-	-	1013	R	-0.04	-	0.3	0.1	0.1	0.7	0.7	20.8	21.1	0	0	-	
Wider Site R3	10/10/22	10:58	WS204	S	GL	Dry	D	1.00	-	-	1013	R	-0.02	-	0.1	0.1	0.1	0.3	0.3	20.9	21.2	0	0	-	
Wider Site R3	10/10/22	10:38	WS205	S	GL	1.46		2.96	-	-	1013	R	0.05	-	0.2	0.1	0.1	2.3	2.3	19.8	19.9	0	0	-	
Wider Site R3	10/10/22	10:29	WS206	S	GL	2.18		4.30	-	-	1013	R	-0.02	-	0.1	0.1	0.1	1.5	1.5	20.1	20.2	0	0	-	
Wider Site R3	10/10/22	11:08	WS207	S	GL	0.84		2.15	-	-	1013	R	-0.05	-	-0.1	0.1	0.1	0.8	0.8	20.9	21.0	0	0	-	
Wider Site R3	10/10/22	11:15	WS208	S	GL	0.59		2.22	-	-	1014	R	2.91	-	-4.7	0.1	0.1	1.1	1.1	20.6	20.6	4	0	-	
Wider Site R3	10/10/22	10:22	WS209	S	GL	1.66		2.99	-	-	1013	R	0.02	-	0.3	0.1	0.1	2.1	2.0	20.0	20.0	0	0	-	
Wider Site R3	10/10/22	11:28	WS210	S	GL	0.77		2.60	-	-	1014	R	0.12	-	-3.0	0.1	0.1	1.1	1.1	20.6	20.7	2	0	-	
Wider Site R3	10/10/22	09:30	WS211	S	GL	3.15		3.52	-	-	1012	R	0.23	-</											

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)							Local conditions		
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R)/ steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any
Wider Site R3	10/10/22	17:07	WS217	S	GL	Dry	D	2.02	-	-	1014	R	0.00	-	0.2	0.1	0.1	1.3	1.2	20.1	19.8	0	0	-	
Wider Site R3	10/10/22	10:14	WS218	S	GL	Dry	D	1.77	-	-	1013	R	0.04	-	0.1	0.1	0.1	1.0	1.0	20.7	20.9	0	0	-	
Wider Site R3	10/10/22	11:50	WS219	S	GL	4.07		4.95	-	-	1014	R	0.00	-	0.3	0.1	0.1	1.3	1.3	20.6	20.6	0	0	-	
Wider Site R3	10/10/22	11:44	WS220	S	GL	1.74		2.98	-	-	1014	R	0.05	-	0.1	0.1	0.1	0.6	0.6	20.9	21.1	0	0	-	
Wider Site R3	10/10/22	17:26	WS221	S	GL	Dry	D	1.99	-	-	1014	R	0.04	-	0.3	0.1	0.1	1.0	0.9	19.9	19.9	0	0	-	
Wider Site R3	10/10/22	16:51	WS222	S	GL	Dry	D	2.44	-	-	1014	R	0.04	-	0.2	0.1	0.1	1.0	1.0	20.5	20.5	0	0	-	
Wider Site R3	10/10/22	11:56	WS223	S	GL	Dry	D	1.97	-	-	1014	R	-0.05	-	0.3	0.1	0.1	0.6	0.5	21.3	21.5	0	0	-	
Wider Site R3	10/10/22	12:53	WS224	S	GL	Dry	D	1.36	-	-	1015	R	-0.05	-	0.1	0.1	0.1	0.6	0.5	21.6	21.8	0	0	-	
Wider Site R3	10/10/22	17:24	WS225	S	GL	Dry	D	1.98	-	-	1014	R	-0.02	-	0.3	0.1	0.1	1.0	1.0	20.5	20.5	0	0	-	
Wider Site R3	10/10/22	17:00	WS226	S	GL	Dry	D	1.12	-	-	1014	R	0.04	-	0.2	0.1	0.1	0.4	0.4	20.5	20.5	0	0	-	
Wider Site R3	10/10/22	16:42	WS227	S	GL	Dry	D	2.72	-	-	1014	R	0.02	-	0.2	0.1	0.1	1.0	0.9	20.3	20.3	0	0	-	
Wider Site R3	10/10/22	15:12	WS228	S	GL	Dry	D	0.99	-	-	1014	R	-0.07	-	0.2	0.1	0.1	0.4	0.4	21.0	21.1	0	0	-	
Wider Site R3	10/10/22	15:08	WS229	S	GL	Dry	D	1.95	-	-	1014	R	0.05	-	0.2	0.1	0.1	0.4	0.3	20.5	20.9	0	0	-	
Wider Site R3	10/10/22	12:20	WS230	S	GL	Dry	D	1.10	-	-	1014	R	0.07	-	0.1	0.1	0.1	0.6	0.6	21.5	21.6	0	0	-	
Wider Site R3	10/10/22	16:27	WS231	S	GL	4.50		5.07	-	-	1014	R	0.02	-	0.3	0.1	0.1	1.9	2.0	20.1	20.1	0	0	-	
Wider Site R3	10/10/22	12:05	WS232	S	GL	1.96		2.97	-	-	1014	R	0.18	-	0.2	0.1	0.1	0.6	0.6	21.4	21.6	0	0	-	
Wider Site R3	10/10/22	13:00	WS233	S	GL	1.35		2.25	-	-	1015	R	0.16	-	0.2	0.1	0.1	1.8	1.7	20.5	20.5	0	0	-	
Wider Site R3	10/10/22	13:08	WS234	S	GL	1.25		1.64	-	-	1015	R	0.02	-	0.2	0.1	0.1	0.3	0.3	21.2	21.5	0	0	-	
Wider Site R3	10/10/22	15:46	WS235	S	GL	1.96		4.91	-	-	1014	R	0.16	-	0.2	0.1	0.1	1.2	1.2	20.7	20.6	0	0	-	
Wider Site R3	10/10/22	15:40	WS236	S	GL	1.41		1.96	-	-	1014	R	0.19	-	0.3	0.1	0.1	1.0	1.0	20.3	20.2	0	0	-	
Wider Site R3	10/10/22	15:02	WS237	S	GL	Dry	D	1.01	-	-	1014	R	0.02	-	0.2	0.1	0.1	0.2	0.4	21.2	21.4	0	0	-	
Wider Site R3	10/10/22	16:20	WS238	S	GL	3.90		5.06	-	-	1014	R	0.02	-	0.3	0.1	0.1	1.3	0.9	21.0	21.0	0	0	-	
Wider Site R3	10/10/22	13:23	WS239	S	GL	1.39		2.22	-	-	1015	R	-0.04	-	0.2	0.1	0.1	0.6	0.6	21.2	21.2	0	0	-	
Wider Site R3	10/10/22	13:17	WS240	S	GL	Dry	D	1.10	-	-	1015	R	-0.04	-	0.1	0.1	0.1	1.1	1.0	21.0	21.2	0	0	-	
Wider Site R3	10/10/22	14:33	WS241	S	GL	1.57		1.94	-	-	1016	R	-0.04	-	0.1	0.1	0.1	1.1	1.0	21.1	21.3	0	0	-	
Wider Site R3	10/10/22	15:50	WS242	S	GL	0.72		3.61	-	-	1014	R	0.04	-	0.2	0.1	0.1	1.2	1.2	19.0	18.8	1	0	-	
Wider Site R3	10/10/22	14:56	WS243	S	GL	Dry	D	1.00	-	-	1014	R	0.07	-	0.3	0.1	0.1	0.4	0.4	20.0	20.5	0	0	-	
Wider Site R3	10/10/22	14:37	WS244	S	GL	Dry	D	0.88	-	-	1016	R	-0.07	-	0.3	0.1	0.1	0.5	0.5	21.8	21.8	0	0	-	
Wider Site R3	10/10/22	16:04	WS245	S	GL	1.10		2.56	-	-	1014	R	0.02	-	-0.2	0.1	0.1	0.1	0.3	21.0	21.3	1	0	-	
Wider Site R3	10/10/22	16:14	WS246	S	GL	Dry	D	4.55	-	-	1014	R	0.05	-	0.2	0.1	0.1	0.4	0.8	20.5	21.0	0	0	-	
Wider Site R3	10/10/22	14:43	WS247	S	GL	Dry	D	0.92	-	-	1016	R	0.00	-	0.3	0.1	0.1	1.1	1.1	21.2	21.2	0	0	-	
Wider Site R3	10/10/22	13:32	WS248	S	GL	Dry	D*	1.60	-	-	1015	R	-0.07	-	0.1	0.1	0.1	0.5	0.5	21.2	21.4	0	0	-	
Wider Site R3	10/10/22	13:50	WS249	S	GL	0.07		0.97	-	-	1016	R	0.04	-	0.0	0.1	0.1	0.6	0.6	21.3	21.4	0	0	-	
Wider Site R3	10/10/22	13:41	WS250	S	GL	Dry	D	0.85	-	-	1016	R	0.02	-	0.3	0.1	0.1	0.5	0.5	21.3	21.3	0	0	-	
Wider Site R3	10/10/22	14:09	WS251	S	GL	0.93		1.96	-	-	1016	R	-0.28	-	-0.5	0.1	0.1	1.0	0.9	20.3	20.7	1	0	-	
Wider Site R3	10/10/22	13:58	WS252	S	GL	1.00		5.05	-	-	1014	R	0.12	-	0.2	0.1	0.1	0.8	1.0	20.5	20.6	1	0	-	
Wider Site R4	19/10/22	16:13	BH201	S	GL	4.29		5.00	-	-	1006	F	0.09	-	0.2	0.1	0.1	1.0	0.9	21.5	21.5	0	0	-	OK
Wider Site R4	19/10/22	14:02	BH202	S	GL	3.38		5.24	-	-	1009	F	0.14	-	0.3	0.1	0.1	0.7	0.7	21.1	21.1	0	0	-	OK
Wider Site R4	19/10/22	12:39	BH203	S	GL	3.54		6.00	-	-	1010	F	0.12	-	0.2	0.1	0.1	0.4	0.4	21.1	21.1	0	0	-	OK
Wider Site R4	19/10/22	13:42	BH204	S	GL	2.60		5.10	-	-	1009	F	0.14	-	0.1	0.1	0.1	0.8	0.8	21.1	21.1	0	0	-	OK
Wider Site R4	19/10/22	12:46	BH205	S	GL	1.16		4.12	-	-	1010	F	0.00	-	0.2	0.1	0.1	0.3	0.3	21.3	21.4	0	0	-	OK
Wider Site R4	19/10/22	16:51	WS201	S	GL	Dry	D	1.86	-	-	1006	F	0.19	-	0.2	0.1	0.1	0.6	0.4	20.7	21.9	0	0	-	DRY
Wider Site R4	19/10/22	17:02	WS202	S	GL	1.72		1.97	-	-	1007	F	-0.02	-	0.1	0.1	0.1	0.2	0.2	21.9	21.9	0	0	-	OK
Wider Site R4	19/10/22	15:25	WS203	S	GL	Dry	D	1.99	-	-	1007	F	0.00	-	0.2	0.1	0.1	0.7	0.7	21.4	21.5	0	0	-	DRY
Wider Site R4	19/10/22	15:18	WS204	S	GL	Dry	D	1.00	-	-	1008	F	-0.21	-	0.2	0.1	0.1	0.6	0.4	20.8	20.9	0	0	-	DRY
Wider Site R4	19/10/22	15:33	WS205	S	GL	1.47		2.96	-	-	1007	F	-0.02	-	0.2	0.1	0.1	2.3	2.2	20.0	20.0	0	0	-	OK
Wider Site R4	19/10/22	15:11	WS206	S	GL	2.21		4.30	-	-	1008	F	-0.11	-	0.3	0.1	0.1	1.5	1.5	20.4	20.5	0	0	-	OK
Wider Site R4	19/10/22	15:02	WS207	S	GL	0.81		2.15	-	-	1008	F	0.05	-	-1.7	0.1	0.1	1.9	1.9	20.6	20.7	1	0	-	OK
Wider Site R4	19/10/22	14:52	WS208	S	GL	0.57		2.22	-	-	1008	F	2.98	-	-5.8	0.1	0.1	2.3	2.3	20.0	20.2	3	0	-	OK
Wider Site R4	19/10/22	15:05	WS209	S	GL	1.67		2.99	-	-	1008	F	0.04	-	0.2	0.1	0.1	1.8	1.8	20.5	20.5	0	0	-	OK
Wider Site R4	19/10/22	14:24	WS210	S	GL	0.76		2.60	-	-	1009	F	-0.07	-	-2.6	0.1	0.1	1.3	1.3	20.5	20.6	2	0	-	OK
Wider Site R4	19/10/22	16:42	WS211	S	GL	3.15		3.52	-	-	1006	F	0.16	-	0.1	0.1	0.1	3.5	3.2	18.8	18.9	0	0	-	OK
Wider Site R4	19/10/22	14:36	WS213	S	GL	Dry	D	3.63	-	-	1006	F	0.09	-	0.3	0.1	0.1	1.1	1.1	21.0	21.0	0	0	-	DRY
Wider Site R4	19/10/22	15:41	WS214	S	GL	Dry	D	0.97	-	-	1007	F	0.12	-	0.2	0.1	0.1	0.9	0.9	21.1	21.5	0	0	-	DRY
Wider Site R4	19/10/22	14:43	WS215	S	GL	0.92		2.53	-	-	1009	F	-0.14	-	0.2	0.1	0.1	0.2	0.2	21.4	21.5	0	0	-	OK
Wider Site R4	19/10/22	17:12	WS216	S	GL	Dry	D*	4.05	-	-	1006	F	0.04	-	0.2	0.1	0.1	1.0	1.0	19.0	18.2	0	0	-	OK
Wider Site R4	19/10/22	16:34	WS217	S	GL	Dry	D	2.02	-	-	1006	F	0.02	-	0.2	0.1	0.1	0.6	0.6	21.8	21.8	0	0	-	DRY
Wider Site R4	19/10/22	15:47	WS218	S	GL	Dry	D	1.76	-	-	1007	F	-0.02	-	0.2	0.1	0.1	0.9	0.9	21.4	21.4	0	0	-	DRY
Wider Site R4	19/10/22	14:32	WS219	S	GL	3.92		4.95	-	-	1008	F	0.05	-	0.2	0.1	0.1	1.3	1.3	20.6	20.6	0	0	-	OK
Wider Site R4	19/10/22	14:37	WS220	S	GL	1.73		2.98	-	-	1009	F	0.00	-	0.2	0.1	0.1	0.6	0.6	21.0	21.2	0	0	-	OK
Wider																									



Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Wider Site R4	19/10/22	16:08	WS226	S	GL	Dry	D	1.14	-	-	998	F	0.09	-	0.2	0.1	0.1	0.4	0.3	21.8	21.8	0	0	-	DRY
Wider Site R4	19/10/22	16:00	WS227	S	GL	Dry	D	2.72	-	-	1006	F	0.00	-	0.2	0.1	0.1	0.9	0.9	21.6	21.6	0	0	-	DRY
Wider Site R4	19/10/22	12:32	WS228	S	GL	Dry	D	0.99	-	-	1010	F	-0.07	-	0.1	0.1	0.1	0.5	0.5	21.2	21.3	0	0	-	DRY
Wider Site R4	19/10/22	12:28	WS229	S	GL	Dry	D	1.95	-	-	1010	F	-0.12	-	0.2	0.1	0.1	0.6	0.6	21.2	21.4	0	0	-	DRY
Wider Site R4	19/10/22	16:21	WS230	S	GL	Dry	D	1.10	-	-	1007	F	0.04	-	0.2	0.1	0.1	0.6	0.6	21.7	21.7	0	0	-	DRY
Wider Site R4	19/10/22	12:05	WS231	S	GL	4.55		5.07	-	-	1011	F	0.14	-	0.2	0.1	0.1	2.2	2.2	20.1	20.1	0	0	-	OK
Wider Site R4	19/10/22	14:08	WS232	S	GL	1.45		2.97	-	-	1009	F	0.12	-	0.2	0.1	0.1	0.6	0.6	21.1	21.3	0	0	-	OK
Wider Site R4	19/10/22	11:37	WS233	S	GL	1.35		2.25	-	-	1011	F	0.14	-	0.2	0.1	0.1	1.8	1.8	20.3	20.3	0	0	-	OK
Wider Site R4	19/10/22	11:45	WS234	S	GL	1.22		1.64	-	-	1011	F	-0.05	-	0.2	0.1	0.1	0.4	0.4	20.9	21.3	0	0	-	OK
Wider Site R4	19/10/22	12:54	WS235	S	GL	1.41		4.91	-	-	1010	F	0.16	-	0.2	0.1	0.1	1.3	1.3	20.7	20.7	0	0	-	OK
Wider Site R4	19/10/22	13:00	WS236	S	GL	Dry	D	1.96	-	-	1010	F	0.19	-	0.2	0.1	0.1	1.8	1.8	20.2	20.2	0	0	-	DRY
Wider Site R4	19/10/22	12:22	WS237	S	GL	Dry	D	1.01	-	-	1010	F	0.02	-	0.2	0.1	0.1	0.4	0.4	21.3	21.4	0	0	-	DRY
Wider Site R4	19/10/22	12:10	WS238	S	GL	3.97		5.06	-	-	1010	F	0.16	-	0.2	0.1	0.1	2.0	2.0	20.0	20.0	0	0	-	OK
Wider Site R4	19/10/22	11:27	WS239	S	GL	1.37		2.22	-	-	1012	F	0.05	-	0.3	0.1	0.1	0.6	0.6	21.2	21.3	0	0	-	OK
Wider Site R4	19/10/22	11:32	WS240	S	GL	Dry	D	1.10	-	-	1012	F	0.09	-	0.3	0.1	0.1	1.0	1.0	20.9	21.0	0	0	-	DRY
Wider Site R4	19/10/22	10:28	WS241	S	GL	1.54		1.94	-	-	1013	F	0.18	-	0.3	0.1	0.1	1.6	1.6	19.6	19.7	0	0	-	OK
Wider Site R4	19/10/22	13:09	WS242	S	GL	0.72		3.61	-	-	1010	F	0.21	-	-3.8	0.1	0.1	2.3	2.3	18.8	18.8	1	0	-	OK
Wider Site R4	19/10/22	12:16	WS243	S	GL	Dry	D	1.00	-	-	1010	F	0.16	-	0.2	0.1	0.1	0.7	0.6	20.9	21.1	0	0	-	DRY
Wider Site R4	19/10/22	13:58	WS244	S	GL	Dry	D	0.88	-	-	1010	F	0.00	-	0.1	0.1	0.1	0.3	0.3	21.1	21.5	0	0	-	DRY
Wider Site R4	19/10/22	13:25	WS245	S	GL	1.10		2.56	-	-	1010	F	0.16	-	-0.2	0.1	0.1	0.3	0.3	21.3	21.5	1	0	-	OK
Wider Site R4	19/10/22	13:38	WS246	S	GL	1.43		4.55	-	-	1010	F	0.05	-	0.1	0.1	0.1	0.8	0.8	21.0	21.1	0	0	-	OK
Wider Site R4	19/10/22	13:47	WS247	S	GL	Dry	D*	0.92	-	-	1010	F	0.07	-	0.1	0.1	0.1	1.2	1.2	20.5	20.7	0	0	-	OK
Wider Site R4	19/10/22	11:16	WS248	S	GL	Dry	D*	1.60	-	-	1012	F	-0.05	-	0.3	0.1	0.1	0.5	0.5	21.2	21.3	0	0	-	OK
Wider Site R4	19/10/22	11:03	WS249	S	GL	Dry	D	0.95	-	-	1012	F	0.04	-	0.1	0.1	0.1	0.4	0.4	21.2	21.2	0	0	-	DRY
Wider Site R4	19/10/22	11:09	WS250	S	GL	Dry	D	0.86	-	-	1012	F	0.18	-	0.2	0.1	0.1	0.5	0.5	21.2	21.3	0	0	-	DRY
Wider Site R4	19/10/22	10:38	WS251	S	GL	0.84		1.96	-	-	1013	F	-0.16	-	-0.5	0.1	0.1	1.4	1.4	19.2	19.2	1	0	-	OK
Wider Site R4	19/10/22	10:51	WS252	S	GL	0.90		5.05	-	-	1012	F	-0.02	-	-5.2	0.1	0.1	1.0	0.9	20.3	20.6	1	0	-	OK
Wider Site R5	26/10/22	15:43	BH201	S	GL	4.27		5.00	-	-	1004	R	0.11	-	0.3	0.1	0.1	0.8	0.7	20.8	20.8	0	0	-	OK
Wider Site R5	26/10/22	13:35	BH202	S	GL	3.33		5.24	-	-	1003	R	-0.05	-	0.2	0.1	0.1	0.8	0.8	19.9	20.1	0	0	-	OK
Wider Site R5	25/10/22	13:14	BH203	S	GL	3.21		6.00	-	-	1005	R	-0.02	-	0.3	0.1	0.1	0.8	0.8	19.7	19.8	0	0	-	OK
Wider Site R5	25/10/22	13:45	BH204	S	GL	2.48		5.10	-	-	997	R	-0.07	-	0.1	0.1	0.1	0.8	0.8	20.3	20.4	0	0	-	OK
Wider Site R5	25/10/22	13:21	BH205	S	GL	0.73		4.12	-	-	1005	R	0.02	-	-3.6	0.1	0.1	0.7	0.6	20.6	20.9	1	0	-	OK
Wider Site R5	25/10/22	11:36	WS201	S	GL	Dry	D	1.86	-	-	1004	R	0.11	-	0.1	0.1	0.1	1.3	0.7	19.9	20.3	0	0	-	DRY
Wider Site R5	25/10/22	11:42	WS202	S	GL	1.14		1.99	-	-	1005	R	0.12	-	0.2	0.1	0.1	0.6	0.6	20.4	20.5	0	0	-	OK
Wider Site R5	26/10/22	14:42	WS203	S	GL	Dry	D	1.99	-	-	1004	R	0.18	-	0.3	0.1	0.1	0.6	0.6	20.7	20.7	0	0	-	DRY
Wider Site R5	26/10/22	14:34	WS204	S	GL	Dry	D	1.00	-	-	1004	R	-0.02	-	0.2	0.1	0.1	0.2	0.2	21.3	21.4	0	0	-	DRY
Wider Site R5	26/10/22	14:48	WS205	S	GL	1.03		2.96	-	-	1004	R	0.07	-	0.2	0.1	0.1	1.7	1.6	20.1	20.3	0	0	-	OK
Wider Site R5	26/10/22	15:07	WS206	S	GL	1.74		4.30	-	-	1004	R	0.04	-	0.3	0.1	0.1	1.6	1.6	19.0	19.0	0	0	-	OK
Wider Site R5	26/10/22	14:28	WS207	S	GL	0.59		2.15	-	-	1004	R	-0.58	-	-2.3	0.1	0.1	1.5	1.5	20.5	20.5	2	0	-	OK
Wider Site R5	26/10/22	14:23	WS208	S	GL	0.43		2.22	-	-	1004	R	15.96	-	0.6	0.1	0.1	1.7	1.7	20.2	20.3	3	0	-	OK
Wider Site R5	26/10/22	15:02	WS209	S	GL	1.52		2.99	-	-	1004	R	0.05	-	0.2	0.1	0.1	1.6	1.6	19.9	19.9	0	0	-	OK
Wider Site R5	26/10/22	14:15	WS210	S	GL	0.53		2.60	-	-	1004	R	11.62	-	0.2	0.1	0.1	1.3	1.3	20.3	20.4	2	0	-	OK
Wider Site R5	25/10/22	11:27	WS211	S	GL	3.10		3.52	-	-	1004	R	0.23	-	0.2	0.1	0.1	3.3	3.3	18.1	18.1	0	0	-	OK
Wider Site R5	26/10/22	14:54	WS213	S	GL	Dry	D	3.63	-	-	1004	R	0.00	-	0.3	0.1	0.1	0.5	0.5	20.6	20.7	0	0	-	DRY
Wider Site R5	26/10/22	15:14	WS214	S	GL	Dry	D	0.97	-	-	1004	R	0.02	-	0.2	0.1	0.1	0.9	0.9	20.2	20.4	0	0	-	DRY
Wider Site R5	26/10/22	14:09	WS215	S	GL	0.57		2.53	-	-	1004	R	9.63	-	-1.7	0.1	0.1	0.6	0.6	20.7	20.7	1	0	-	OK
Wider Site R5	25/10/22	10:56	WS216	S	GL	Dry	D*	4.05	-	-	1005	R	-0.14	-	0.2	0.1	0.1	1.5	1.5	19.7	19.8	0	0	-	OK
Wider Site R5	25/10/22	11:53	WS217	S	GL	Dry	D	2.02	-	-	1004	R	-0.11	-	0.3	0.1	0.1	1.5	1.4	19.8	19.9	0	0	-	DRY
Wider Site R5	26/10/22	15:19	WS218	S	GL	Dry	D	1.76	-	-	1004	R	-0.07	-	0.2	0.1	0.1	1.0	1.0	20.4	20.6	0	0	-	DRY
Wider Site R5	26/10/22	13:55	WS219	S	GL	3.82		4.95	-	-	1003	R	-0.05	-	0.3	0.1	0.1	1.0	1.0	19.8	19.9	0	0	-	OK
Wider Site R5	26/10/22	13:50	WS220	S	GL	1.42		2.98	-	-	1004	R	0.07	-	0.3	0.1	0.1	0.6	0.6	19.7	19.8	0	0	-	OK
Wider Site R5	25/10/22	11:03	WS221	S	GL	Dry	D	1.99	-	-	1004	R	0.07	-	0.2	0.1	0.1	1.4	1.4	19.8	19.9	0	0	-	DRY
Wider Site R5	26/10/22	15:25	WS222	S	GL	Dry	D	2.44	-	-	1004	R	-0.09	-	0.2	0.1	0.1	0.7	0.7	20.7	20.8	0	0	-	DRY
Wider Site R5	26/10/22	14:01	WS223	S	GL	Dry	D	1.98	-	-	1003	R	0.09	-	0.1	0.1	0.1	0.5	0.5	20.4	20.5	0	0	-	DRY
Wider Site R5	26/10/22	13:22	WS224	S	GL	0.95		1.36	-	-	1003	R	0.07	-	0.1	0.1	0.1	0.3	0.2	19.9	21.0	0	0	-	OK
Wider Site R5	25/10/22	11:09	WS225	S	GL	Dry	D	1.98	-	-	1005	R	0.02	-	0.1	0.1	0.1	1.0	1.0	19.9	20.0	0	0	-	DRY
Wider Site R5	26/10/22	15:38	WS226	S	GL	Dry	D	1.14	-	-	1004	R	0.04	-	0.2	0.1	0.1	0.5	0.5	20.5	20.5	0	0	-	DRY
Wider Site R5	26/10/22	15:30	WS227	S	GL	Dry	D	2.72	-	-	1004	R	0.19	-	0.2	0.1	0.1	0.8	0.8	20.8	20.8	0	0	-	DRY
Wider Site R5	25/10/22	13:06	WS228	S	GL	Dry	D	0.99	-	-	1004	R	0.00	-	0.3	0.1	0.1	0.7	0.7	20.0	20.0	0	0	-	DRY
Wider Site R5	25/10/22	12:57	WS229	S	GL	Dry	D	1.95	-	-	1004	R	0.09	-											

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R)/ steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Wider Site R5	25/10/22	12:12	WS235	S	GL	1.23		4.91	-	-	1005	R	0.16	-	0.3	0.1	0.1	1.7	1.7	19.0	19.0	0	0	-	OK
Wider Site R5	25/10/22	12:06	WS236	S	GL	Dry	D	1.96	-	-	1005	R	0.02	-	0.3	0.1	0.1	1.9	1.9	19.2	19.2	0	0	-	DRY
Wider Site R5	25/10/22	12:52	WS237	S	GL	Dry	D	1.01	-	-	1004	R	0.12	-	0.4	0.1	0.1	0.4	0.4	20.4	20.5	0	0	-	DRY
Wider Site R5	25/10/22	12:40	WS238	S	GL	3.90		5.06	-	-	1005	R	-0.14	-	0.2	0.1	0.1	2.2	2.2	19.6	19.7	0	0	-	OK
Wider Site R5	26/10/22	12:55	WS239	S	GL	1.27		2.22	-	-	1003	R	0.02	-	0.3	0.1	0.1	0.7	0.7	19.8	19.9	0	0	-	OK
Wider Site R5	26/10/22	13:00	WS240	S	GL	Dry	D	1.10	-	-	1003	R	0.09	-	0.3	0.1	0.1	1.1	1.1	19.7	19.8	0	0	-	DRY
Wider Site R5	26/10/22	11:59	WS241	S	GL	1.36		1.94	-	-	1002	R	0.16	-	0.2	0.1	0.1	1.2	1.2	19.9	19.9	0	0	-	OK
Wider Site R5	25/10/22	12:17	WS242	S	GL	0.52		3.61	-	-	1005	R	19.09	-	1.0	0.1	0.1	2.4	2.4	18.6	18.8	1	0	-	OK
Wider Site R5	25/10/22	12:46	WS243	S	GL	Dry	D	1.00	-	-	1004	R	-0.02	-	0.3	0.1	0.1	0.6	0.6	20.3	20.3	0	0	-	DRY
Wider Site R5	25/10/22	14:00	WS244	S	GL	Dry	D	0.88	-	-	1005	R	-0.18	-	0.3	0.1	0.1	0.5	0.5	19.7	19.8	0	0	-	DRY
Wider Site R5	25/10/22	13:26	WS245	S	GL	0.63		2.56	-	-	1005	R	0.04	-	-4.5	0.1	0.1	0.8	0.8	20.9	20.9	1	0	-	OK
Wider Site R5	25/10/22	13:35	WS246	S	GL	1.14		4.55	-	-	1005	R	0.14	-	-2.2	0.1	0.1	1.0	1.0	20.2	20.3	0	0	-	OK
Wider Site R5	25/10/22	13:53	WS247	S	GL	0.71		0.92	-	-	1005	R	0.05	-	0.1	0.1	0.1	1.2	1.2	18.5	18.8	0	0	-	OK
Wider Site R5	26/10/22	12:44	WS248	S	GL	1.37		1.60	-	-	1003	R	0.07	-	0.3	0.1	0.1	0.7	0.7	20.0	20.1	0	0	-	OK
Wider Site R5	26/10/22	12:30	WS249	S	GL	Dry	D	0.95	-	-	1003	R	0.11	-	0.2	0.1	0.1	1.1	1.1	19.3	19.3	0	0	-	DRY
Wider Site R5	26/10/22	12:37	WS250	S	GL	Dry	D	0.86	-	-	1003	R	-0.04	-	0.3	0.1	0.1	0.6	0.6	19.8	19.8	0	0	-	DRY
Wider Site R5	26/10/22	12:08	WS251	S	GL	0.54		1.96	-	-	1003	R	-3.08	-	-1.4	0.1	0.1	1.3	1.1	19.2	19.4	1	0	-	OK
Wider Site R5	26/10/22	12:20	WS252	S	GL	0.48		5.05	-	-	1003	R	-2.38	-	-4.9	0.1	0.1	1.2	1.2	19.5	19.6	1	0	-	OK
Wider Site R6	02/11/22	14:15	BH201	S	GL	4.20		5.80	-	-	1003	R	0.00	-	0.1	0.1	0.1	0.9	0.9	20.3	20.3	0	0	-	
Wider Site R6	02/11/22	11:48	BH202	S	GL	3.27		5.15	-	-	1006	R	0.09	-	0.1	0.1	0.1	1.1	1.1	19.2	19.5	0	0	-	
Wider Site R6	01/11/22	14:43	BH203	S	GL	3.16		5.00	-	-	998	F	0.12	-	0.2	0.1	0.1	0.8	0.8	20.1	20.1	0	0	-	
Wider Site R6	01/11/22	15:09	BH204	S	GL	2.43		5.18	-	-	998	F	-0.02	-	0.2	0.1	0.1	0.9	0.9	19.7	19.9	0	0	-	
Wider Site R6	01/11/22	14:51	BH205	S	GL	0.69		4.16	-	-	999	F	0.12	-	-2.9	0.1	0.1	0.3	0.3	20.9	21.1	1	0	-	
Wider Site R6	02/11/22	11:16	WS201	S	GL	Dry	D	1.90	-	-	1006	R	0.00	-	0.1	0.1	0.1	2.9	0.8	19.4	19.8	0	0	-	Dry
Wider Site R6	02/11/22	11:21	WS202	S	GL	1.05		2.00	-	-	1006	R	0.00	-	-4.5	0.1	0.1	1.2	1.2	19.7	19.7	0	0	-	
Wider Site R6	02/11/22	13:04	WS203	S	GL	Dry	D	2.00	-	-	1005	R	0.00	-	0.1	0.1	0.1	0.7	0.7	20.0	20.2	0	0	-	Dry
Wider Site R6	02/11/22	12:54	WS204	S	GL	Dry	D	1.00	-	-	1005	R	-0.12	-	0.1	0.1	0.1	0.2	0.2	20.9	20.9	0	0	-	Dry
Wider Site R6	02/11/22	13:10	WS205	S	GL	0.95		3.11	-	-	1004	R	0.00	-	0.1	0.1	0.1	0.9	0.8	20.2	20.5	1	0	-	
Wider Site R6	02/11/22	13:30	WS206	S	GL	1.64		4.20	-	-	1004	R	-0.21	-	0.1	0.1	0.1	2.0	2.0	18.2	18.2	0	0	-	
Wider Site R6	02/11/22	12:47	WS207	S	GL	0.57		2.20	-	-	1006	R	0.07	-	-4.0	0.1	0.1	1.3	1.3	20.1	20.2	0	0	-	
Wider Site R6	02/11/22	12:41	WS208	S	GL	0.38		2.15	-	-	1006	R	2.45	-	-6.1	0.1	0.1	1.7	1.7	19.8	19.8	0	0	-	
Wider Site R6	02/11/22	13:27	WS209	S	GL	1.47		3.00	-	-	1004	R	0.09	-	0.1	0.1	0.1	2.0	2.0	18.6	18.8	0	0	-	
Wider Site R6	02/11/22	12:33	WS210	S	GL	0.50		2.60	-	-	1006	R	1.44	-	-6.1	0.1	0.1	1.3	1.3	19.7	20.0	0	0	-	
Wider Site R6	02/11/22	11:09	WS211	S	GL	3.05		3.40	-	-	1007	R	0.04	-	0.1	0.1	0.1	3.5	3.3	17.3	17.4	0	0	-	
Wider Site R6	02/11/22	13:18	WS213	S	GL	Dry	D	3.65	-	-	1004	R	0.00	-	0.1	0.1	0.1	0.6	0.6	19.8	20.1	0	0	-	Dry
Wider Site R6	02/11/22	13:45	WS214	S	GL	Dry	D	1.00	-	-	1004	R	0.00	-	0.1	0.1	0.1	1.2	1.2	19.4	19.4	0	0	-	Dry
Wider Site R6	02/11/22	12:25	WS215	S	GL	0.54		2.50	-	-	1006	R	2.40	-	0.1	0.1	0.1	1.0	1.0	20.2	20.2	0	0	-	
Wider Site R6	02/11/22	10:36	WS216	S	GL	3.90		4.20	-	-	1006	R	-0.07	-	0.1	0.1	0.1	0.9	0.9	19.9	19.9	0	0	-	
Wider Site R6	02/11/22	11:36	WS217	S	GL	Dry	D	2.05	-	-	1006	R	0.00	-	0.1	0.1	0.1	1.8	1.8	19.1	19.4	0	0	-	Dry
Wider Site R6	02/11/22	13:51	WS218	S	GL	Dry	D	1.80	-	-	1003	R	0.00	-	0.1	0.1	0.1	1.1	1.1	19.6	19.7	0	0	-	Dry
Wider Site R6	02/11/22	12:10	WS219	S	GL	3.72		5.00	-	-	1006	R	0.04	-	0.1	0.1	0.1	1.4	1.4	19.2	19.2	0	0	-	
Wider Site R6	02/11/22	12:04	WS220	S	GL	1.38		3.00	-	-	1006	R	1.38	-	0.1	0.1	0.1	0.8	0.8	19.2	19.2	0	0	-	
Wider Site R6	02/11/22	10:49	WS221	S	GL	Dry	D	2.05	-	-	1007	R	0.00	-	0.1	0.1	0.1	1.6	1.6	19.2	19.2	0	0	-	Dry
Wider Site R6	02/11/22	13:58	WS222	S	GL	Dry	D	2.53	-	-	1003	R	0.14	-	0.1	0.1	0.1	0.8	0.8	19.8	20.1	0	0	-	Dry
Wider Site R6	02/11/22	12:16	WS223	S	GL	Dry	D	2.00	-	-	1006	R	0.07	-	0.1	0.1	0.1	0.6	0.6	19.6	19.6	0	0	-	Dry
Wider Site R6	01/11/22	13:48	WS224	S	GL	1.04		1.40	-	-	998	F	0.11	-	0.3	0.1	0.1	0.4	0.1	20.3	21.0	0	0	-	OK
Wider Site R6	02/11/22	10:56	WS225	S	GL	Dry	D	2.00	-	-	1007	R	0.00	-	0.1	0.1	0.1	1.2	1.2	19.3	19.3	0	0	-	Dry
Wider Site R6	02/11/22	14:10	WS226	S	GL	Dry	D	1.10	-	-	1003	R	0.00	-	0.1	0.1	0.1	0.7	0.7	19.9	19.9	0	0	-	Dry
Wider Site R6	02/11/22	14:04	WS227	S	GL	Dry	D	2.80	-	-	1003	R	0.00	-	0.1	0.1	0.1	0.8	0.8	20.2	20.2	0	0	-	Dry
Wider Site R6	01/11/22	14:36	WS228	S	GL	Dry	D	1.01	-	-	998	F	0.02	-	0.2	0.1	0.1	0.9	0.9	19.6	19.7	0	0	-	DRY
Wider Site R6	01/11/22	14:32	WS229	S	GL	Dry	D	1.00	-	-	998	F	0.05	-	0.2	0.1	0.1	0.7	0.7	20.4	20.6	0	0	-	DRY
Wider Site R6	02/11/22	14:22	WS230	S	GL	Dry	D	1.10	-	-	1003	R	0.00	-	0.1	0.1	0.1	0.8	0.8	19.7	19.7	0	0	-	Dry
Wider Site R6	01/11/22	14:12	WS231	S	GL	4.47		5.18	-	-	998	F	0.07	-	0.2	0.1	0.1	2.7	2.7	17.9	17.9	0	0	-	OK
Wider Site R6	02/11/22	11:56	WS232	S	GL	1.27		3.00	-	-	1006	R	0.00	-	0.1	0.1	0.1	0.7	0.7	19.5	19.7	0	0	-	
Wider Site R6	01/11/22	13:40	WS233	S	GL	1.19		2.35	-	-	999	F	0.00	-	0.1	0.1	0.1	2.0	2.0	18.9	19.2	0	0	-	OK
Wider Site R6	01/11/22	13:55	WS234	S	GL	1.03		1.68	-	-	999	F	0.05	-	0.3	0.1	0.1	0.3	0.3	20.6	20.6	0	0	-	OK
Wider Site R6	01/11/22	11:53	WS235	S	GL	1.20		5.06	-	-	999	F	0.02	-	0.2	0.1	0.1	1.7	1.6	17.5	17.5	0	0	-	OK
Wider Site R6	01/11/22	11:47	WS236	S	GL	Dry	D	2.00	-	-	998	F	-0.02	-	0.2	0.1	0.1	0.6	0.6	19.9	19.9	0	0	-	DRY
Wider Site R6	01/11/22	14:28	WS237	S	GL	Dry	D	1.05	-	-	998	F	-0.04	-	0.3	0.1	0.1	0.5	0.5	20.3	20.3	0	0	-	DRY
Wider Site R6	01/11/22	14:16	WS238	S	GL	3.88		4.97	-	-	998	F	0.00	-	0.2	0.1	0.1	2.2	2.1	18.9	19.0</				

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Wider Site R6	01/11/22	15:19	WS244	S	GL	Dry	D	0.93	-	-	999	F	0.00	-	0.3	0.1	0.1	0.7	0.7	19.3	19.5	0	0	-	DRY
Wider Site R6	01/11/22	14:57	WS245	S	GL	0.61		2.58	-	-	999	F	-0.02	-	-6.5	0.1	0.1	0.6	0.6	20.9	21.0	1	0	-	OK
Wider Site R6	01/11/22	15:03	WS246	S	GL	1.11		4.49	-	-	999	F	2.78	-	-3.3	0.1	0.1	0.9	0.9	18.9	18.9	0	0	-	OK
Wider Site R6	01/11/22	15:14	WS247	S	GL	0.67		0.93	-	-	999	F	0.28	-	0.2	0.1	0.1	1.6	1.6	16.9	16.9	0	0	-	OK
Wider Site R6	01/11/22	13:08	WS248	S	GL	1.34		1.65	-	-	999	F	0.14	-	0.3	0.1	0.1	0.9	0.9	19.8	19.8	0	0	-	OK
Wider Site R6	01/11/22	12:54	WS249	S	GL	Dry	D	1.00	-	-	999	F	0.04	-	0.2	0.1	0.1	1.3	1.3	19.3	19.3	0	0	-	DRY
Wider Site R6	01/11/22	13:00	WS250	S	GL	Dry	D	0.89	-	-	999	F	1.39	-	0.3	0.1	0.1	0.8	0.8	19.8	19.8	0	0	-	DRY
Wider Site R6	01/11/22	12:28	WS251	S	GL	0.50		2.00	-	-	999	F	1.44	-	-1.0	0.1	0.1	1.0	1.0	19.4	19.4	2	0	-	OK
Wider Site R6	01/11/22	12:40	WS252	S	GL	0.47		5.18	-	-	999	F	6.53	-	-2.5	0.2	0.2	1.2	1.2	19.5	19.5	1	0	-	OK
Wider Site R7	17/11/22	13:55	BH201	S	GL	4.19		5.86	-	-	1004	F	0.11	-	0.3	0.1	0.1	0.8	0.7	20.8	20.8	0	0	-	OK
Wider Site R7	17/11/22	11:47	BH202	S	GL	3.26		5.15	-	-	1004	F	0.09	-	0.1	0.1	0.1	1.1	1.1	19.2	19.5	0	0	-	OK
Wider Site R7	16/11/22	15:27	BH203	S	GL	3.15		5.00	-	-	981	F	-0.02	-	0.3	0.1	0.1	0.8	0.8	19.7	19.8	0	0	-	OK
Wider Site R7	16/11/22	15:58	BH204	S	GL	2.42		5.18	-	-	981	F	-0.07	-	0.1	0.1	0.1	0.8	0.8	20.3	20.4	0	0	-	OK
Wider Site R7	16/11/22	15:34	BH205	S	GL	0.68		4.16	-	-	981	F	0.02	-	-3.6	0.1	0.1	0.7	0.6	20.6	20.9	1	0	-	OK
Wider Site R7	17/11/22	14:47	WS201	S	GL	Dry	D	1.90	-	-	1004	F	-0.07	-	0.1	0.1	0.1	2.9	0.8	19.4	19.8	0	0	-	DRY
Wider Site R7	17/11/22	14:53	WS202	S	GL	1.04		2.00	-	-	1004	F	0.12	-	0.2	0.1	0.1	0.6	0.6	20.4	20.5	0	0	-	OK
Wider Site R7	17/11/22	12:54	WS203	S	GL	Dry	D	2.00	-	-	1004	F	-0.04	-	0.1	0.1	0.1	0.7	0.7	20.0	20.2	0	0	-	DRY
Wider Site R7	17/11/22	12:46	WS204	S	GL	Dry	D	1.00	-	-	1004	F	-0.02	-	0.2	0.1	0.1	0.2	0.2	21.3	21.4	0	0	-	DRY
Wider Site R7	17/11/22	13:00	WS205	S	GL	0.94		3.00	-	-	1004	F	0.02	-	0.1	0.1	0.1	0.9	0.8	20.2	20.5	1	0	-	OK
Wider Site R7	17/11/22	13:19	WS206	S	GL	1.63		4.20	-	-	1004	F	0.04	-	0.3	0.1	0.1	1.6	1.6	19.0	19.0	0	0	-	OK
Wider Site R7	17/11/22	12:40	WS207	S	GL	0.55		2.20	-	-	1004	F	0.07	-	-4.0	0.1	0.1	1.3	1.3	20.1	20.2	1	0	-	OK
Wider Site R7	17/11/22	12:35	WS208	S	GL	0.29		2.15	-	-	1004	F	2.45	-	-6.1	0.1	0.1	1.7	1.7	19.8	19.8	3	0	-	OK
Wider Site R7	17/11/22	13:14	WS209	S	GL	1.20		3.00	-	-	1004	F	0.05	-	0.2	0.1	0.1	1.6	1.6	19.9	19.9	0	0	-	OK
Wider Site R7	17/11/22	12:27	WS210	S	GL	0.36		2.60	-	-	1004	F	1.44	-	-6.1	0.1	0.1	1.3	1.3	19.7	20.0	3	0	-	OK
Wider Site R7	17/11/22	14:38	WS211	S	GL	2.20		3.40	-	-	1004	F	0.23	-	0.2	0.1	0.1	3.3	3.3	18.1	18.1	0	0	-	OK
Wider Site R7	17/11/22	13:06	WS213	S	GL	Dry	D	3.65	-	-	1004	F	0.00	-	0.3	0.1	0.1	0.5	0.5	20.6	20.7	0	0	-	DRY
Wider Site R7	17/11/22	13:26	WS214	S	GL	Dry	D	1.00	-	-	1004	F	0.02	-	0.1	0.1	0.1	1.2	1.2	19.4	19.4	0	0	-	DRY
Wider Site R7	17/11/22	12:21	WS215	S	GL	0.40		2.50	-	-	1004	F	2.40	-	0.1	0.1	0.1	1.0	1.0	20.2	20.2	2	0	-	OK
Wider Site R7	17/11/22	14:15	WS216	S	GL	3.85		4.20	-	-	1004	F	-0.07	-	0.1	0.1	0.1	0.9	0.9	19.9	19.9	0	0	-	OK
Wider Site R7	17/11/22	15:02	WS217	S	GL	Dry	D	2.05	-	-	1004	F	-0.05	-	0.1	0.1	0.1	1.8	1.8	19.1	19.4	0	0	-	DRY
Wider Site R7	17/11/22	13:31	WS218	S	GL	Dry	D	1.80	-	-	1004	F	-0.07	-	0.2	0.1	0.1	1.0	1.0	20.4	20.6	0	0	-	DRY
Wider Site R7	17/11/22	12:07	WS219	S	GL	3.34		5.00	-	-	1004	F	0.04	-	0.1	0.1	0.1	1.4	1.4	19.2	19.2	0	0	-	OK
Wider Site R7	17/11/22	12:02	WS220	S	GL	1.20		3.00	-	-	1004	F	0.07	-	0.3	0.1	0.1	0.6	0.6	19.7	19.8	0	0	-	OK
Wider Site R7	17/11/22	14:22	WS221	S	GL	Dry	D	2.05	-	-	1004	F	0.00	-	0.1	0.1	0.1	1.6	1.6	19.2	19.2	0	0	-	DRY
Wider Site R7	17/11/22	13:37	WS222	S	GL	Dry	D	2.50	-	-	1004	F	-0.09	-	0.2	0.1	0.1	0.7	0.7	20.7	20.8	0	0	-	DRY
Wider Site R7	17/11/22	12:13	WS223	S	GL	Dry	D	2.00	-	-	1004	F	0.07	-	0.1	0.1	0.1	0.6	0.6	19.6	19.6	0	0	-	DRY
Wider Site R7	17/11/22	11:34	WS224	S	GL	0.84		1.40	-	-	1004	F	0.07	-	0.1	0.1	0.1	0.3	0.2	19.9	21.0	0	0	-	OK
Wider Site R7	17/11/22	14:28	WS225	S	GL	Dry	D	2.00	-	-	1004	F	0.02	-	0.1	0.1	0.1	1.0	1.0	19.9	20.0	0	0	-	DRY
Wider Site R7	17/11/22	13:50	WS226	S	GL	Dry	D	1.10	-	-	1004	F	0.00	-	0.1	0.1	0.1	0.7	0.7	19.9	19.9	0	0	-	DRY
Wider Site R7	17/11/22	13:42	WS227	S	GL	Dry	D	2.80	-	-	1004	F	0.19	-	0.2	0.1	0.1	0.8	0.8	20.8	20.8	0	0	-	DRY
Wider Site R7	16/11/22	15:19	WS228	S	GL	Dry	D	1.01	-	-	981	F	0.02	-	0.2	0.1	0.1	0.9	0.9	19.6	19.7	0	0	-	DRY
Wider Site R7	16/11/22	15:10	WS229	S	GL	Dry	D	1.00	-	-	981	F	0.05	-	0.2	0.1	0.1	0.7	0.7	20.4	20.6	0	0	-	DRY
Wider Site R7	17/11/22	14:03	WS230	S	GL	Dry	D	1.10	-	-	1004	F	0.02	-	0.1	0.1	0.1	0.8	0.8	19.7	19.7	0	0	-	DRY
Wider Site R7	16/11/22	14:02	WS231	S	GL	4.29		5.18	-	-	982	F	0.02	-	0.3	0.1	0.1	3.7	3.5	17.8	17.8	0	0	-	OK
Wider Site R7	17/11/22	11:54	WS232	S	GL	1.12		3.00	-	-	1004	F	-0.05	-	0.2	0.1	0.1	0.6	0.6	20.2	20.2	0	0	-	OK
Wider Site R7	17/11/22	11:18	WS233	S	GL	0.99		2.35	-	-	1004	F	0.00	-	0.1	0.1	0.1	2.0	2.0	18.9	19.2	0	0	-	OK
Wider Site R7	17/11/22	11:26	WS234	S	GL	1.01		1.68	-	-	1004	F	0.05	-	0.3	0.1	0.1	0.3	0.3	20.6	20.6	0	0	-	OK
Wider Site R7	16/11/22	11:53	WS235	S	GL	0.98		5.06	-	-	984	F	-0.02	-	0.1	0.1	0.1	1.7	1.2	18.5	18.5	1	0	-	OK
Wider Site R7	16/11/22	11:46	WS236	S	GL	Dry	D	1.98	-	-	984	F	-0.02	-	0.2	0.1	0.1	1.9	1.9	18.1	18.1	0	0	-	DRY
Wider Site R7	16/11/22	15:05	WS237	S	GL	Dry	D	1.05	-	-	981	F	-0.04	-	0.3	0.1	0.1	0.5	0.5	20.3	20.3	0	0	-	DRY
Wider Site R7	16/11/22	14:12	WS238	S	GL	3.74		4.97	-	-	982	F	0.07	-	0.1	0.1	0.1	2.6	2.1	19.8	19.8	0	0	-	OK
Wider Site R7	17/11/22	11:07	WS239	S	GL	1.25		2.28	-	-	1004	F	0.02	-	0.3	0.1	0.1	0.7	0.7	19.8	19.9	0	0	-	OK
Wider Site R7	17/11/22	11:12	WS240	S	GL	Dry	D	1.10	-	-	1004	F	0.09	-	0.3	0.1	0.1	1.1	1.1	19.7	19.8	0	0	-	DRY
Wider Site R7	17/11/22	10:05	WS241	S	GL	1.24		1.98	-	-	1004	F	0.16	-	0.2	0.1	0.1	1.2	1.2	19.9	19.9	0	0	-	OK
Wider Site R7	16/11/22	12:01	WS242	S	GL	0.31		3.65	-	-	984	F	17.55	-	0.1	0.1	0.1	2.6	2.6	16.9	17.0	2	0	-	OK
Wider Site R7	16/11/22	14:35	WS243	S	GL	Dry	D	1.03	-	-	981	F	0.02	-	0.3	0.1	0.1	0.7	0.7	21.4	21.4	0	0	-	DRY
Wider Site R7	16/11/22	16:15	WS244	S	GL	Dry	D	0.93	-	-	981	F	0.00	-	0.3	0.1	0.1	0.7	0.7	19.3	19.5	0	0	-	DRY
Wider Site R7	16/11/22	15:39	WS245	S	GL	0.56		2.58	-	-	981	F	0.04	-	-4.5	0.1	0.1	0.8	0.8	20.9	20.9	1	0	-	OK
Wider Site R7	16/11/22	15:48	WS246	S	GL	0.98		4.49	-	-	981	F	0.14	-	-2.2	0.1	0.1	1.0	1.0	20.2	20.3	0	0	-	OK
Wider Site R7	16/11/22	16:06	WS247	S	GL	0.56		0.93	-	-	981	F	0.05	-	0.1	0.1									

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R)/ steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any
Wider Site R8	21/12/22	10:26	BH201	S	GL	4.20		5.86	-	-	1003	F	0.12	-	0.1	0.1	0.1	0.9	0.9	20.3	20.3	0	0	-	OK
Wider Site R8	21/12/22	10:45	BH202	S	GL	3.30		5.15	-	-	1003	F	-0.05	-	0.2	0.1	0.1	0.8	0.8	19.9	20.1	0	0	-	OK
Wider Site R8	19/12/22	12:23	BH203	S	GL	2.82		5.00	-	-	997	F	-0.04	-	0.2	0.1	0.1	0.6	0.6	20.5	20.9	0	0	-	OK
Wider Site R8	19/12/22	13:00	BH204	S	GL	1.83		5.18	-	-	996	F	0.07	-	0.2	0.1	0.1	0.8	0.8	20.1	20.4	0	0	-	OK
Wider Site R8	19/12/22	12:32	BH205	S	GL	0.42		4.16	-	-	997	F	8.77	-	-2.0	0.1	0.1	2.3	2.3	17.1	17.4	18	0	-	OK
Wider Site R8	21/12/22	09:49	WS201	S	GL	Dry	D	1.90	-	-	1003	F	0.11	-	0.1	0.1	0.1	1.3	0.7	19.9	20.3	0	0	-	DRY
Wider Site R8	21/12/22	09:57	WS202	S	GL	1.10		2.00	-	-	1003	F	1.07	-	-4.5	0.1	0.1	1.2	1.2	19.7	19.7	1	0	-	OK
Wider Site R8	21/12/22	12:06	WS203	S	GL	Dry	D	2.00	-	-	1003	F	-0.04	-	0.1	0.1	0.1	0.7	0.7	20.0	20.2	0	0	-	DRY
Wider Site R8	21/12/22	11:58	WS204	S	GL	Dry	D	1.00	-	-	1003	F	-0.02	-	0.2	0.1	0.1	0.2	0.2	21.3	21.4	0	0	-	DRY
Wider Site R8	21/12/22	12:13	WS205	S	GL	0.55		3.00	-	-	1003	F	0.07	-	0.2	0.1	0.1	1.7	1.6	20.1	20.3	0	0	-	OK
Wider Site R8	21/12/22	11:51	WS206	S	GL	1.44		4.20	-	-	1003	F	-0.21	-	0.1	0.1	0.1	2.0	2.0	18.2	18.2	0	0	-	OK
Wider Site R8	21/12/22	11:42	WS207	S	GL	0.42		2.20	-	-	1003	F	-0.58	-	-2.3	0.1	0.1	1.5	1.5	20.5	20.5	2	0	-	OK
Wider Site R8	21/12/22	11:37	WS208	S	GL	0.24		2.15	-	-	1003	F	10.96	-	3.2	0.1	0.1	1.7	1.7	20.2	20.3	3	0	-	OK
Wider Site R8	21/12/22	12:19	WS209	S	GL	0.98		3.00	-	-	1003	F	0.09	-	0.0	0.1	0.1	2.0	2.0	18.6	18.8	0	0	-	OK
Wider Site R8	21/12/22	11:20	WS210	S	GL	0.33		2.60	-	-	1003	F	2.25	-	0.9	0.1	0.1	1.3	1.3	20.3	20.4	2	0	-	OK
Wider Site R8	21/12/22	09:38	WS211	S	GL	1.98		3.40	-	-	1003	F	0.04	-	0.1	0.1	0.1	3.5	3.3	17.3	17.4	0	0	-	OK
Wider Site R8	21/12/22	10:03	WS213	S	GL	Dry	D	3.66	-	-	1003	F	0.00	-	0.2	0.1	0.1	0.6	0.5	19.7	19.8	0	0	-	DRY
Wider Site R8	21/12/22	12:25	WS214	S	GL	Dry	D	1.00	-	-	1003	F	0.02	-	0.1	0.1	0.1	1.1	1.0	20.2	20.2	0	0	-	DRY
Wider Site R8	21/12/22	11:29	WS215	S	GL	0.33		2.50	-	-	1003	F	3.50	-	-1.4	0.1	0.1	0.6	0.6	20.7	20.7	1	0	-	OK
Wider Site R8	21/12/22	09:25	WS216	S	GL	3.80		4.20	-	-	1003	F	-0.10	-	0.2	0.1	0.1	1.5	1.5	19.7	19.8	0	0	-	OK
Wider Site R8	21/12/22	10:11	WS217	S	GL	Dry	D	2.05	-	-	1003	F	-0.11	-	0.3	0.1	0.1	1.5	1.4	19.8	19.9	0	0	-	DRY
Wider Site R8	21/12/22	12:31	WS218	S	GL	Dry	D	1.80	-	-	1003	F	-0.09	-	0.1	0.1	0.1	1.1	1.1	19.6	19.7	0	0	-	DRY
Wider Site R8	21/12/22	11:05	WS219	S	GL	3.31		5.00	-	-	1003	F	0.02	-	0.3	0.1	0.1	1.0	1.0	19.8	19.9	0	0	-	OK
Wider Site R8	21/12/22	11:11	WS220	S	GL	0.99		3.00	-	-	1003	F	0.02	-	0.2	0.1	0.1	0.8	0.8	19.2	19.2	0	0	-	OK
Wider Site R8	21/12/22	09:30	WS221	S	GL	Dry	D	2.05	-	-	1003	F	0.02	-	0.2	0.1	0.1	1.7	1.7	18.8	18.9	0	0	-	DRY
Wider Site R8	21/12/22	12:44	WS222	S	GL	Dry	D	2.50	-	-	1003	F	0.10	-	0.3	0.1	0.1	0.8	0.8	19.8	20.1	0	0	-	DRY
Wider Site R8	21/12/22	10:58	WS223	S	GL	Dry	D	2.00	-	-	1003	F	0.02	-	0.2	0.1	0.1	0.5	0.5	20.4	20.5	0	0	-	DRY
Wider Site R8	19/12/22	11:13	WS224	S	GL	0.64		1.40	-	-	1003	F	0.11	-	0.3	0.1	0.1	0.4	0.1	20.3	21.0	0	0	-	OK
Wider Site R8	21/12/22	09:35	WS225	S	GL	Dry	D	2.00	-	-	1003	F	0.07	-	0.1	0.1	0.1	1.2	1.2	19.3	19.3	0	0	-	DRY
Wider Site R8	21/12/22	10:21	WS226	S	GL	Dry	D	1.10	-	-	1003	F	0.02	-	0.3	0.1	0.1	0.5	0.5	20.5	20.5	0	0	-	DRY
Wider Site R8	21/12/22	12:49	WS227	S	GL	Dry	D	2.80	-	-	1003	F	0.20	-	0.2	0.1	0.1	0.8	0.8	20.2	20.2	0	0	-	DRY
Wider Site R8	19/12/22	12:17	WS228	S	GL	Dry	D	1.01	-	-	996	F	-0.16	-	0.2	0.1	0.1	0.8	0.8	20.1	20.2	0	0	-	DRY
Wider Site R8	19/12/22	12:12	WS229	S	GL	Dry	D	1.00	-	-	996	F	0.21	-	0.3	0.1	0.1	0.6	0.6	20.6	20.6	0	0	-	DRY
Wider Site R8	21/12/22	10:40	WS230	S	GL	Dry	D	1.10	-	-	1003	F	0.03	-	0.2	0.1	0.1	0.7	0.7	20.4	20.6	0	0	-	DRY
Wider Site R8	19/12/22	11:20	WS231	S	GL	3.49		5.18	-	-	997	F	-0.05	-	0.3	0.1	0.1	3.6	3.6	17.1	17.1	0	0	-	OK
Wider Site R8	21/12/22	10:51	WS232	S	GL	0.87		3.00	-	-	1003	F	-0.20	-	-2.9	0.1	0.1	0.7	0.7	19.5	19.7	0	0	-	OK
Wider Site R8	19/12/22	11:02	WS233	S	GL	0.33		2.35	-	-	1003	F	-0.10	-	0.2	0.1	0.1	1.8	1.8	19.1	19.2	0	0	-	OK
Wider Site R8	19/12/22	11:13	WS234	S	GL	0.59		1.68	-	-	1003	F	0.04	-	0.2	0.1	0.1	0.2	0.3	20.5	20.6	0	0	-	OK
Wider Site R8	19/12/22	14:37	WS235	S	GL	0.94		5.06	-	-	1003	F	0.01	-	0.3	0.1	0.1	1.6	1.7	17.5	17.6	0	0	-	OK
Wider Site R8	19/12/22	14:29	WS236	S	GL	Dry	D	1.98	-	-	1003	F	0.02	-	0.3	0.1	0.1	1.9	1.9	19.2	19.2	0	0	-	DRY
Wider Site R8	19/12/22	12:01	WS237	S	GL	Dry	D	1.05	-	-	996	F	0.16	-	0.3	0.1	0.1	0.5	0.5	20.6	20.8	0	0	-	DRY
Wider Site R8	19/12/22	11:29	WS238	S	GL	1.96		4.97	-	-	996	F	0.00	-	0.2	0.1	0.1	1.8	1.6	19.1	19.6	1	0	-	OK
Wider Site R8	19/12/22	10:49	WS239	S	GL	0.98		2.28	-	-	1003	F	-0.02	-	0.3	0.1	0.1	0.8	0.8	19.5	19.6	0	0	-	OK
Wider Site R8	19/12/22	10:55	WS240	S	GL	Dry	D	1.10	-	-	1003	F	0.12	-	0.3	0.1	0.1	1.2	1.2	19.4	19.4	0	0	-	OK
Wider Site R8	19/12/22	09:50	WS241	S	GL	0.88		1.98	-	-	1003	F	0.03	-	-1.6	0.1	0.1	1.5	1.5	19.2	19.3	0	0	-	OK
Wider Site R8	19/12/22	14:55	WS242	S	GL	0.28		3.65	-	-	1003	F	8.85	-	-1.2	0.1	0.1	2.3	2.4	18.5	18.5	1	0	-	OK
Wider Site R8	19/12/22	11:42	WS243	S	GL	Dry	D	1.03	-	-	996	F	0.12	-	0.2	0.1	0.1	0.7	0.7	20.5	20.6	0	0	-	DRY
Wider Site R8	19/12/22	13:11	WS244	S	GL	0.65		0.93	-	-	996	F	0.11	-	0.2	0.1	0.1	0.6	0.6	18.8	20.7	0	0	-	OK
Wider Site R8	19/12/22	12:46	WS245	S	GL	0.45		2.58	-	-	997	F	9.90	-	0.3	0.1	0.1	2.0	2.0	16.3	16.4	2	0	-	OK
Wider Site R8	19/12/22	12:53	WS246	S	GL	0.84		4.49	-	-	996	F	1.81	-	0.1	0.1	0.1	2.8	2.7	17.1	17.2	2	0	-	OK
Wider Site R8	19/12/22	13:05	WS247	S	GL	0.30		0.93	-	-	997	F	41.77	-	6.3	0.1	0.1	1.2	1.2	13.4	13.4	2	0	-	OK
Wider Site R8	19/12/22	10:37	WS248	S	GL	1.28		1.65	-	-	1003	F	0.14	-	0.3	0.1	0.1	0.9	0.9	19.8	19.8	0	0	-	OK
Wider Site R8	19/12/22	10:19	WS249	S	GL	Dry	D	1.00	-	-	1003	F	0.06	-	0.3	0.1	0.1	1.2	1.3	18.9	19.0	0	0	-	DRY
Wider Site R8	19/12/22	10:29	WS250	S	GL	0.68		0.89	-	-	1003	F	1.02	-	0.2	0.1	0.1	1.0	1.0	19.9	20.1	0	0	-	OK
Wider Site R8	19/12/22	09:59	WS251	S	GL	0.32		2.00	-	-	1003	F	-0.02	-	0.1	0.1	0.1	1.1	1.2	20.1	19.8	1	0	-	OK
Wider Site R8	19/12/22	10:05	WS252	S	GL	0.25		5.18	-	-	1003	F	1.03	-	-3.2	0.1	0.2	1.1	1.2	18.8	17.9	0	0	-	OK
Wider Site R9	10/01/23	12:58	BH201	S	GL	3.61		5.86	-	-	997	R	0.09	-	0.2	0.1	0.1	0.8	0.8	20.2	20.2	0	0	-	OK
Wider Site R9	10/01/23	13:12	BH202	S	GL	0.95		5.15	-	-	997	R	0.25	-	-4.1	0.1	0.1	0.7	0.6	20.4	20.6	0	0	-	OK
Wider Site R9	11/01/23	11:55	BH203	S	GL	2.75		5.00	-	-	1003	R	-0.04	-	0.2	0.1	0.1	0.6	0.6	20.5	20.9	0	0	-	OK
Wider Site R9	11/01/23	12:26	BH204	S	GL	1.74		5.18	-	-	1003	R	0.07	-	0										



Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R)/ steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Wider Site R9	10/01/23	14:40	WS205	S	GL	0.30		3.00	-	-	996	R	-0.11	-	0.2	0.1	0.1	1.5	1.5	20.4	20.4	0	0	-	OK
Wider Site R9	10/01/23	14:19	WS206	S	GL	1.22		4.20	-	-	996	R	-0.04	-	0.2	0.1	0.1	1.9	1.9	19.5	19.5	0	0	-	OK
Wider Site R9	10/01/23	14:10	WS207	S	GL	0.30		2.20	-	-	996	R	-0.44	-	-6.1	0.1	0.1	2.7	2.7	17.9	19.7	1	0	-	OK
Wider Site R9	10/01/23	14:05	WS208	S	GL	0.18		2.15	-	-	996	R	25.38	-	4.7	0.1	0.1	4.0	4.0	11.6	11.6	4	0	-	OK
Wider Site R9	10/01/23	14:46	WS209	S	GL	0.82		3.00	-	-	996	R	-0.30	-	-1.5	0.1	0.1	1.2	1.2	19.7	19.9	1	0	-	OK
Wider Site R9	10/01/23	13:43	WS210	S	GL	0.24		2.60	-	-	997	R	23.39	-	4.1	0.1	0.1	2.0	2.0	14.6	14.7	0	0	-	OK
Wider Site R9	10/01/23	12:14	WS211	S	GL	1.54		3.40	-	-	997	R	4.93	-	0.2	0.1	0.1	2.8	2.8	16.6	16.6	0	0	-	OK
Wider Site R9	10/01/23	12:38	WS213	S	GL	Dry	D	3.66	-	-	997	R	0.28	-	0.2	0.1	0.1	0.5	0.5	20.6	20.6	0	0	-	DRY
Wider Site R9	10/01/23	14:52	WS214	S	GL	Dry	D	1.02	-	-	995	R	0.04	-	0.2	0.1	0.1	0.9	0.9	19.8	19.8	0	0	-	DRY
Wider Site R9	10/01/23	13:58	WS215	S	GL	0.27		2.50	-	-	996	R	12.26	-	0.2	0.1	0.1	1.9	1.9	12.6	12.6	4	0	-	OK
Wider Site R9	10/01/23	11:54	WS216	S	GL	3.23		4.20	-	-	997	R	0.00	-	0.2	0.1	0.1	1.2	1.2	19.5	19.6	0	0	-	OK
Wider Site R9	10/01/23	12:46	WS217	S	GL	Dry	D	2.09	-	-	997	R	-0.04	-	0.2	0.1	0.1	1.7	1.7	19.9	19.9	0	0	-	DRY
Wider Site R9	10/01/23	14:56	WS218	S	GL	Dry	D	1.82	-	-	995	R	0.00	-	0.2	0.1	0.1	1.0	1.0	19.7	19.7	0	0	-	DRY
Wider Site R9	10/01/23	13:30	WS219	S	GL	3.28		5.00	-	-	996	R	0.05	-	0.2	0.1	0.1	1.7	1.7	19.3	19.6	0	0	-	OK
Wider Site R9	10/01/23	13:35	WS220	S	GL	0.84		3.00	-	-	997	R	-0.95	-	-4.5	0.1	0.1	1.0	1.0	18.2	18.2	2	0	-	OK
Wider Site R9	10/01/23	11:59	WS221	S	GL	Dry	D	1.99	-	-	997	R	-0.04	-	0.2	0.1	0.1	1.7	1.7	18.8	18.9	0	0	-	DRY
Wider Site R9	10/01/23	15:09	WS222	S	GL	Dry	D	2.49	-	-	995	R	0.19	-	0.2	0.1	0.1	0.7	0.7	20.5	20.5	0	0	-	DRY
Wider Site R9	10/01/23	13:26	WS223	S	GL	1.73		2.00	-	-	996	R	-0.04	-	0.2	0.1	0.1	0.5	0.5	20.3	20.4	0	0	-	OK
Wider Site R9	11/01/23	10:17	WS224	S	GL	0.44		1.40	-	-	1003	R	0.07	-	0.2	0.1	0.1	0.3	0.3	21.2	21.4	0	0	-	OK
Wider Site R9	10/01/23	12:04	WS225	S	GL	Dry	D	2.00	-	-	997	R	-0.05	-	0.2	0.1	0.1	1.0	1.0	19.5	19.5	0	0	-	DRY
Wider Site R9	10/01/23	12:53	WS226	S	GL	Dry	D	1.18	-	-	997	R	0.09	-	0.2	0.1	0.1	0.7	0.7	20.2	20.4	0	0	-	DRY
Wider Site R9	10/01/23	15:14	WS227	S	GL	Dry	D	2.78	-	-	995	R	0.14	-	0.2	0.1	0.1	0.8	0.8	20.3	20.4	0	0	-	DRY
Wider Site R9	11/01/23	11:47	WS228	S	GL	Dry	D	1.01	-	-	1003	R	0.02	-	0.2	0.1	0.1	0.9	0.9	19.6	19.7	0	0	-	DRY
Wider Site R9	11/01/23	11:38	WS229	S	GL	Dry	D	1.00	-	-	1003	R	0.05	-	0.2	0.1	0.1	0.7	0.7	20.4	20.6	0	0	-	DRY
Wider Site R9	10/01/23	13:08	WS230	S	GL	Dry	D	1.15	-	-	997	R	-0.19	-	0.2	0.1	0.1	0.7	0.7	20.0	20.1	0	0	-	DRY
Wider Site R9	11/01/23	10:31	WS231	S	GL	3.28		5.18	-	-	1003	R	0.02	-	0.3	0.1	0.1	3.7	3.5	17.8	17.8	0	0	-	OK
Wider Site R9	10/01/23	13:18	WS232	S	GL	0.13		3.00	-	-	997	R	-0.23	-	-4.1	0.1	0.1	0.6	0.6	20.6	20.8	0	0	-	OK
Wider Site R9	11/01/23	10:08	WS233	S	GL	0.12		2.35	-	-	1003	R	-0.53	-	-2.8	0.1	0.1	1.5	1.5	17.6	17.7	0	0	-	OK
Wider Site R9	11/01/23	10:24	WS234	S	GL	0.21		1.68	-	-	1003	R	4.12	-	-3.2	0.1	0.1	0.9	0.9	15.8	15.8	2	0	-	OK
Wider Site R9	11/01/23	14:16	WS235	S	GL	0.91		5.06	-	-	1003	R	0.02	-	0.2	0.1	0.1	1.7	1.6	17.5	17.5	0	0	-	OK
Wider Site R9	11/01/23	14:09	WS236	S	GL	Dry	D	1.98	-	-	1003	R	0.02	-	0.3	0.1	0.1	1.9	1.9	19.2	19.2	0	0	-	DRY
Wider Site R9	11/01/23	11:28	WS237	S	GL	Dry	D	1.05	-	-	1003	R	0.16	-	0.3	0.1	0.1	0.5	0.5	20.6	20.8	0	0	-	DRY
Wider Site R9	11/01/23	10:41	WS238	S	GL	1.88		4.97	-	-	1003	R	0.07	-	0.2	0.1	0.1	2.6	2.1	19.8	19.8	0	0	-	OK
Wider Site R9	11/01/23	09:55	WS239	S	GL	0.13		2.28	-	-	1003	R	-1.48	-	-3.1	0.1	0.1	1.0	1.0	16.6	16.8	2	0	-	OK
Wider Site R9	11/01/23	10:01	WS240	S	GL	0.14		1.14	-	-	1003	R	24.04	-	1.8	0.1	0.1	2.0	2.0	17.4	17.4	2	0	-	OK
Wider Site R9	11/01/23	08:51	WS241	S	GL	0.55		1.98	-	-	1002	R	0.02	-	-1.7	0.1	0.1	0.7	0.7	19.8	19.8	0	0	-	OK
Wider Site R9	11/01/23	14:24	WS242	S	GL	0.22		3.65	-	-	1003	R	7.94	-	-3.3	0.1	0.1	2.4	2.4	18.6	18.8	1	0	-	OK
Wider Site R9	11/01/23	11:04	WS243	S	GL	Dry	D	1.03	-	-	1003	R	0.02	-	0.3	0.1	0.1	0.7	0.7	21.4	21.4	0	0	-	DRY
Wider Site R9	11/01/23	12:31	WS244	S	GL	0.66		0.93	-	-	1003	R	0.11	-	0.2	0.1	0.1	0.7	0.7	19.3	19.5	0	0	-	DRY
Wider Site R9	11/01/23	12:07	WS245	S	GL	0.28		2.58	-	-	1003	R	0.04	-	-4.5	0.1	0.1	0.8	0.8	20.9	20.9	1	0	-	OK
Wider Site R9	11/01/23	12:16	WS246	S	GL	0.75		4.49	-	-	1003	R	0.14	-	-2.2	0.1	0.1	1.0	1.0	20.2	20.3	0	0	-	OK
Wider Site R9	11/01/23	12:34	WS247	S	GL	0.25		0.93	-	-	1003	R	0.05	-	0.1	0.1	0.1	1.2	1.2	18.5	18.8	0	0	-	OK
Wider Site R9	11/01/23	09:43	WS248	S	GL	0.36		1.65	-	-	1003	R	2.68	-	-5.6	0.1	0.1	1.0	1.0	15.7	15.8	3	0	-	OK
Wider Site R9	11/01/23	09:26	WS249	S	GL	0.65		1.00	-	-	1003	R	-0.02	-	-1.6	0.1	0.1	1.8	1.8	19.5	19.6	1	0	-	OK
Wider Site R9	11/01/23	09:35	WS250	S	GL	0.22		0.89	-	-	1003	R	0.55	-	-4.0	0.1	0.1	1.0	1.0	20.7	20.8	1	0	-	OK
Wider Site R9	11/01/23	09:02	WS251	S	GL	0.25		2.00	-	-	1003	R	-0.16	-	-0.4	0.1	0.1	1.3	1.1	19.4	19.5	0	0	-	WATER LOGGED FIELD
Wider Site R9	11/01/23	09:14	WS252	S	GL	0.19		5.18	-	-	1003	R	-0.39	-	-4.4	0.1	0.1	1.3	1.3	16.9	17.0	0	0	-	OK
Wider Site R10	09/02/23	14:29	BH201	S	GL	3.35		4.87	-	-	1027	R	-0.05	-	0.1	0.1	0.1	0.7	0.7	21.1	21.4	0	0	-	OK
Wider Site R10	10/02/23	14:55	BH203	S	GL	2.82		4.84	-	-	1030	R	0.05	-	0.1	0.1	0.1	0.6	0.6	20.3	20.3	0	0	-	OK
Wider Site R10	10/02/23	15:49	BH204	S	GL	1.82		5.01	-	-	1030	R	-0.05	-	0.1	0.1	0.1	0.8	0.8	20.1	20.3	0	0	-	SILT
Wider Site R10	10/02/23	15:11	BH205	S	GL	0.60		4.16	-	-	1030	R	-6.63	-	-0.1	0.1	0.1	1.9	1.9	15.4	15.4	2	0	-	OK
Wider Site R10	09/02/23	13:47	WS201	S	GL	1.64		1.95	-	-	1027	R	-0.58	-	0.1	0.1	0.1	0.7	0.5	14.2	15.7	0	0	-	OK
Wider Site R10	09/02/23	13:56	WS202	S	GL	0.57		2.03	-	-	1027	R	-1.13	-	-0.1	0.1	0.1	0.5	0.5	20.2	20.4	2	0	-	OK
Wider Site R10	09/02/23	15:49	WS203	S	GL	2.03	D	2.03	-	-	1027	R	-0.11	-	0.1	0.1	0.1	0.6	0.6	20.8	21.4	0	0	-	DRY
Wider Site R10	09/02/23	15:58	WS204	S	GL	1.35	D	1.35	-	-	1028	R	0.05	-	0.1	0.1	0.1	0.6	0.6	20.5	20.5	0	0	-	DRY
Wider Site R10	09/02/23	15:35	WS205	S	GL	0.57		2.99	-	-	1028	R	-0.86	-	-0.1	0.1	0.1	2.6	2.5	17.9	18.1	1	0	-	OK
Wider Site R10	09/02/23	15:24	WS206	S	GL	1.54		4.19	-	-	1028	R	-0.11	-	0.1	0.1	0.1	1.6	1.6	20.7	20.8	0	0	-	SILT
Wider Site R10	09/02/23	16:09	WS207	S	GL	0.58		2.16	-	-	1029	R	0.04	-	0.1	0.1	0.1	2.2	2.2	19.3	19.3	15	0	-	SILT
Wider Site R10	09/02/23	16:29	WS208	S	GL	0.40		2.20	-	-	1029	R	-22.80	-	-0.4	0.1	0.1	3.2	3.2	12.5	12.5	4	0	-	WATER SILT 3rd run on gas, 2.30min water up pipe. Pi
Wider Site R10	09/02/23	15:15	WS209	S	GL	1.00		3.0																	

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)							Local conditions		
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R)/ steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any
Wider Site R10	09/02/23	13:03	WS216	S	GL	2.97		4.07	-	-	1026	R	0.35	-	0.1	0.1	0.1	1.0	1.0	19.1	19.1	0	1	-	OK
Wider Site R10	09/02/23	14:14	WS217	S	GL	2.08	D	2.08	-	-	1027	R	0.04	-	0.1	0.1	0.1	1.4	1.4	20.6	20.7	0	0	-	DRY
Wider Site R10	09/02/23	14:49	WS218	S	GL	1.81	D	1.81	-	-	1027	R	0.07	-	0.1	0.1	0.1	0.8	0.8	20.9	20.9	0	0	-	DRY
Wider Site R10	09/02/23	13:14	WS221	S	GL	2.04	D	2.04	-	-	1027	R	0.02	-	0.1	0.1	0.1	1.2	1.2	19.7	20.0	0	0	-	DRY
Wider Site R10	09/02/23	14:42	WS222	S	GL	2.49	D	2.49	-	-	1027	R	0.07	-	0.1	0.1	0.1	0.8	0.8	20.8	20.8	0	0	-	DRY
Wider Site R10	10/02/23	13:47	WS224	S	GL	0.56		1.39	-	-	1030	R	-0.02	-	0.1	0.1	0.1	0.4	0.3	20.6	21.2	0	0	-	OK
Wider Site R10	09/02/23	13:20	WS225	S	GL	2.04	D	2.04	-	-	1026	R	-0.02	-	0.1	0.1	0.1	0.8	0.8	20.4	20.5	0	0	-	DRY
Wider Site R10	09/02/23	14:22	WS226	S	GL	1.18	D	1.18	-	-	1027	R	0.11	-	0.1	0.1	0.1	0.6	0.6	21.2	21.3	0	0	-	DRY
Wider Site R10	09/02/23	14:36	WS227	S	GL	2.77	D	2.77	-	-	1027	R	0.07	-	0.1	0.1	0.1	0.7	0.7	21.2	21.4	0	0	-	DRY
Wider Site R10	10/02/23	14:47	WS228	S	GL	1.03	D	1.03	-	-	1029	R	0.05	-	0.1	0.1	0.1	0.8	0.8	20.1	20.3	0	0	-	DRY
Wider Site R10	10/02/23	14:42	WS229	S	GL	2.00	D	2.00	-	-	1029	R	0.02	-	0.1	0.1	0.1	0.5	0.5	20.9	20.9	0	0	-	DRY
Wider Site R10	10/02/23	14:08	WS231	S	GL	2.80		4.96	-	-	1030	R	0.14	-	0.1	0.1	0.1	3.3	3.3	18.5	18.5	0	0	-	OK
Wider Site R10	10/02/23	14:35	WS232	S	GL	1.06	D	1.06	-	-	1029	R	-0.11	-	0.1	0.1	0.1	0.5	0.5	21.2	21.5	0	0	-	DRY
Wider Site R10	10/02/23	13:21	WS233	S	GL	0.40		2.27	-	-	1031	R	-0.04	-	0.1	0.1	0.1	1.0	0.7	20.5	20.8	0	0	-	SILT
Wider Site R10	10/02/23	13:39	WS234	S	GL	0.33		1.67	-	-	1031	R	-13.79	-	-0.2	0.1	0.1	0.5	0.5	17.2	17.2	1	0	-	OK
Wider Site R10	10/02/23	14:15	WS238	S	GL	1.86		4.98	-	-	1030	R	0.04	-	0.1	0.1	0.1	1.5	1.5	19.8	19.8	1	0	-	OK
Wider Site R10	10/02/23	12:58	WS239	S	GL	0.47		2.28	-	-	1030	R	-2.54	-	-0.3	0.1	0.1	1.2	1.1	18.9	19.0	1	0	-	OK
Wider Site R10	10/02/23	13:14	WS240	S	GL	0.69		1.50	-	-	1030	R	-23.61	-	-0.6	0.1	0.1	0.7	0.7	19.1	19.1	1	0	-	OK
Wider Site R10	10/02/23	11:06	WS241	S	GL	0.78		2.00	-	-	1031	R	-0.04	-	0.1	0.1	0.1	0.6	0.5	20.1	20.6	0	0	-	OK
Wider Site R10	10/02/23	14:24	WS243	S	GL	1.03	D	1.03	-	-	1029	R	0.02	-	0.1	0.1	0.1	0.7	0.6	20.8	21.1	0	0	-	DRY
Wider Site R10	10/02/23	16:20	WS244	S	GL	0.64		0.95	-	-	1030	R	-14.83	-	-0.3	0.1	0.1	0.4	0.4	20.1	20.2	2	0	-	OK
Wider Site R10	10/02/23	15:27	WS245	S	GL	0.59		2.56	-	-	1030	R	-20.03	-	-0.2	0.1	0.1	0.8	0.8	18.6	18.7	1	0	-	SILT
Wider Site R10	10/02/23	15:42	WS246	S	GL	0.93		4.48	-	-	1030	R	0.93	-	-0.2	0.1	0.1	2.4	2.1	17.6	18.2	2	0	-	OK
Wider Site R10	10/02/23	16:04	WS247	S	GL	0.03		0.96	-	-	1030	R	11.00	-	0.3	0.1	0.1	0.9	0.9	12.0	12.0	4	0	-	OK
Wider Site R10	10/02/23	12:14	WS248	S	GL	0.58		1.65	-	-	1031	R	-18.21	-	-0.2	0.1	0.1	0.5	0.5	19.5	19.5	1	0	-	OK
Wider Site R10	10/02/23	11:49	WS249	S	GL	1.01	D	1.01	-	-	1031	R	0.09	-	0.1	0.1	0.1	1.7	1.7	19.1	19.2	0	0	-	DRY
Wider Site R10	10/02/23	11:57	WS250	S	GL	0.57		0.90	-	-	1031	R	0.11	-	0.1	0.1	0.1	1.0	1.0	20.7	20.9	0	0	-	OK
Wider Site R10	10/02/23	11:21	WS251	S	GL	0.43		2.00	-	-	1031	R	-4.21	-	-0.1	0.1	0.1	1.0	0.8	19.1	19.3	7	0	-	OK
Wider Site R10	10/02/23	11:38	WS252	S	GL	0.43		5.03	-	-	1031	R	-9.78	-	-0.2	0.1	0.1	1.1	1.1	18.2	18.3	0	0	-	OK
Wider Site R11	09/03/23	14:21	BH201	S	GL	3.46		4.86	-	-	985	F	-0.04	-	0.1	0.1	0.1	0.8	0.8	21.0	20.9	0	0	-	OK
Wider Site R11	13/03/23	12:19	BH202	S	GL	1.30		5.16	-	-	984	F	0.19	-	0.1	0.1	0.1	0.5	0.5	20.6	20.6	0	0	-	OK
Wider Site R11	09/03/23	12:51	CP301	S	GL	2.36		4.74	-	-	986	F	0.37	-	0.1	0.1	0.1	1.6	1.6	19.5	19.5	0	0	-	SILT
Wider Site R11	09/03/23	12:41	CP302	S	GL	1.96		4.10	-	-	986	F	-0.04	-	0.1	0.1	0.1	1.0	1.0	20.3	20.2	0	0	-	OK
Wider Site R11	09/03/23	14:57	CP303	S	GL	3.29		4.05	-	-	984	F	0.05	-	0.1	0.1	0.1	0.6	0.6	21.0	21.0	0	0	-	OK
Wider Site R11	09/03/23	14:41	CP304	S	GL	3.03		4.05	-	-	985	F	0.05	-	0.1	0.1	0.1	0.7	0.7	21.1	20.8	0	0	-	OK
Wider Site R11	09/03/23	14:08	CP305	S	GL	3.08		4.72	-	-	985	F	0.04	-	0.1	0.1	0.1	1.2	1.2	20.5	20.4	0	0	-	OK
Wider Site R11	13/03/23	12:12	RO301	S	GL	0.34		7.72	-	-	984	F	0.44	-	0.1	0.1	0.1	0.3	0.4	20.2	20.1	1	0	-	OK
Wider Site R11	13/03/23	12:07	RO302	S	GL	0.15		3.16	-	-	984	F	-0.14	-	-0.1	0.1	0.1	0.1	0.1	21.1	20.9	0	0	-	OK
Wider Site R11	14/03/23	14:54	RO303	S	GL	0.18		3.54	-	-	1004	R	-0.18	-	0.1	0.1	0.1	0.1	0.1	20.9	20.8	0	0	-	OK
Wider Site R11	14/03/23	14:49	RO304	S	GL	0.32		8.04	-	-	1004	R	0.02	-	0.1	0.1	0.1	0.3	0.3	20.2	20.2	1	0	-	SILT
Wider Site R11	14/03/23	13:37	RO305	S	GL	0.13		2.38	-	-	1004	R	38.20	-	1.5	0.1	0.1	1.3	1.3	17.2	17.2	3	0	-	OK
Wider Site R11	09/03/23	13:30	RO306	S	GL	0.76		5.55	-	-	986	F	11.37	-	0.1	0.1	0.1	1.1	1.1	19.5	19.4	3	0	-	OK
Wider Site R11	09/03/23	13:36	RO307	S	GL	1.38		5.13	-	-	985	F	0.26	-	0.1	0.1	0.1	0.5	0.6	21.2	21.1	0	0	-	OK
Wider Site R11	09/03/23	13:42	RO307A	S	GL	1.39		2.16	-	-	985	F	0.02	-	0.1	0.1	0.1	0.4	0.4	21.4	21.0	1	0	-	OK
Wider Site R11	10/03/23	12:01	RO309	S	GL	5.05		5.60	-	-	998	R	0.12	-	0.1	0.1	0.1	1.0	1.0	20.2	20.2	0	0	-	OK
Wider Site R11	10/03/23	12:07	RO309A	S	GL	4.13	D*	4.23	-	-		R	-0.02	-	0.1	0.1	0.1	0.9	0.9	20.4	20.2	0	0	-	OK
Wider Site R11	10/03/23	11:50	RO310	S	GL	4.10		6.08	-	-	998	R	0.00	-	0.1	0.1	0.1	1.5	1.5	19.9	19.8	0	0	-	OK
Wider Site R11	10/03/23	11:34	RO311	S	GL	1.09		5.09	-	-	997	R	0.12	-	0.1	0.1	0.1	0.3	0.5	21.4	21.3	0	0	-	OK
Wider Site R11	10/03/23	11:21	RO312	S	GL	3.66		9.44	-	-	997	R	0.69	-	0.1	0.1	0.1	0.4	0.4	20.6	20.6	2	0	-	OK
Wider Site R11	10/03/23	11:28	RO312A	S	GL	2.12	D	2.12	-	-	997	R	0.11	-	0.1	0.1	0.1	0.3	0.4	21.3	21.0	0	0	-	DRY
Wider Site R11	10/03/23	12:15	RO313	S	GL	3.18		4.47	-	-	999	R	0.86	-	0.1	0.1	0.1	2.9	2.9	17.2	17.2	0	0	-	OK
Wider Site R11	10/03/23	12:20	RO313A	S	GL	0.79	D	0.79	-	-	999	R	0.09	-	0.1	0.1	0.1	0.8	0.9	19.6	19.3	0	0	-	DRY
Wider Site R11	10/03/23	12:49	RO314	S	GL	0.75		4.66	-	-	1000	R	15.71	-	0.3	0.1	0.1	1.6	1.6	18.2	18.2	9	0	-	OK
Wider Site R11	09/03/23	15:26	RO315	S	GL	0.19		5.03	-	-	985	F	79.12	-	1.5	0.1	0.1	1.6	1.6	4.0	4.0	1	0	-	FLOODED AROUND STANDPIPE
Wider Site R11	09/03/23	15:04	RO316	S	GL	2.29		5.47	-	-	985	F	0.32	-	0.1	0.1	0.1	0.7	0.7	19.6	19.6	2	0	-	OK
Wider Site R11	09/03/23	15:08	RO316A	S	GL	1.16		1.31	-	-	985	F	0.11	-	0.1	0.1	0.1	0.2	0.2	21.2	21.1	0	0	-	OK
Wider Site R11	10/03/23	12:59	RO317	S	GL	0.23		7.45	-	-	1000	R	0.30	-	0.1	0.1	0.1	0.5	0.6	20.2	20.2	1	0	-	OK
Wider Site R11	10/03/23	13:34	RO318	S	GL	0.50		5.84	-	-	1000	R	7.26	-	0.3	0.1	0.1	1.9	1.9	15.5	15.5	3	0	-	FLOODED AROUND STANDPIPE
Wider Site R11	10/03/23	13:38	RO318A	S	GL	0.42		4.17	-	-	1000	R	0.97	-	0.1	0.1	0.1	1.7	1.7	18.7	18.6	1	0	-	OK

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Wider Site R11	10/03/23	11:56	WS203	S	GL	2.69	D	2.69	-	-	998	R	-0.05	-	0.1	0.1	0.1	0.7	0.7	20.8	20.8	0	0	-	DRY
Wider Site R11	10/03/23	12:26	WS204	S	GL	2.91	D	3.11	-	-	1000	R	-0.04	-	0.1	0.1	0.1	1.0	1.0	18.4	18.4	0	0	-	DRY
Wider Site R11	10/03/23	11:44	WS205	S	GL	2.46		3.14	-	-	997	R	4.83	-	0.3	0.1	0.1	2.9	2.9	16.0	16.0	0	1	-	OK
Wider Site R11	10/03/23	12:34	WS206	S	GL	1.52		2.04	-	-	1000	R	0.05	-	0.1	0.1	0.1	1.9	1.9	19.2	19.3	0	0	-	SILT
Wider Site R11	10/03/23	13:05	WS207	S	GL	2.26		2.50	-	-	1000	R	0.62	-	0.1	0.1	0.1	2.4	2.4	18.8	19.0	0	5	-	OK
Wider Site R11	10/03/23	13:21	WS208	S	GL	3.45		3.84	-	-	1000	R	21.12	-	0.3	0.1	0.1	3.7	3.7	17.1	17.1	1	3	-	SILT
Wider Site R11	10/03/23	11:14	WS209	S	GL	2.89		3.00	-	-	997	R	1.23	-	0.2	0.1	0.1	1.6	1.6	19.4	19.4	0	0	-	OK
Wider Site R11	10/03/23	14:48	WS210	S	GL	2.83		3.09	-	-	1002	R	23.40	-	0.5	0.1	0.1	1.8	1.8	16.0	16.2	0	0	-	SILT
Wider Site R11	09/03/23	12:59	WS211	S	GL	0.98		1.95	-	-	985	F	4.23	-	0.2	0.1	0.1	2.5	2.5	17.4	17.4	1	0	-	OK
Wider Site R11	09/03/23	13:53	WS213	S	GL	0.41	D	2.03	-	-	985	F	0.00	-	0.1	0.1	0.1	0.6	0.6	21.0	21.0	3	0	-	DRY
Wider Site R11	09/03/23	14:52	WS214	S	GL	2.03	D	2.03	-	-	984	F	0.02	-	0.1	0.1	0.1	1.1	1.1	20.5	20.8	3	0	-	DRY
Wider Site R11	10/03/23	13:59	WS215	S	GL	1.05		1.05	-	-	1001	R	17.24	-	0.3	0.1	0.1	1.6	1.6	15.4	15.4	0	3	-	OK
Wider Site R11	09/03/23	12:23	WS216	S	GL	0.44		3.01	-	-	-	F	-0.05	-	0.1	0.1	0.1	1.0	1.0	20.0	20.0	1	0	-	OK
Wider Site R11	09/03/23	14:02	WS217	S	GL	1.52	D	4.22	-	-	985	F	0.02	-	0.1	0.1	0.1	1.2	1.2	21.0	21.3	0	0	-	DRY
Wider Site R11	09/03/23	14:46	WS218	S	GL	0.34	D	2.20	-	-	984	F	-0.12	-	0.1	0.1	0.1	1.0	1.0	20.6	21.0	0	0	-	DRY
Wider Site R11	13/03/23	11:35	WS219	S	GL	0.19		2.21	-	-	983	F	-0.02	-	0.1	0.1	0.1	1.6	1.6	19.5	19.6	0	0	-	OK
Wider Site R11	13/03/23	11:49	WS220	S	GL	1.01		3.01	-	-	983	F	13.84	-	0.2	0.1	0.1	1.1	1.1	17.9	17.9	0	2	-	OK
Wider Site R11	09/03/23	12:30	WS221	S	GL	0.26	D	2.60	-	-	986	F	-0.25	-	0.1	0.1	0.1	1.2	1.2	19.9	20.2	2	0	-	DRY
Wider Site R11	09/03/23	14:34	WS222	S	GL	2.34	D	3.56	-	-	985	F	-0.07	-	0.1	0.1	0.1	1.0	1.0	20.5	20.6	0	0	-	DRY
Wider Site R11	13/03/23	11:28	WS223	S	GL	3.65	D*	3.65	-	-	983	F	-0.07	-	0.1	0.1	0.1	0.5	0.5	20.2	20.2	0	0	-	OK
Wider Site R11	14/03/23	15:00	WS224	S	GL	1.00		1.00	-	-	1004	R	0.11	-	0.1	0.1	0.1	0.5	0.5	20.5	20.6	0	0	-	OK
Wider Site R11	09/03/23	12:36	WS225	S	GL	0.26	D	2.54	-	-	986	F	-0.05	-	0.1	0.1	0.1	0.9	0.9	20.2	20.7	9	0	-	DRY
Wider Site R11	09/03/23	14:15	WS226	S	GL	3.13	D	4.06	-	-	985	F	0.00	-	0.1	0.1	0.1	0.6	0.6	21.1	21.4	1	0	-	DRY
Wider Site R11	09/03/23	14:29	WS227	S	GL	2.09	D	2.09	-	-	985	F	0.16	-	0.1	0.1	0.1	0.8	0.8	20.9	21.2	2	0	-	DRY
Wider Site R11	13/03/23	12:32	WS230	S	GL	1.81	D	1.81	-	-	983	F	-0.05	-	0.1	0.1	0.1	0.6	0.6	20.4	20.4	0	0	-	DRY
Wider Site R11	13/03/23	13:48	WS231	S	GL	3.32		4.99	-	-	983	F	0.09	-	0.1	0.1	0.1	3.9	3.5	15.0	18.4	1	0	-	OK
Wider Site R11	14/03/23	12:00	WS231	S	GL	0.92		3.01	-	-	1004	R	0.07	-	0.1	0.1	0.1	0.6	0.6	18.7	18.7	3	2	-	SILT
Wider Site R11	13/03/23	14:45	WS232	S	GL	2.04		2.04	-	-	984	F	2.45	-	0.2	0.1	0.1	0.7	0.7	19.7	19.7	1	1	-	OK
Wider Site R11	14/03/23	15:08	WS233	S	GL	2.50		2.50	-	-	1004	R	0.11	-	0.1	0.1	0.1	0.6	0.5	20.4	20.4	1	0	-	OK
Wider Site R11	14/03/23	14:33	WS239	S	GL	1.91		2.01	-	-	1004	R	-2.64	-	-0.8	0.1	0.1	1.2	1.2	17.2	17.2	4	3	-	OK
Wider Site R11	14/03/23	14:39	WS240	S	GL	0.47		1.39	-	-	1004	R	-2.31	-	-0.6	0.1	0.1	1.3	1.3	18.0	18.0	3	2	-	OK
Wider Site R11	14/03/23	13:03	WS241	S	GL	2.05		2.05	-	-	1003	R	0.09	-	0.1	0.1	0.1	0.9	0.9	20.2	20.2	0	1	-	OK
Wider Site R11	14/03/23	14:21	WS248	S	GL	1.18		1.18	-	-		R	2.86	-	0.9	0.1	0.1	0.8	0.8	16.5	16.5	0	3	-	OK
Wider Site R11	14/03/23	13:56	WS249	S	GL	2.77		2.77	-	-	1004	R	-4.23	-	0.1	0.1	0.1	1.3	1.3	20.2	20.3	0	1	-	OK
Wider Site R11	14/03/23	14:08	WS250	S	GL	1.09		1.09	-	-	1004	R	2.31	-	0.2	0.1	0.1	2.6	2.6	16.7	16.8	0	1	-	OK
Wider Site R11	14/03/23	13:14	WS251	S	GL	2.61		4.97	-	-	1003	R	-0.78	-	-0.1	0.1	0.1	1.6	1.6	17.3	17.3	0	2	-	OK
Wider Site R11	14/03/23	13:42	WS252	S	GL	0.26		1.70	-	-	1004	R	0.07	-	0.1	0.1	0.1	0.9	0.9	20.2	20.3	1	1	-	OK
Wider Site R12	05/04/23	11:31	BH01	S	GL	0.17		2.94	-	-	1015	F	-0.05	-	0.1	0.1	0.1	12.5	12.5	6.2	6.2	1	0	-	OK
Wider Site R12	05/04/23	12:01	BH02	S	GL	0.23		2.28	-	-	1015	F	-0.04	-	0.1	0.1	0.1	5.1	5.3	16.8	16.4	1	0	-	SILT
Wider Site R12	05/04/23	11:27	WS01	S	GL	0.25		2.28	-	-	1015	F	0.07	-	0.1	0.1	0.1	4.3	4.3	15.9	15.9	0	0	-	OK
Wider Site R12	05/04/23	11:17	WS02	S	GL	0.17		1.19	-	-	1015	F	0.00	-	0.1	0.1	0.1	2.8	2.9	17.2	15.6	0	0	-	OK
Wider Site R12	05/04/23	11:22	WS03	S	GL	0.63	D	1.97	-	-	1015	F	-0.11	-	0.1	0.1	0.1	11.6	12.2	7.4	7.4	0	0	-	DRY
Wider Site R12	05/04/23	12:05	WS04	S	GL	0.44		1.65	-	-	1015	F	0.05	-	0.1	0.1	0.1	14.5	14.5	2.5	2.5	1	0	-	OK
Wider Site R12	05/04/23	11:36	WS05	S	GL	0.71		1.01	-	-	1015	F	-0.05	-	0.1	0.1	0.1	5.8	5.8	16.0	15.7	0	0	-	OK
Wider Site R12	05/04/23	11:40	WS06	S	GL	0.28		0.90	-	-	1015	F	0.12	-	0.1	0.1	0.1	12.0	12.0	8.9	8.9	0	0	-	OK
Wider Site R12	05/04/23	11:44	WS07	S	GL	0.32		2.00	-	-	1015	F	-0.07	-	0.1	0.1	0.1	2.4	2.6	18.6	17.1	2	0	-	OK
Wider Site R12	05/04/23	11:53	WS08	S	GL	0.22		5.02	-	-	1015	F	0.04	-	0.1	0.1	0.1	7.0	7.0	15.4	15.3	2	0	-	OK
Wider Site R12	05/04/23	11:49	WS09	S	GL	Dry	D*	3.36	-	-	1015	F	-0.05	-	0.1	0.1	0.1	2.9	2.9	18.8	18.5	0	0	-	OK
Wider Site R12	05/04/23	11:13	WS10	S	GL	2.95		3.43	-	-	1015	F	-0.04	-	0.1	0.1	0.1	13.2	13.2	3.3	3.3	0	0	-	OK
Wider Site R12	06/04/23	12:45	BH201	S	GL	3.45		4.88	-	-	1007	F	0.11	-	0.1	0.1	0.1	0.9	0.9	19.8	19.8	0	0	-	OK
Wider Site R12	06/04/23	16:16	BH202	S	GL	1.44		5.16	-	-	1008	F	0.09	-	0.1	0.1	0.1	1.1	1.1	19.5	19.2	0	0	-	OK
Wider Site R12	05/04/23	13:37	BH203	S	GL	2.55		5.12	-	-	1015	F	0.07	-	0.1	0.1	0.1	1.0	1.0	19.1	19.0	0	0	-	OK
Wider Site R12	05/04/23	14:35	BH204	S	GL	1.84		5.28	-	-	1015	F	0.04	-	0.1	0.1	0.1	0.7	0.7	20.9	20.7	0	0	-	OK
Wider Site R12	05/04/23	13:58	BH205	S	GL	0.56		4.41	-	-	1015	F	-15.25	-	-6.0	0.1	0.1	0.8	0.8	17.2	17.2	1	0	-	OK
Wider Site R12	06/04/23	15:34	WS201	S	GL	0.56		1.93	-	-	1008	F	-0.07	-	0.1	0.1	0.1	0.8	2.9	19.8	19.4	0	0	-	OK
Wider Site R12	06/04/23	15:25	WS202	S	GL	0.48		2.02	-	-	1008	F	1.07	-	-4.5	0.1	0.1	1.2	1.2	19.7	19.7	1	0	-	OK
Wider Site R12	06/04/23	14:36	WS203	S	GL	Dry	D	2.02	-	-	1008	F	-0.02	-	0.1	0.1	0.1	0.7	0.7	20.3	20.0	1	0	-	DRY
Wider Site R12	06/04/23	14:12	WS204	S	GL	Dry	D	1.04	-	-	1009	F	-0.02	-	0.1	0.1	0.1	1.0	1.0	18.1	17.9	0	0	-	DRY
Wider Site R12	06/04/23	14:44	WS205	S	GL	0.77		2.99	-	-	1008	F	0.02	-	0.1	0.1	0.1	0.8	0.9	20.5	20.2	1	0	-	OK
Wider Site R12	06/04/23	13:59																							





Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions		
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)	
Water Only R2	04/04/23	-	RO319	S	GL	0.47		5.56	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO320	S	GL	0.38		4.79	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO321	S	GL	0.76		3.91	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	SILT
Water Only R2	04/04/23	-	RO321A	S	GL	0.77		2.03	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	WS235	S	GL	-		-	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R2	04/04/23	-	WS236	S	GL	-		-	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R2	04/04/23	-	WS242	S	GL	-		-	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	
Wider Site R13	12/05/23	13:40	BH201	S	GL	3.29		4.87	-	-	1018	R	0.02	0.1	0.1	0.1	0.1	1.3	1.3	19.5	19.3	0	0	-	-	OK
Wider Site R13	12/05/23	15:31	BH202	S	GL	1.01		5.15	-	-	1019	R	0.11	0.1	0.1	0.1	0.1	0.1	0.1	22.2	21.9	0	0	-	-	OK
Wider Site R13	10/05/23	15:07	BH203	S	GL	2.71		4.99	-	-	1007	R	0.16	0.1	0.1	0.1	0.1	2.1	2.1	17.1	17.1	0	0	-	-	OK
Wider Site R13	10/05/23	16:23	BH204	S	GL	1.67		5.15	-	-	1007	R	0.02	0.1	0.1	0.1	0.1	0.9	0.9	21.1	20.9	0	0	-	-	SILT
Wider Site R13	10/05/23	15:38	BH205	S	GL	0.21		4.12	-	-	1008	R	-5.04	-2.4	-0.2	0.1	0.1	1.4	1.4	18.5	18.4	1	0	-	-	OK
Wider Site R13	15/05/23	11:57	WS201	S	GL	0.64		1.93	-	-	1011	R	0.05	0.1	0.1	0.1	0.1	0.7	0.8	11.6	10.4	0	0	-	-	OK
Wider Site R13	15/05/23	12:08	WS202	S	GL	0.24		2.02	-	-	1011	R	1.07	3.0	2.1	0.1	0.1	0.6	0.6	20.4	20.3	0	0	-	-	OK
Wider Site R13	15/05/23	13:32	WS203	S	GL	2.02	D	2.02	-	-	1011	R	-0.02	0.1	0.1	0.1	0.1	0.7	0.7	20.3	20.0	1	0	-	-	DRY
Wider Site R13	15/05/23	13:12	WS204	S	GL	1.04	D	1.04	-	-	1011	R	-0.02	0.1	0.1	0.1	0.1	1.0	1.0	18.1	17.9	0	0	-	-	DRY
Wider Site R13	15/05/23	13:41	WS205	S	GL	0.51		2.99	-	-	1011	R	0.05	0.1	0.1	0.1	0.1	1.9	1.9	19.3	19.2	0	0	-	-	SILT
Wider Site R13	15/05/23	12:57	WS206	S	GL	1.25		4.19	-	-	1011	R	-0.05	0.1	0.1	0.1	0.1	1.9	1.9	19.8	19.6	0	0	-	-	OK
Wider Site R13	15/05/23	12:50	WS207	S	GL	0.32		2.20	-	-	1011	R	0.07	-4.0	0.1	0.1	0.1	1.3	1.3	20.2	20.1	1	0	-	-	OK
Wider Site R13	15/05/23	12:43	WS208	S	GL	0.57		2.20	-	-	1011	R	1.23	0.2	0.2	0.1	0.1	1.6	1.6	19.4	19.4	0	0	-	-	OK
Wider Site R13	15/05/23	12:14	WS209	S	GL	0.84		3.01	-	-	1011	R	0.09	0.1	0.1	0.1	0.1	2.0	2.0	18.8	18.6	0	0	-	-	OK
Wider Site R13	15/05/23	12:28	WS210	S	GL	0.82		2.57	-	-	1011	R	0.04	0.1	0.1	0.1	0.1	0.1	0.1	21.2	21.1	1	0	-	-	OK
Wider Site R13	15/05/23	11:48	WS211	S	GL	1.43		3.56	-	-	1011	R	0.04	0.1	0.1	0.1	0.1	3.3	3.5	17.4	17.3	0	0	-	-	OK
Wider Site R13	12/05/23	14:16	WS213	S	GL	3.58		3.66	-	-	1018	R	-0.11	0.1	0.1	0.1	0.1	0.7	0.7	20.9	20.7	0	0	-	-	OK
Wider Site R13	12/05/23	14:24	WS214	S	GL	1.00	D	1.00	-	-	1018	R	-0.04	0.1	0.1	0.1	0.1	1.5	1.5	17.8	17.7	0	0	-	-	DRY
Wider Site R13	15/05/23	12:36	WS215	S	GL	0.24		2.54	-	-	1011	R	-0.05	0.1	0.1	0.1	0.1	1.0	1.0	20.2	20.2	0	0	-	-	OK
Wider Site R13	15/05/23	11:21	WS216	S	GL	2.90		4.07	-	-	1011	R	0.02	0.1	0.1	0.1	0.1	1.1	1.1	19.5	19.4	0	0	-	-	OK
Wider Site R13	12/05/23	14:09	WS217	S	GL	2.08	D	2.08	-	-	1018	R	0.04	0.1	0.1	0.1	0.1	1.3	1.3	20.9	20.6	0	0	-	-	DRY
Wider Site R13	12/05/23	14:33	WS218	S	GL	1.81	D	1.81	-	-	1018	R	0.14	0.1	0.1	0.1	0.1	1.5	1.5	19.7	19.4	0	0	-	-	DRY
Wider Site R13	12/05/23	15:02	WS219	S	GL	1.13		4.99	-	-	1019	R	0.00	0.1	0.1	0.1	0.1	1.7	1.7	19.7	19.7	0	0	-	-	OK
Wider Site R13	12/05/23	15:14	WS220	S	GL	0.91		3.02	-	-	1019	R	-0.02	0.1	0.1	0.1	0.1	0.4	0.5	21.4	21.1	0	0	-	-	OK
Wider Site R13	15/05/23	11:30	WS221	S	GL	2.03	D	2.03	-	-	1011	R	0.04	0.1	0.1	0.1	0.1	1.5	1.5	18.8	18.5	0	0	-	-	DRY
Wider Site R13	12/05/23	13:51	WS222	S	GL	2.49	D	2.49	-	-	1018	R	0.02	0.1	0.1	0.1	0.1	1.4	1.4	19.6	19.4	0	0	-	-	DRY
Wider Site R13	12/05/23	14:42	WS223	S	GL	1.82		2.01	-	-	1019	R	0.11	0.1	0.1	0.1	0.1	0.5	0.5	21.2	20.9	0	0	-	-	OK
Wider Site R13	11/05/23	11:48	WS224	S	GL	0.40		1.39	-	-	1010	R	0.19	0.1	0.1	0.1	0.1	0.2	0.2	21.1	21.0	1	0	-	-	OK
Wider Site R13	15/05/23	11:36	WS225	S	GL	2.04	D	2.04	-	-	1011	R	-0.09	0.1	0.1	0.1	0.1	1.0	1.0	19.9	19.6	0	0	-	-	DRY
Wider Site R13	15/05/23		WS226	S	GL	1.18	D	1.18	-	-	1011	R	-0.07	0.1	0.1	0.1	0.1	0.9	0.9	20.0	20.0	0	0	-	-	DRY
Wider Site R13	12/05/23	13:44	WS227	S	GL	2.77	D	2.77	-	-	1018	R	-0.25	0.1	0.1	0.1	0.1	1.0	1.0	19.9	19.8	0	0	-	-	DRY
Wider Site R13	10/05/23	14:55	WS228	S	GL	1.00		1.00	-	-	1007	R	-0.09	0.1	0.1	0.1	0.1	1.4	1.4	19.4	19.1	0	0	-	-	DRY
Wider Site R13	10/05/23	14:44	WS229	S	GL	1.94		1.94	-	-	1007	R	-0.02	0.1	0.1	0.1	0.1	0.7	0.7	20.0	19.7	0	0	-	-	OK
Wider Site R13	12/05/23	13:27	WS230	S	GL	1.08	D	1.08	-	-	1018	R	0.16	0.1	0.1	0.1	0.1	1.1	1.1	19.5	19.3	0	0	-	-	DRY
Wider Site R13	10/05/23	11:48	WS231	S	GL	2.36		4.96	-	-	1007	R	0.12	0.1	0.1	0.1	0.1	3.8	3.9	16.8	16.8	0	0	-	-	OK
Wider Site R13	12/05/23	15:21	WS232	S	GL	0.19		2.93	-	-	1019	R	-0.12	0.1	0.1	0.1	0.1	0.3	0.3	21.8	21.6	0	0	-	-	OK
Wider Site R13	11/05/23	11:33	WS233	S	GL	0.18		2.28	-	-	1011	R	-0.04	0.1	0.1	0.1	0.1	0.1	0.1	21.3	20.8	0	0	-	-	OK
Wider Site R13	11/05/23	12:04	WS234	S	GL	0.17		1.67	-	-	1011	R	7.21	3.0	0.2	0.1	0.1	0.7	0.7	19.6	19.4	6	0	-	-	OK
Wider Site R13	15/05/23	10:45	WS235	S	GL	1.20		5.06	-	-	1011	R	0.02	0.2	0.1	0.1	0.1	1.6	1.7	17.5	17.5	0	0	-	-	OK
Wider Site R13	15/05/23	10:30	WS236	S	GL	2.00	D	2.00	-	-	1011	R	-0.02	0.2	0.1	0.1	0.1	0.6	0.6	19.9	19.9	0	0	-	-	DRY
Wider Site R13	10/05/23	14:32	WS237	S	GL	1.01	D	1.01	-	-	1007	R	0.12	0.1	0.1	0.1	0.1	0.7	0.7	20.5	20.3	0	0	-	-	DRY
Wider Site R13	10/05/23	13:42	WS238	S	GL	1.89		5.06	-	-	1007	R	0.00	0.1	0.1	0.1	0.1	1.2	2.3	20.4	15.8	2	0	-	-	OK
Wider Site R13	11/05/23	11:18	WS239	S	GL	0.17		2.28	-	-	1011	R	-4.13	-2.1	-0.8	0.1	0.1	0.6	0.6	19.7	19.7	0	0	-	-	OK
Wider Site R13	11/05/23	11:25	WS240	S	GL	0.14		1.19	-	-	1011	R	2.75	0.3	0.8	0.1	0.1	0.9	0.9	20.3	20.1	2	0	-	-	OK
Wider Site R13	11/05/23	12:50	WS241	S	GL	0.63		1.97	-	-	1010	R	-0.11	0.1	0.1	0.1	0.1	0.1	0.1	21.5	21.3	1	0	-	-	OK
Wider Site R13	15/05/23	10:59	WS242	S	GL	0.45		3.65	-	-	1011	R	7.94	-4.9	0.1	0.1	0.1	2.6	2.7	18.0	17.9	1	0	-	-	OK
Wider Site R13	10/05/23	14:06	WS243	S	GL	1.01	D	1.01	-	-	1007	R	0.14	0.1	0.1	0.1	0.1	1.2	1.2	20.4	20.2	0	0	-	-	DRY
Wider Site R13	10/05/23	17:02	WS244	S	GL	0.27		0.88	-	-	1008	R	18.85	7.3	0.1	0.1	0.1	0.8	0.8	20.7	20.7	3	0	-	-	OK
Wider Site R13	10/05/23	15:51	WS245	S	GL	0.31		2.52	-	-	1007	R	6.98	3.4	0.2	0.1	0.1	1.7	1.7	17.3	17.3	4	0	-	-	SILT
Wider Site R13	10/05/23	16:02	WS246	S	GL	0.85		4.55	-	-	1008	R	-0.05	0.1	0.1	0.1	0.1	0.1	0.1	22.1	21.8	0	0	-	-	SILT
Wider Site R13	10/05/23	16:45	WS247	S	GL	-0.18		0.89	-	-	1008	R	9.84	3.8	0.1	0.1	0.1	1.2	1.2	18.5	18.4	4	0	-	-	ABOVE GROUND LEVEL
Wider Site R13	11/05/23	14:08	WS248	S	GL	0.43																				

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Water Only R3	11/05/23	-	CP303	S	GL	3.16		4.01	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	CP304	S	GL	2.87		4.06	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	CP305	S	GL	2.84		4.72	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO301	S	GL	0.30		7.69	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO302	S	GL	0.17		3.15	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO303	S	GL	0.11		3.53	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO304	S	GL	0.28		8.00	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO305	S	GL	0.35		2.38	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO306	S	GL	0.69		5.54	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO307	S	GL	1.18		5.11	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO307A	S	GL	1.20		2.17	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO309	S	GL	4.77		5.60	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO309A	S	GL	4.13		4.23	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO310	S	GL	3.89		6.27	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO311	S	GL	1.00		5.09	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO312	S	GL	3.56		9.32	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO312A	S	GL	2.04		2.11	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO313	S	GL	2.89		4.47	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO313A	S	GL	0.79	D	0.79	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	DRY
Water Only R3	11/05/23	-	RO314	S	GL	0.68		4.66	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	DAMAGED
Water Only R3	11/05/23	-	RO315	S	GL	0.19		5.03	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO316	S	GL	2.09		4.86	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO316A	S	GL	0.99		1.32	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO317	S	GL	0.34		7.43	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO318	S	GL	0.50		5.90	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO318A	S	GL	0.48		3.16	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO319	S	GL	0.46		5.56	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO320	S	GL	0.31		4.79	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO321	S	GL	0.73		3.91	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	SILT
Water Only R3	11/05/23	-	RO321A	S	GL	0.76		2.03	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	OK
Wider Site R14	07/06/23	16:04	BH201	S	GL	3.12		4.89	-	-	1019	S	-0.05	0.1	0.1	0.1	0.1	1.1	1.1	20.5	20.2	0	0	-	OK
Wider Site R14	09/06/23	15:31	BH202	S	GL	2.10		5.11	-	-	1019	S	0.11	0.1	0.1	0.1	0.1	0.1	0.1	22.2	21.9	0	0	-	OK
Wider Site R14	06/06/23	15:07	BH203	S	GL	0.77		5.10	-	-	1019	S	0.16	0.1	0.1	0.1	0.1	2.1	2.1	17.1	17.1	0	0	-	OK
Wider Site R14	06/06/23	16:23	BH204	S	GL	1.55		5.03	-	-	1019	S	0.02	0.1	0.1	0.1	0.1	0.9	0.9	21.1	20.9	0	0	-	SILT
Wider Site R14	06/06/23	15:38	BH205	S	GL	0.25		4.16	-	-	1019	S	-5.04	-2.4	-0.2	0.1	0.1	1.4	1.4	18.5	18.4	1	0	-	OK
Wider Site R14	05/06/23	13:08	WS201	S	GL	1.84		1.95	-	-	1019	S	0.05	0.1	0.1	0.1	0.1	1.1	1.2	12.7	12.3	0	0	-	OK
Wider Site R14	05/06/23	13:21	WS202	S	GL	0.70		2.03	-	-	1020	S	-2.57	-0.3	0.1	0.1	0.1	0.5	0.5	19.7	19.5	0	0	-	OK
Wider Site R14	05/06/23	13:52	WS203	S	GL	2.02	D	2.02	-	-	1019	S	0.14	0.1	0.1	0.1	0.1	1.0	1.1	20.2	19.9	0	0	-	DRY
Wider Site R14	05/06/23	14:12	WS204	S	GL	1.05	D	1.05	-	-	1019	S	0.00	0.1	0.1	0.1	0.1	3.4	3.8	18.2	17.9	0	0	-	DRY
Wider Site R14	05/06/23	13:40	WS205	S	GL	0.67		3.00	-	-	1020	S	0.14	0.1	0.1	0.1	0.1	0.2	0.2	21.2	21.0	1	0	-	OK
Wider Site R14	05/06/23	14:21	WS206	S	GL	1.66		4.16	-	-	1019	S	0.12	0.1	0.1	0.1	0.1	2.5	2.5	19.7	19.5	0	0	-	OK
Wider Site R14	05/06/23	14:35	WS207	S	GL	0.70		-0.24	-	-	1020	S	0.05	0.1	0.1	0.1	0.1	0.3	0.3	21.5	20.7	1	0	-	OK
Wider Site R14	05/06/23	15:03	WS208	S	GL	0.47		2.22	-	-	1020	S	-19.45	-7.2	-0.2	0.1	0.1	1.6	1.8	19.4	19.2	3	0	-	OK
Wider Site R14	05/06/23	16:08	WS209	S	GL	1.05		3.00	-	-	1019	S	0.07	0.1	0.1	0.1	0.1	0.0	0.1	21.7	21.1	1	0	-	OK
Wider Site R14	05/06/23	15:43	WS210	S	GL	0.57		2.58	-	-	1019	S	-14.03	-5.8	-0.1	0.1	0.1	0.6	0.6	20.6	20.4	1	0	-	OK
Wider Site R14	05/06/23	12:59	WS211	S	GL	2.22		3.56	-	-	1019	S	0.02	0.1	0.1	0.1	0.1	2.9	2.9	17.9	17.9	0	0	-	OK
Wider Site R14	09/06/23	14:16	WS213	S	GL	3.65	D	3.65	-	-	1018	S	-0.11	0.1	0.1	0.1	0.1	0.7	0.7	20.9	20.7	0	0	-	DRY
Wider Site R14	09/06/23	14:24	WS214	S	GL	1.01	D	1.01	-	-	1018	S	-0.04	0.1	0.1	0.1	0.1	1.5	1.5	17.8	17.7	0	0	-	DRY
Wider Site R14	07/06/23	13:42	WS216	S	GL	2.97		4.09	-	-	1019	S	-0.19	0.1	0.1	0.1	0.1	1.5	1.5	18.9	18.6	0	0	-	OK
Wider Site R14	09/06/23	14:09	WS217	S	GL	2.08	D	2.08	-	-	1018	S	0.04	0.1	0.1	0.1	0.1	1.3	1.3	20.9	20.6	0	0	-	DRY
Wider Site R14	09/06/23	14:33	WS218	S	GL	1.81	D	1.81	-	-	1018	S	0.14	0.1	0.1	0.1	0.1	1.5	1.5	19.7	19.4	0	0	-	DRY
Wider Site R14	09/06/23	15:02	WS219	S	GL	1.55		4.99	-	-	1019	S	0.00	0.1	0.1	0.1	0.1	1.7	1.7	19.7	19.7	0	0	-	OK
Wider Site R14	09/06/23	15:14	WS220	S	GL	1.22		3.00	-	-	1019	S	-0.02	0.1	0.1	0.1	0.1	0.4	0.5	21.4	21.1	0	0	-	OK
Wider Site R14	07/06/23	13:48	WS221	S	GL	2.03	D	2.03	-	-	1019	S	-0.09	0.1	0.1	0.1	0.1	1.1	1.1	19.9	19.8	0	1	-	DRY
Wider Site R14	09/06/23	13:51	WS222	S	GL	2.49	D	2.49	-	-	1018	S	0.02	0.1	0.1	0.1	0.1	1.4	1.4	19.6	19.4	0	0	-	DRY
Wider Site R14	09/06/23	14:42	WS223	S	GL	1.91		2.01	-	-	1019	S	0.11	0.1	0.1	0.1	0.1	0.5	0.5	21.2	20.9	0	0	-	OK
Wider Site R14	08/06/23	11:48	WS224	S	GL	0.66		1.39	-	-	1019	S	0.19	0.1	0.1	0.1	0.1	0.2	0.2	21.1	21.0	1	0	-	OK
Wider Site R14	07/06/23	13:55	WS225	S	GL	2.04	D	2.04	-	-	1019	S	0.23	0.1	0.1	0.1	0.1	1.3	1.3	19.6	19.5	0	0	-	DRY
Wider Site R14	07/06/23	16:15	WS226	S	GL	1.18	D	1.18	-	-	1019	S	-0.07	0.1	0.1	0.1	0.1	0.9	0.9	20.0	20.0	0	0	-	DRY
Wider Site R14	09/06/23	13:44	WS227	S	GL	2.77	D	2.77	-	-	1018	S	-0.25	0.1	0.1	0.1	0.1	1.0	1.0	19.9	19.8	0	0	-	DRY
Wider Site R14	06/06/23	14:55	WS228	S	GL	1.95	D	1.95	-	-	1019	S	-0.09	0.1	0.1	0.1	0.1	1.4	1.4	19.4	19.1	0	0	-	DRY
Wider Site R14	06/06/23	14:44	WS229	S	GL	1.07	D	1.07	-	-	1019	S	-0.02	0.1	0.1	0.1	0.1	0.7	0.7	20.0	19.7	0	0	-	DRY
Wider Site R14	07/06/23	15:52	WS230	S	GL	1.46	D	1.46	-	-	1018	S	0.05	0.1	0.1	0.1	0.1	0.0	0.0	21.2	21.0	0	0	-	DRY
Wider Site R14	06/06/23	11:48	WS231	S	GL	3.07		4.98	-	-	1010	S	0.12	0.1	0.1	0.1	0.1	3.8	3.9	16.8	16.8	0	0	-	OK
Wider Site R14	09/06/23	15:21	WS232	S	GL	0.71		2.95	-																

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)							Local conditions			
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)	
Wider Site R14	08/06/23	11:33	WS233	S	GL	0.72		1.95	-	-	1019	S	-0.04	0.1	0.1	0.1	0.1	0.1	0.1	21.3	20.8	0	0	-	OK	
Wider Site R14	08/06/23	12:04	WS234	S	GL	0.82		1.67	-	-	1019	S	7.21	3.0	0.2	0.1	0.1	0.7	0.7	19.6	19.4	6	0	-	OK	
Wider Site R14	07/06/23	14:22	WS235	S	GL	0.87		4.94	-	-	1019	S	-0.16	0.1	0.1	0.1	0.1	0.7	0.9	19.9	19.0	1	0	-	OK	
Wider Site R14	07/06/23	14:14	WS236	S	GL	1.98	D	1.98	-	-	1019	S	-0.07	0.1	0.1	0.1	0.1	3.2	3.5	16.7	16.7	2	0	-	DRY	
Wider Site R14	06/06/23	14:32	WS237	S	GL	1.37	D	1.37	-	-	1020	S	0.12	0.1	0.1	0.1	0.1	0.7	0.7	20.5	20.3	0	0	-	DRY	
Wider Site R14	06/06/23	13:42	WS238	S	GL	1.98		4.98	-	-	1020	S	0.00	0.1	0.1	0.1	0.1	1.2	2.3	20.4	15.8	2	0	-	OK	
Wider Site R14	08/06/23	11:18	WS239	S	GL	0.76		2.29	-	-	1019	S	-4.13	-2.1	-0.8	0.1	0.1	0.6	0.6	19.7	19.7	0	0	-	OK	
Wider Site R14	08/06/23	12:50	WS241	S	GL	1.17		1.97	-	-	1019	S	-0.11	0.1	0.1	0.1	0.1	0.1	0.1	21.5	21.3	1	0	-	OK	
Wider Site R14	07/06/23	14:40	WS242	S	GL	0.45		3.53	-	-	1020	S	-14.90	-5.6	-0.1	0.1	0.1	0.9	0.9	13.0	13.0	36	0	-	OK	
Wider Site R14	06/06/23	14:06	WS243	S	GL	1.02	D	1.02	-	-	1020	S	0.14	0.1	0.1	0.1	0.1	1.2	1.2	20.4	20.2	0	0	-	DRY	
Wider Site R14	06/06/23	17:02	WS244	S	GL	0.88		0.95	-	-	1019	S	18.85	7.3	0.1	0.1	0.1	0.8	0.8	20.7	20.7	3	0	-	OK	
Wider Site R14	06/06/23	15:51	WS245	S	GL	0.74		2.16	-	-	1019	S	6.98	3.4	0.2	0.1	0.1	1.7	1.7	17.3	17.3	4	0	-	SILT	
Wider Site R14	06/06/23	16:02	WS246	S	GL	1.09		4.49	-	-	1019	S	-0.05	0.1	0.1	0.1	0.1	0.1	0.1	22.1	21.8	0	0	-	SILT	
Wider Site R14	06/06/23	16:45	WS247	S	GL	0.21		0.96	-	-	1019	S	9.84	3.8	-0.1	0.1	0.1	1.2	1.2	18.5	18.4	4	0	-	OK	
Wider Site R14	08/06/23	14:08	WS248	S	GL	0.92		1.66	-	-	1019	S	2.15	0.2	0.4	0.1	0.1	0.6	0.6	20.2	20.0	5	0	-	OK	
Wider Site R14	08/06/23	13:43	WS249	S	GL	0.98	D	0.98	-	-	1019	S	0.02	0.1	0.1	0.1	0.1	3.1	3.1	16.8	16.8	1	0	-	DRY	
Wider Site R14	08/06/23	13:57	WS250	S	GL	0.90	D	0.90	-	-	1019	S	7.53	2.8	0.5	0.1	0.1	3.3	3.3	15.6	15.5	1	0	-	DRY	
Wider Site R14	08/06/23	13:14	WS251	S	GL	0.62		2.00	-	-	1019	S	-3.58	-1.7	0.1	0.1	0.1	0.3	0.4	21.1	20.7	0	0	-	OK	
Wider Site R14	08/06/23	13:30	WS252	S	GL	0.70		4.97	-	-	1019	S	-0.12	0.1	0.1	0.1	0.1	0.2	0.2	21.9	21.7	0	0	-	OK	
Water Only R4	05/06/23	-	CP301	S	GL	2.16		4.71	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	silt	
Water Only R4	07/06/23	-	CP302	S	GL	1.85		4.12	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	09/06/23	-	CP303	S	GL	2.95		4.01	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	09/06/23	-	CP304	S	GL	2.97		4.08	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	09/06/23	-	CP305	S	GL	2.94		4.72	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	09/06/23	-	RO301	S	GL	0.26		7.47	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	09/06/23	-	RO302	S	GL	0.70		3.18	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	08/06/23	-	RO303	S	GL	0.77		3.63	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	08/06/23	-	RO304	S	GL	0.50		7.98	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	09/06/23	-	RO305	S	GL	0.40		2.40	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	05/06/23	-	RO306	S	GL	0.73		5.44	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	05/06/23	-	RO307	S	GL	1.36		5.17	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	05/06/23	-	RO307A	S	GL	1.36		2.20	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	05/06/23	-	RO309A	S	GL	4.24		4.34	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	05/06/23	-	RO309	S	GL	4.96		5.60	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	05/06/23	-	RO310	S	GL	3.93		5.91	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	05/06/23	-	RO311	S	GL	1.09		5.05	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	05/06/23	-	RO312A	S	GL	2.21	D	2.21	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
Water Only R4	05/06/23	-	RO312	S	GL	3.59		9.39	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	silt
Water Only R4	05/06/23	-	RO313	S	GL	3.44		4.64	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	05/06/23	-	RO313A	S	GL	0.78	D	0.78	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
Water Only R4	05/06/23	-	RO314	S	GL	0.90		4.60	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	09/06/23	-	RO315	S	GL	0.30		4.61	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	09/06/23	-	RO316A	S	GL	1.22		1.41	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	09/06/23	-	RO316	S	GL	2.24		5.46	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	05/06/23	-	RO317	S	GL	0.63		7.59	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	05/06/23	-	RO318	S	GL	0.68		5.90	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	05/06/23	-	RO318A	S	GL	0.67		4.16	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	ANTS
Water Only R4	05/06/23	-	RO319	S	GL	0.66		5.56	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	09/06/23	-	RO320	S	GL	0.53		5.09	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	09/06/23	-	RO321	S	GL	0.87		3.89	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	silt
Water Only R4	09/06/23	-	RO321A	S	GL	0.79		2.04	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R4	08/06/23	-	WS240	S	GL	0.00		0.00	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	Mower damaged - no pipe to test
Water Only R4	05/06/23	-	WS215	S	GL	0.00		0.00	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	Vandalism - pipe damaged

## *Ground Gas Risk Assessment*



Site: Begbroke, Oxfordshire											Notes:														
Job number: 19114											Where the flow or concentration is less than the limit of detection of the instrument, the detection limit is reported.														
Client: Oxford University Development Ltd											Blue text indicates water level above top of screen						D* indicates minimal water in well, likely to be associated with water trapped in the end cap								
Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)							Local conditions		
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Landfill R1	24/08/21	11:23	BH01	S	GL	3.37		9.98	-	-	1023	R	0.14	-	0.2	0.1	0.1	13.0	13.0	8.4	8.4	6	0	-	OK
Landfill R1	24/08/21	14:18	BH02	S	GL	3.02		8.75	-	-	1023	R	0.00	-	0.2	0.1	0.1	8.8	8.7	12.2	12.3	2	0	-	OK
Landfill R1	24/08/21	11:51	BH03	S	GL	3.35		8.11	-	-	1025	R	0.02	-	0.2	0.1	0.1	14.8	14.7	5.9	5.9	10	0	-	OK
Landfill R1	24/08/21	11:16	WS01	S	GL	Dry	D*	3.24	-	-	1023	R	0.05	-	0.2	0.1	0.1	12.8	12.8	9.6	9.6	1	0	-	OK
Landfill R1	24/08/21	12:54	WS02	S	GL	Dry	D	3.69	-	-	1025	R	0.02	-	0.3	0.1	0.1	3.2	3.2	17.4	17.5	1	0	-	DRY
Landfill R1	24/08/21	13:01	WS03	S	GL	Dry	D	2.69	-	-	1024	R	0.02	-	0.3	0.1	0.1	8.9	8.9	12.5	12.5	3	0	-	DRY
Landfill R1	24/08/21	12:33	WS04	S	GL	Dry	D	3.07	-	-	1024	R	0.00	-	0.2	0.3	0.3	15.5	15.5	1.8	1.8	4	0	-	DRY
Landfill R1	24/08/21	11:31	WS05	S	GL	2.59		3.17	-	-	1023	R	0.04	-	0.3	0.1	0.1	8.2	8.2	12.8	12.8	1	0	-	OK
Landfill R1	24/08/21	11:39	WS06	S	GL	1.88		2.10	-	-	1024	R	0.07	-	0.1	0.1	0.1	8.5	8.4	12.0	12.0	2	0	-	OK
Landfill R1	24/08/21	11:58	WS07	S	GL	Dry	D*	2.54	-	-	1025	R	0.12	-	0.2	0.1	0.1	3.1	3.1	16.5	17.5	0	0	-	OK
Landfill R1	24/08/21	12:23	WS08	S	GL	Dry	D	3.91	-	-	1025	R	0.02	-	0.2	0.1	0.1	7.5	7.5	14.8	14.8	1	0	-	DRY
Landfill R1	24/08/21	12:08	WS09	S	GL	Dry	D	3.05	-	-	1025	R	0.02	-	0.1	0.1	0.1	3.1	3.1	18.3	18.4	1	0	-	DRY
Landfill R1	24/08/21	12:43	WS10	S	GL	Dry	D	3.11	-	-	1024	R	0.04	-	0.2	0.1	0.1	6.1	6.1	12.4	12.4	0	0	-	DRY
Landfill R2	07/09/21	10:43	BH01	S	GL	3.91		9.98	-	-	1014	F	0.07	-	0.2	0.1	0.1	11.6	11.6	9.0	9.0	1	0	-	CO MAXED OUT AT 248ppm BEFORE SETTLING BACK TO
Landfill R2	07/09/21	11:27	BH02	S	GL	3.02		8.75	-	-	1015	F	0.02	-	0.1	0.1	0.1	9.7	9.7	11.8	11.9	5	0	-	OK
Landfill R2	07/09/21	11:03	BH03	S	GL	3.38		8.11	-	-	1014	F	0.05	-	-0.5	0.1	0.1	8.0	8.0	12.7	12.7	6	0	-	OK
Landfill R2	07/09/21	10:39	WS01	S	GL	Dry	D	3.15	-	-	1014	F	0.02	-	0.2	0.1	0.1	13.3	13.3	10.7	10.7	1	0	-	DRY
Landfill R2	07/09/21	11:42	WS02	S	GL	Dry	D	3.60	-	-	1015	F	0.25	-	0.2	0.1	0.1	3.8	3.8	16.9	16.9	1	0	-	DRY
Landfill R2	07/09/21	11:48	WS03	S	GL	Dry	D	2.62	-	-	1015	F	0.05	-	0.2	0.1	0.1	9.0	9.0	11.6	11.6	3	0	-	DRY
Landfill R2	07/09/21	11:31	WS04	S	GL	Dry	D	3.01	-	-	1015	F	0.02	-	0.2	0.2	0.2	16.3	16.3	1.1	1.1	4	0	-	DRY
Landfill R2	07/09/21	10:51	WS05	S	GL	2.61		3.17	-	-	1014	F	0.02	-	0.1	0.1	0.1	4.2	4.2	16.3	16.4	0	0	-	OK
Landfill R2	07/09/21	10:57	WS06	S	GL	Dry	D*	2.10	-	-	1014	F	-0.04	-	0.1	0.1	0.1	7.1	7.1	12.8	12.8	1	0	-	OK
Landfill R2	07/09/21	11:09	WS07	S	GL	Dry	D*	2.54	-	-	1015	F	0.04	-	0.2	0.1	0.1	3.9	3.9	16.4	16.4	0	0	-	OK
Landfill R2	07/09/21	11:22	WS08	S	GL	Dry	D	3.88	-	-	1015	F	-0.05	-	0.1	0.1	0.1	7.2	7.2	14.4	14.5	1	0	-	DRY
Landfill R2	07/09/21	11:15	WS09	S	GL	Dry	D	2.96	-	-	1015	F	0.07	-	0.2	0.1	0.1	3.2	3.2	17.5	17.5	1	0	-	DRY
Landfill R2	07/09/21	11:37	WS10	S	GL	Dry	D	3.05	-	-	1015	F	0.02	-	0.2	0.1	0.1	3.7	3.6	14.4	15.7	0	0	-	DRY
Landfill R3	14/09/21	12:17	BH01	S	GL	3.96		9.98	-	-	1004	F	-0.12	-	0.1	0.1	0.1	11.5	11.5	9.7	9.7	0	0	-	SAMPLE
Landfill R3	14/09/21	13:03	BH02	S	GL	3.04		8.75	-	-	1005	F	0.00	-	0.1	0.1	0.1	10.6	10.6	11.8	11.8	2	0	-	SAMPLE
Landfill R3	14/09/21	12:34	BH03	S	GL	3.39		8.11	-	-	1004	F	0.07	-	-1.3	0.1	0.1	8.1	8.1	13.3	13.4	3	0	-	SAMPLE
Landfill R3	14/09/21	12:04	WS01	S	GL	Dry	D	3.15	-	-	1004	F	-0.09	-	0.1	0.1	0.1	11.3	11.3	12.8	12.8	0	0	-	DRY
Landfill R3	14/09/21	13:21	WS02	S	GL	Dry	D*	3.69	-	-	1005	F	-0.07	-	0.2	0.1	0.1	3.7	3.7	17.6	17.7	0	0	-	OK
Landfill R3	14/09/21	13:26	WS03	S	GL	Dry	D*	2.69	-	-	1005	F	0.14	-	0.1	0.1	0.1	7.3	7.3	14.6	14.6	0	0	-	OK
Landfill R3	14/09/21	13:13	WS04	S	GL	Dry	D*	3.07	-	-	1005	F	-0.25	-	0.1	0.3	0.3	14.1	14.1	4.1	4.1	0	0	-	OK
Landfill R3	14/09/21	12:23	WS05	S	GL	2.63		3.10	-	-	1004	F	-0.04	-	0.1	0.1	0.1	4.8	4.8	16.5	16.5	0	0	-	OK
Landfill R3	14/09/21	12:28	WS06	S	GL	1.89		2.10	-	-	1004	F	0.12	-	0.1	0.1	0.1	6.0	6.0	14.9	14.9	0	0	-	OK
Landfill R3	14/09/21	12:49	WS07	S	GL	Dry	D*	2.54	-	-	1004	F	0.02	-	0.1	0.1	0.1	3.4	3.4	17.5	17.5	0	0	-	OK
Landfill R3	14/09/21	12:59	WS08	S	GL	Dry	D*	3.91	-	-	1005	F	0.02	-	0.1	0.1	0.1	7.2	7.2	15.1	15.1	0	0	-	OK
Landfill R3	14/09/21	12:54	WS09	S	GL	Dry	D*	3.05	-	-	1004	F	-0.11	-	0.1	0.1	0.1	3.4	3.4	18.5	18.5	0	0	-	OK
Landfill R3	14/09/21	13:17	WS10	S	GL	Dry	D*	3.11	-	-	1005	F	-0.05	-	0.1	0.1	0.1	9.1	4.0	13.6	15.9	0	0	-	OK
Landfill R4	21/09/21	11:38	BH01	S	GL	3.97		9.98	-	-	1023	R	0.05	-	0.1	0.1	0.1	9.9	9.9	12.3	12.3	3	1	-	OK
Landfill R4	21/09/21	12:23	BH02	S	GL	3.05		8.75	-	-	1024	R	-0.04	-	0.1	0.1	0.1	6.1	6.1	15.6	15.6	3	0	-	OK
Landfill R4	21/09/21	12:00	BH03	S	GL	3.42		8.11	-	-	1024	R	0.05	-	-1.0	0.1	0.1	5.5	5.5	15.7	15.8	3	0	-	OK
Landfill R4	21/09/21	11:33	WS01	S	GL	Dry	D	3.15	-	-	1023	R	-0.35	-	0.1	0.1	0.1	6.6	6.6	15.3	15.3	0	1	-	DRY
Landfill R4	21/09/21	12:39	WS02	S	GL	Dry	D*	3.69	-	-	1025	R	0.00	-	0.2	0.1	0.1	4.4	4.4	16.6	16.6	1	0	-	OK
Landfill R4	21/09/21	12:45	WS03	S	GL	Dry	D	2.65	-	-	1024	R	0.02	-	0.2	0.1	0.1	8.5	8.5	12.5	12.5	2	0	-	OK
Landfill R4	21/09/21	12:29	WS04	S	GL	Dry	D	3.00	-	-	1025	R	0.12	-	0.2	0.1	0.1	5.3	5.3	13.1	13.2	2	0	-	DRY
Landfill R4	21/09/21	11:44	WS05	S	GL	2.71		3.10	-	-	1023	R	-0.07	-	0.1	0.1	0.1	4.3	4.3	16.7	16.7	0	1	-	OK
Landfill R4	21/09/21	11:54	WS06	S	GL	Dry	D*	2.10	-	-	1024	R	-0.07	-	0.1	0.1	0.1	7.1	7.0	13.5	13.6	0	0	-	OK
Landfill R4	21/09/21	12:06	WS07	S	GL	Dry	D*	2.54	-	-	1024	R	0.02	-	0.2	0.1	0.1	3.1	3.1	17.6	17.6	0	0	-	OK
Landfill R4	21/09/21	12:18	WS08	S	GL	Dry	D	4.83	-	-	1024	R	-0.05	-	0.2	0.1	0.1	7.0	7.0	14.5	14.5	1	0	-	DRY
Landfill R4	21/09/21	12:11	WS09	S	GL	Dry	D	2.97	-	-	1024	R	-0.12	-	0.2	0.1	0.1	3.3	3.3	17.9	17.9	1	0	-	DRY
Landfill R4	21/09/21	12:34	WS10	S	GL	Dry	D	3.05	-	-	1025	R	0.07	-	0.2	0.1	0.1	3.5	3.5	16.3	16.3	1	0	-	DRY
Landfill R5	28/09/21	12:07	BH01	S	GL	3.98		9.98	-	-	1006	R	0.04	-	0.1	0.1	0.1	13.6	12.0	11.5	11.5	2	1	-	OK
Landfill R5	28/09/21	12:45	BH02	S	GL	3.07		8.75	-	-	1007	R	0.09	-	0.1	0.1	0.1	5.6	5.6	16.4	16.5	3	0	-	OK
Landfill R5	28/09/21	12:23	BH03	S	GL	3.45		8.11	-	-	1007	R	0.04	-	-0.2	0.1	0.1	5.7	5.7	15.6	15.7	3	1	-	OK
Landfill R5	28/09/21	12:02	WS01	S	GL	Dry	D	3.15	-	-	1006	R	-0.16	-	0.1	0.1	0.1	2.5	2.5	19.4	19.4	0	0	-	DRY
Landfill R5	28/09/21	13:01	WS02	S	GL	Dry	D*	3.69	-	-	1007	R	0.04	-	0.1	0.1	0.1	4.8	4.8	17.0	17.1	0	0	-	OK
Landfill R5	28/09/21	13:08	WS03	S	GL	Dry	D	2.65	-	-	1007	R	0.21	-	0.2	0.1	0.1	9.5	9.5	12.9	13.0	1	0	-	DRY
Landfill R5	28/09/21	12:50	WS04	S	GL	Dry	D	3.00	-	-	1007	R	0.07	-	0.1	0.1	0.1	6.4	6.4	12.5	12.5	1	0	-	DRY
Landfill R5	28/09/21	12:14	WS05	S	GL	2.88																			

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R)/ steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Landfill R5	28/09/21	12:34	WS07	S	GL	Dry	D*	2.54	-	-	1007	R	0.04	-	0.2	0.1	0.1	2.4	2.4	18.8	18.8	0	0	-	OK
Landfill R5	28/09/21	12:40	WS08	S	GL	Dry	D	4.83	-	-	1007	R	-0.07	-	0.1	0.1	0.1	5.8	5.8	16.6	16.7	0	0	-	DRY
Landfill R5	28/09/21	12:29	WS09	S	GL	Dry	D	2.97	-	-	1007	R	-0.05	-	0.2	0.1	0.1	3.5	3.5	18.2	18.3	0	0	-	DRY
Landfill R5	28/09/21	12:54	WS10	S	GL	Dry	D	3.05	-	-	1007	R	0.05	-	0.2	0.1	0.1	5.4	5.4	14.8	14.9	0	0	-	DRY
Landfill R6	05/10/21	11:49	BH01	S	GL	3.96		9.98	-	-	993	R	0.16	-	0.1	0.1	0.1	15.1	15.1	9.7	9.7	2	0	-	OK
Landfill R6	05/10/21	12:24	BH02	S	GL	3.08		8.75	-	-	994	R	-0.07	-	0.2	0.1	0.1	3.9	3.9	18.3	18.4	1	0	-	OK
Landfill R6	05/10/21	12:05	BH03	S	GL	3.42		8.11	-	-	993	R	0.09	-	0.2	0.1	0.1	5.1	5.1	16.2	16.2	2	0	-	OK
Landfill R6	05/10/21	11:45	WS01	S	GL	Dry	D	3.15	-	-	992	R	0.09	-	0.2	0.1	0.1	3.2	3.2	18.5	18.6	0	0	-	DRY
Landfill R6	05/10/21	12:37	WS02	S	GL	3.47		3.69	-	-	994	R	0.09	-	0.1	0.1	0.1	6.1	5.9	15.4	15.4	0	0	-	OK
Landfill R6	05/10/21	12:42	WS03	S	GL	Dry	D	2.65	-	-	994	R	0.11	-	0.2	0.1	0.1	10.4	10.4	10.5	10.6	0	0	-	DRY
Landfill R6	05/10/21	12:28	WS04	S	GL	Dry	D	3.00	-	-	994	R	0.05	-	0.2	0.1	0.1	4.3	4.3	15.9	15.9	0	0	-	DRY
Landfill R6	05/10/21	11:55	WS05	S	GL	Dry	D*	3.10	-	-	993	R	0.07	-	0.2	0.1	0.1	4.6	1.7	17.5	19.1	0	0	-	OK
Landfill R6	05/10/21	12:00	WS06	S	GL	1.89		2.10	-	-	993	R	-0.05	-	0.1	0.1	0.1	7.5	7.4	13.8	13.8	0	0	-	OK
Landfill R6	05/10/21	12:09	WS07	S	GL	Dry	D*	2.54	-	-	993	R	0.07	-	0.2	0.1	0.1	1.8	1.8	19.2	19.4	0	0	-	OK
Landfill R6	05/10/21	12:19	WS08	S	GL	Dry	D	4.83	-	-	994	R	0.05	-	0.2	0.1	0.1	5.7	5.7	15.8	15.8	0	0	-	DRY
Landfill R6	05/10/21	12:14	WS09	S	GL	Dry	D	2.97	-	-	994	R	0.14	-	0.2	0.1	0.1	3.9	3.9	18.0	18.0	0	0	-	DRY
Landfill R6	05/10/21	12:32	WS10	S	GL	Dry	D	3.05	-	-	994	R	0.02	-	0.2	0.1	0.1	1.0	1.0	19.4	20.3	0	0	-	DRY
Wider Site R1	12/09/22	13:52	BH201	S	GL	4.18		5.00	-	-	1003	F	-0.07	-	0.2	0.1	0.1	0.8	0.8	20.1	20.1	1	1	-	
Wider Site R1	12/09/22	14:12	BH202	S	GL	3.21		5.24	-	-	1004	F	-0.12	-	0.1	0.1	0.1	0.7	0.7	20.3	20.4	2	0	-	
Wider Site R1	12/09/22	15:50	BH203	S	GL	3.53		6.00	-	-	1004	F	0.05	-	0.1	0.1	0.1	0.9	0.9	20.1	20.1	2	0	-	
Wider Site R1	12/09/22	16:20	BH204	S	GL	2.63		5.13	-	-	1003	F	0.11	-	0.1	0.1	0.1	0.8	0.8	20.4	20.6	1	0	-	
Wider Site R1	12/09/22	15:58	BH205	S	GL	1.15		4.12	-	-	1004	F	-0.07	-	0.1	0.1	0.1	0.6	0.6	20.6	20.6	3	0	-	
Wider Site R1	13/09/22	13:07	WS201	S	GL	Dry	D	1.80	-	-	1005	F	5.79	-	0.1	0.1	0.1	2.1	0.7	19.7	19.9	0	1	-	
Wider Site R1	13/09/22	13:22	WS202	S	GL	1.57		2.98	-	-	1005	F	0.09	-	0.1	0.1	0.1	1.1	1.1	19.8	19.8	1	0	-	
Wider Site R1	13/09/22	14:30	WS203	S	GL	Dry	D	1.97	-	-	1004	F	8.93	-	0.3	0.1	0.1	0.7	0.7	19.7	20.4	1	0	-	
Wider Site R1	13/09/22	14:15	WS205	S	GL	1.42		2.95	-	-	1005	F	0.00	-	0.1	0.1	0.1	3.6	3.1	18.1	18.1	1	0	-	
Wider Site R1	13/09/22	15:00	WS206	S	GL	2.14		4.20	-	-	1005	F	0.00	-	0.3	0.1	0.1	1.7	1.7	19.5	19.5	1	0	-	
Wider Site R1	15/09/22	10:11	WS207	S	GL	1.84		2.12	-	-	1007	R	0.07	-	-0.1	0.1	0.1	0.4	0.4	20.8	20.8	0	0	-	
Wider Site R1	15/09/22	10:28	WS208	S	GL	0.56		2.20	-	-	1007	R	0.16	-	3.2	0.1	0.1	0.7	0.7	20.6	20.6	13	0	-	
Wider Site R1	13/09/22	15:36	WS209	S	GL	1.62		3.29	-	-	1005	F	0.05	-	0.3	0.1	0.1	2.0	2.0	19.7	19.7	1	0	-	
Wider Site R1	13/09/22	15:55	WS210	S	GL	0.75		4.58	-	-	1005	F	-1.04	-	-4.4	0.1	0.1	0.4	0.3	20.8	21.0	7	0	-	
Wider Site R1	13/09/22	12:47	WS211	S	GL	1.01		5.01	-	-	1005	F	-0.02	-	0.0	0.1	0.1	2.5	2.5	19.0	19.0	1	1	-	
Wider Site R1	13/09/22	13:53	WS213	S	GL	Dry	D	3.60	-	-	1005	F	0.04	-	0.2	0.1	0.1	0.9	0.7	20.5	20.5	1	0	-	
Wider Site R1	13/09/22	15:18	WS214	S	GL	Dry	D	0.97	-	-	1004	F	0.07	-	0.3	0.1	0.1	1.1	1.1	20.4	20.4	1	0	-	
Wider Site R1	15/09/22	10:40	WS215	S	GL	0.90		2.53	-	-	1007	R	0.02	-	0.2	0.1	0.1	0.2	0.2	20.8	20.8	0	0	-	
Wider Site R1	12/09/22	12:51	WS216	S	GL	Dry	D*	4.05	-	-	1004	F	-0.07	-	0.1	0.1	0.1	1.9	1.9	19.7	19.7	0	0	-	
Wider Site R1	12/09/22	13:25	WS217	S	GL	Dry	D	2.02	-	-	1003	F	0.09	-	0.2	0.1	0.1	1.3	1.3	19.2	19.3	1	1	-	
Wider Site R1	15/09/22	11:40	WS218	S	GL	Dry	D	2.07	-	-	1007	R	-0.05	-	0.2	0.1	0.1	0.8	0.8	20.7	20.7	0	0	-	
Wider Site R1	15/09/22	11:25	WS219	S	GL	Dry	D	4.93	-	-	1007	R	0.04	-	0.2	0.1	0.1	1.5	1.5	20.1	20.1	0	0	-	
Wider Site R1	15/09/22	10:57	WS220	S	GL	2.77		3.00	-	-	1007	R	0.04	-	0.2	0.1	0.1	0.6	0.6	20.7	20.7	0	0	-	
Wider Site R1	12/09/22	13:08	WS221	S	GL	Dry	D	1.99	-	-	1003	F	0.00	-	0.3	0.1	0.1	1.0	0.9	19.9	19.9	0	1	-	
Wider Site R1	12/09/22	13:34	WS222	S	GL	Dry	D	2.43	-	-	1003	F	-0.05	-	0.2	0.1	0.1	0.9	0.9	19.9	19.9	1	1	-	
Wider Site R1	15/09/22	11:33	WS223	S	GL	Dry	D	2.97	-	-	1007	R	0.02	-	0.2	0.1	0.1	0.5	0.5	20.9	20.9	0	0	-	
Wider Site R1	15/09/22	12:36	WS224	S	GL	Dry	D	1.33	-	-	1007	R	0.04	-	0.2	0.1	0.1	1.0	1.0	20.3	20.3	0	0	-	
Wider Site R1	12/09/22	13:15	WS225	S	GL	Dry	D	1.98	-	-	1003	F	-0.14	-	0.4	0.1	0.1	0.9	0.9	19.4	19.6	1	1	-	
Wider Site R1	12/09/22	13:45	WS226	S	GL	Dry	D	1.12	-	-	1003	F	0.00	-	0.2	0.1	0.1	0.4	0.4	20.2	20.3	1	1	-	
Wider Site R1	12/09/22	13:40	WS227	S	GL	Dry	D	2.73	-	-	1003	F	-0.02	-	0.2	0.1	0.1	1.0	1.0	20.0	20.0	1	1	-	
Wider Site R1	12/09/22	15:40	WS228	S	GL	Dry	D	0.97	-	-	1003	F	0.07	-	0.2	0.1	0.1	0.4	0.4	20.8	20.8	1	0	-	
Wider Site R1	12/09/22	15:35	WS229	S	GL	Dry	D	1.95	-	-	1003	F	0.05	-	0.1	0.1	0.1	0.5	0.5	20.8	20.9	1	0	-	
Wider Site R1	12/09/22	14:06	WS230	S	GL	Dry	D	1.09	-	-	1003	F	0.07	-	0.2	0.1	0.1	0.6	0.6	20.5	20.5	1	0	-	
Wider Site R1	12/09/22	14:19	WS231	S	GL	4.49		5.07	-	-	1004	F	0.04	-	0.2	0.1	0.1	0.8	0.8	20.4	20.4	2	0	-	
Wider Site R1	15/09/22	11:09	WS232	S	GL	1.46		3.42	-	-	1007	R	0.02	-	0.2	0.1	0.1	0.4	0.4	20.8	20.8	0	0	-	
Wider Site R1	15/09/22	12:46	WS234	S	GL	1.25		1.62	-	-	1007	R	0.05	-	0.2	0.1	0.1	0.3	0.1	21.0	21.3	0	0	-	
Wider Site R1	22/09/22	10:53	WS235	S	GL	1.36		4.91	-	-	1014	F	0.02	-	0.3	0.1	0.1	1.9	1.7	19.1	19.2	0	0	-	
Wider Site R1	22/09/22	10:35	WS236	S	GL	Dry	D	1.95	-	-	1014	F	0.04	-	0.3	0.1	0.1	2.2	2.2	19.6	19.6	0	0	-	
Wider Site R1	12/09/22	15:26	WS237	S	GL	Dry	D	1.01	-	-	1003	F	0.05	-	0.3	0.1	0.1	0.2	0.2	21.0	21.0	1	0	-	
Wider Site R1	12/09/22	14:33	WS238	S	GL	3.84		5.06	-	-	1003	F	0.02	-	0.2	0.1	0.1	1.3	0.9	19.8	20.1	2	0	-	
Wider Site R1	15/09/22	11:57	WS239	S	GL	1.38		2.23	-	-	1007	R	0.05	-	0.2	0.1	0.1	0.8	0.8	20.7	20.7	0	0	-	
Wider Site R1	15/09/22	12:10	WS240	S	GL	Dry	D	1.10	-	-	1007	R	-0.02	-	0.2	0.1	0.1	1.2	1.2	20.6	20.6	0	0	-	
Wider Site R1	15/09/22	12:22	WS240	S	GL	1.36		2.20	-	-	1007	R	0.07	-	0.2	0.1	0.1	1.9	1.9	19.6	19.6	0	0	-	
Wider Site R1	15/09/22	13:19	WS241	S	GL	1.59		1.																	

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)							Local conditions		
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R)/ steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Wider Site R1	12/09/22	16:12	WS246	S	GL	1.44		4.55	-	-	1004	F	0.12	-	0.2	0.1	0.1	0.7	0.7	20.5	20.5	2	0	-	
Wider Site R1	12/09/22	16:26	WS247	S	GL	Dry	D*	0.89	-	-	1003	F	0.16	-	0.2	0.1	0.1	0.5	0.5	20.2	20.2	1	0	-	
Wider Site R1	15/09/22	15:40	WS248	S	GL	Dry	D	2.02	-	-	1007	R	0.12	-	0.2	0.1	0.1	0.7	0.7	20.8	20.8	0	0	-	
Wider Site R1	15/09/22	13:51	WS249	S	GL	Dry	D	0.97	-	-	1007	R	0.14	-	0.2	0.1	0.1	0.6	0.6	20.9	20.9	0	0	-	
Wider Site R1	15/09/22	14:20	WS250	S	GL	Dry	D	0.84	-	-	1007	R	0.04	-	0.2	0.1	0.1	0.5	0.5	21.2	21.2	0	0	-	
Wider Site R1	15/09/22	13:36	WS251	S	GL	0.90		2.95	-	-	1007	R	0.11	-	0.2	0.1	0.1	0.2	0.2	21.2	21.2	0	0	-	
Wider Site R1	15/09/22	14:07	WS252	S	GL	Dry	D	5.05	-	-	1007	R	0.05	-	-4.5	0.1	0.1	0.1	0.1	21.2	21.2	1	0	-	
Wider Site R2	26/09/22	14:37	BH201	S	GL	3.69		5.90	-	-	996	F	0.00	-	0.3	0.1	0.1	1.1	1.1	20.9	20.9	0	0	-	
Wider Site R2	26/09/22	13:50	BH202	S	GL	3.95		5.74	-	-	996	F	-0.07	-	0.3	0.1	0.1	0.7	0.7	21.0	21.0	0	0	-	
Wider Site R2	27/09/22	13:01	BH203	S	GL	Dry	D*	5.94	-	-	995	F	0.07	-	0.3	0.1	0.1	0.7	0.7	21.2	21.3	0	0	-	
Wider Site R2	27/09/22	12:36	BH204	S	GL	3.43		5.99	-	-	996	F	0.04	-	0.3	0.1	0.1	1.0	1.0	21.0	21.0	0	0	-	
Wider Site R2	27/09/22	12:48	BH205	S	GL	-		6.03	-	-	996	F	0.02	-	0.2	0.1	0.1	0.2	0.2	21.2	21.4	0	0	-	
Wider Site R2	26/09/22	11:07	WS201	S	GL	Dry	D	1.86	-	-	995	F	-0.07	-	0.3	0.1	0.1	1.5	1.4	19.7	19.7	0	0	-	
Wider Site R2	26/09/22	11:18	WS202	S	GL	Dry	D	1.98	-	-	996	F	-0.05	-	0.3	0.1	0.1	1.3	1.3	20.4	20.4	0	0	-	
Wider Site R2	26/09/22	11:42	WS203	S	GL	Dry	D	1.98	-	-	995	F	0.09	-	0.3	0.1	0.1	0.8	0.8	20.8	20.8	0	0	-	
Wider Site R2	26/09/22	12:09	WS205	S	GL	Dry	D	2.92	-	-	996	F	0.00	-	0.3	0.1	0.1	3.4	3.3	18.7	18.7	0	0	-	
Wider Site R2	26/09/22	11:34	WS213	S	GL	Dry	D	3.60	-	-	996	F	0.02	-	0.3	0.1	0.1	0.6	0.6	20.9	20.9	0	0	-	
Wider Site R2	26/09/22	13:24	WS214	S	GL	Dry	D	0.98	-	-	996	F	0.05	-	0.3	0.1	0.1	0.4	0.4	21.7	21.7	0	0	-	
Wider Site R2	26/09/22	13:07	WS219	S	GL	4.34		4.96	-	-	996	F	0.00	-	0.3	0.1	0.1	1.5	1.5	20.6	20.6	0	0	-	
Wider Site R2	26/09/22	15:19	WS221	S	GL	Dry	D	1.98	-	-	997	F	0.00	-	0.3	0.1	0.1	2.1	2.1	20.9	20.9	0	0	-	
Wider Site R2	26/09/22	14:12	WS222	S	GL	Dry	D	1.98	-	-	996	F	0.09	-	0.3	0.1	0.1	1.2	1.1	20.8	20.8	0	0	-	
Wider Site R2	27/09/22	11:42	WS224	S	GL	Dry	D*	1.36	-	-	996	F	-0.02	-	0.3	0.1	0.1	0.8	0.2	20.9	21.4	0	0	-	
Wider Site R2	26/09/22	15:14	WS225	S	GL	Dry	D	1.98	-	-	997	F	0.04	-	0.3	0.1	0.1	0.9	0.9	21.0	21.3	0	0	-	
Wider Site R2	26/09/22	14:55	WS226	S	GL	Dry	D	1.11	-	-	997	F	0.12	-	0.3	0.1	0.1	0.6	0.6	21.3	21.3	0	0	-	
Wider Site R2	27/09/22	13:08	WS228	S	GL	Dry	D	0.97	-	-	995	F	0.05	-	0.3	0.1	0.1	0.8	0.8	21.5	21.5	0	0	-	
Wider Site R2	27/09/22	13:14	WS229	S	GL	Dry	D	1.93	-	-	995	F	0.12	-	0.3	0.1	0.1	0.9	0.9	21.3	21.4	0	0	-	
Wider Site R2	27/09/22	14:27	WS231	S	GL	Dry	D	4.50	-	-	994	F	0.07	-	0.3	0.1	0.1	2.5	2.5	20.0	20.0	0	0	-	
Wider Site R2	26/09/22	13:42	WS232	S	GL	1.47		3.95	-	-	996	F	-0.07	-	0.3	0.1	0.1	0.8	0.8	21.2	21.2	0	0	-	
Wider Site R2	27/09/22	11:50	WS234	S	GL	1.22		1.60	-	-	996	F	0.07	-	0.3	0.1	0.1	0.1	0.1	21.6	21.6	0	0	-	
Wider Site R2	26/09/22	15:46	WS235	S	GL	1.36		4.93	-	-	997	F	0.04	-	0.3	0.1	0.1	1.7	1.7	19.9	19.9	0	0	-	
Wider Site R2	26/09/22	15:39	WS236	S	GL	Dry	D	1.93	-	-	997	F	0.07	-	0.3	0.1	0.1	1.1	1.1	21.0	21.0	0	0	-	
Wider Site R2	27/09/22	13:29	WS237	S	GL	Dry	D	0.93	-	-	995	F	0.04	-	0.3	0.1	0.1	0.5	0.5	21.7	21.7	0	0	-	
Wider Site R2	27/09/22	14:15	WS238	S	GL	3.95		5.93	-	-	995	F	0.05	-	0.3	0.1	0.1	2.0	2.0	20.2	20.2	0	0	-	
Wider Site R2	27/09/22	12:04	WS239	S	GL	1.39		2.21	-	-	996	F	0.00	-	0.3	0.1	0.1	0.8	0.8	21.2	21.2	0	0	-	
Wider Site R2	27/09/22	11:57	WS240	S	GL	Dry	D	1.07	-	-	996	F	0.11	-	0.3	0.1	0.1	1.3	1.3	21.0	21.0	0	0	-	
Wider Site R2	27/09/22	11:04	WS241	S	GL	1.56		1.93	-	-	996	F	-0.04	-	0.3	0.1	0.1	1.3	1.3	20.3	20.3	0	0	-	
Wider Site R2	26/09/22	15:53	WS242	S	GL	0.79		3.56	-	-	997	F	0.04	-	0.3	0.1	0.1	1.2	1.2	20.7	20.7	0	0	-	
Wider Site R2	27/09/22	13:55	WS243	S	GL	Dry	D	0.97	-	-	995	F	0.09	-	0.3	0.1	0.1	1.7	0.9	20.9	21.1	0	0	-	
Wider Site R2	27/09/22	12:19	WS244	S	GL	Dry	D	0.84	-	-	996	F	0.05	-	0.3	0.1	0.1	0.6	0.6	21.3	21.3	0	0	-	
Wider Site R2	27/09/22	12:56	WS245	S	GL	1.15		2.47	-	-	996	F	-0.02	-	-0.2	0.1	0.1	0.1	0.1	21.5	21.5	0	0	-	
Wider Site R2	27/09/22	14:07	WS246	S	GL	1.48		4.43	-	-	995	F	0.09	-	0.3	0.1	0.1	1.1	0.7	20.5	21.3	0	0	-	
Wider Site R2	27/09/22	12:24	WS247	S	GL	Dry	D	0.87	-	-	996	F	0.05	-	0.3	0.1	0.1	1.2	1.2	20.6	20.6	0	0	-	
Wider Site R2	27/09/22	11:21	WS248	S	GL	Dry	D*	1.59	-	-	996	F	0.05	-	0.3	0.1	0.1	0.6	0.6	21.0	21.1	0	0	-	
Wider Site R2	27/09/22	10:41	WS249	S	GL	Dry	D	0.97	-	-	996	F	0.02	-	0.2	0.1	0.1	0.7	0.7	20.7	20.8	0	0	-	
Wider Site R2	27/09/22	10:48	WS250	S	GL	Dry	D	0.84	-	-	996	F	0.04	-	0.3	0.1	0.1	0.6	0.6	20.9	20.9	0	0	-	
Wider Site R3	10/10/22	16:35	BH201	S	GL	4.29		5.00	-	-	1014	R	0.02	-	0.2	0.1	0.1	0.8	0.8	20.1	20.1	0	0	-	
Wider Site R3	10/10/22	12:12	BH202	S	GL	3.28		5.23	-	-	1014	R	0.05	-	0.3	0.1	0.1	0.6	0.6	21.5	21.7	0	0	-	
Wider Site R3	10/10/22	15:19	BH203	S	GL	3.54		6.00	-	-	1014	R	0.12	-	0.2	0.1	0.1	0.4	0.4	20.5	20.5	1	0	-	
Wider Site R3	10/10/22	14:49	BH204	S	GL	2.63		5.10	-	-	1016	R	-0.09	-	0.2	0.1	0.1	0.8	0.8	21.4	21.6	0	0	-	
Wider Site R3	10/10/22	15:26	BH205	S	GL	1.15		4.12	-	-	1014	R	0.00	-	0.2	0.1	0.1	0.3	0.3	21.0	21.0	0	0	-	
Wider Site R3	10/10/22	09:37	WS201	S	GL	Dry	D	1.86	-	-	1012	R	0.14	-	0.2	0.1	0.1	0.9	0.8	20.0	20.5	0	0	-	
Wider Site R3	10/10/22	09:44	WS202	S	GL	Dry	D	1.97	-	-	1012	R	0.04	-	0.0	0.1	0.1	0.7	0.7	20.4	20.4	0	1	-	
Wider Site R3	10/10/22	10:46	WS203	S	GL	Dry	D	1.98	-	-	1013	R	-0.04	-	0.3	0.1	0.1	0.7	0.7	20.8	21.1	0	0	-	
Wider Site R3	10/10/22	10:58	WS204	S	GL	Dry	D	1.00	-	-	1013	R	-0.02	-	0.1	0.1	0.1	0.3	0.3	20.9	21.2	0	0	-	
Wider Site R3	10/10/22	10:38	WS205	S	GL	1.46		2.96	-	-	1013	R	0.05	-	0.2	0.1	0.1	2.3	2.3	19.8	19.9	0	0	-	
Wider Site R3	10/10/22	10:29	WS206	S	GL	2.18		4.30	-	-	1013	R	-0.02	-	0.1	0.1	0.1	1.5	1.5	20.1	20.2	0	0	-	
Wider Site R3	10/10/22	11:08	WS207	S	GL	0.84		2.15	-	-	1013	R	-0.05	-	-0.1	0.1	0.1	0.8	0.8	20.9	21.0	0	0	-	
Wider Site R3	10/10/22	11:15	WS208	S	GL	0.59		2.22	-	-	1014	R	2.91	-	-4.7	0.1	0.1	1.1	1.1	20.6	20.6	4	0	-	
Wider Site R3	10/10/22	10:22	WS209	S	GL	1.66		2.99	-	-	1013	R	0.02	-	0.3	0.1	0.1	2.1	2.0	20.0	20.0	0	0	-	
Wider Site R3	10/10/22	11:28	WS210	S	GL	0.77		2.60	-	-	1014	R	0.12	-	-3.0	0.1	0.1	1.1	1.1	20.6	20.7	2	0	-	
Wider Site R3	10/10/22	09:30	WS211	S	GL	3.15		3.52	-	-	1012	R	0.23	-</											

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any
Wider Site R3	10/10/22	17:07	WS217	S	GL	Dry	D	2.02	-	-	1014	R	0.00	-	0.2	0.1	0.1	1.3	1.2	20.1	19.8	0	0	-	
Wider Site R3	10/10/22	10:14	WS218	S	GL	Dry	D	1.77	-	-	1013	R	0.04	-	0.1	0.1	0.1	1.0	1.0	20.7	20.9	0	0	-	
Wider Site R3	10/10/22	11:50	WS219	S	GL	4.07		4.95	-	-	1014	R	0.00	-	0.3	0.1	0.1	1.3	1.3	20.6	20.6	0	0	-	
Wider Site R3	10/10/22	11:44	WS220	S	GL	1.74		2.98	-	-	1014	R	0.05	-	0.1	0.1	0.1	0.6	0.6	20.9	21.1	0	0	-	
Wider Site R3	10/10/22	17:26	WS221	S	GL	Dry	D	1.99	-	-	1014	R	0.04	-	0.3	0.1	0.1	1.0	0.9	19.9	19.9	0	0	-	
Wider Site R3	10/10/22	16:51	WS222	S	GL	Dry	D	2.44	-	-	1014	R	0.04	-	0.2	0.1	0.1	1.0	1.0	20.5	20.5	0	0	-	
Wider Site R3	10/10/22	11:56	WS223	S	GL	Dry	D	1.97	-	-	1014	R	-0.05	-	0.3	0.1	0.1	0.6	0.5	21.3	21.5	0	0	-	
Wider Site R3	10/10/22	12:53	WS224	S	GL	Dry	D	1.36	-	-	1015	R	-0.05	-	0.1	0.1	0.1	0.6	0.5	21.6	21.8	0	0	-	
Wider Site R3	10/10/22	17:24	WS225	S	GL	Dry	D	1.98	-	-	1014	R	-0.02	-	0.3	0.1	0.1	1.0	1.0	20.5	20.5	0	0	-	
Wider Site R3	10/10/22	17:00	WS226	S	GL	Dry	D	1.12	-	-	1014	R	0.04	-	0.2	0.1	0.1	0.4	0.4	20.5	20.5	0	0	-	
Wider Site R3	10/10/22	16:42	WS227	S	GL	Dry	D	2.72	-	-	1014	R	0.02	-	0.2	0.1	0.1	1.0	0.9	20.3	20.3	0	0	-	
Wider Site R3	10/10/22	15:12	WS228	S	GL	Dry	D	0.99	-	-	1014	R	-0.07	-	0.2	0.1	0.1	0.4	0.4	21.0	21.1	0	0	-	
Wider Site R3	10/10/22	15:08	WS229	S	GL	Dry	D	1.95	-	-	1014	R	0.05	-	0.2	0.1	0.1	0.4	0.3	20.5	20.9	0	0	-	
Wider Site R3	10/10/22	12:20	WS230	S	GL	Dry	D	1.10	-	-	1014	R	0.07	-	0.1	0.1	0.1	0.6	0.6	21.5	21.6	0	0	-	
Wider Site R3	10/10/22	16:27	WS231	S	GL	4.50		5.07	-	-	1014	R	0.02	-	0.3	0.1	0.1	1.9	2.0	20.1	20.1	0	0	-	
Wider Site R3	10/10/22	12:05	WS232	S	GL	1.96		2.97	-	-	1014	R	0.18	-	0.2	0.1	0.1	0.6	0.6	21.4	21.6	0	0	-	
Wider Site R3	10/10/22	13:00	WS233	S	GL	1.35		2.25	-	-	1015	R	0.16	-	0.2	0.1	0.1	1.8	1.7	20.5	20.5	0	0	-	
Wider Site R3	10/10/22	13:08	WS234	S	GL	1.25		1.64	-	-	1015	R	0.02	-	0.2	0.1	0.1	0.3	0.3	21.2	21.5	0	0	-	
Wider Site R3	10/10/22	15:46	WS235	S	GL	1.96		4.91	-	-	1014	R	0.16	-	0.2	0.1	0.1	1.2	1.2	20.7	20.6	0	0	-	
Wider Site R3	10/10/22	15:40	WS236	S	GL	1.41		1.96	-	-	1014	R	0.19	-	0.3	0.1	0.1	1.0	1.0	20.3	20.2	0	0	-	
Wider Site R3	10/10/22	15:02	WS237	S	GL	Dry	D	1.01	-	-	1014	R	0.02	-	0.2	0.1	0.1	0.2	0.4	21.2	21.4	0	0	-	
Wider Site R3	10/10/22	16:20	WS238	S	GL	3.90		5.06	-	-	1014	R	0.02	-	0.3	0.1	0.1	1.3	0.9	21.0	21.0	0	0	-	
Wider Site R3	10/10/22	13:23	WS239	S	GL	1.39		2.22	-	-	1015	R	-0.04	-	0.2	0.1	0.1	0.6	0.6	21.2	21.2	0	0	-	
Wider Site R3	10/10/22	13:17	WS240	S	GL	Dry	D	1.10	-	-	1015	R	-0.04	-	0.1	0.1	0.1	1.1	1.0	21.0	21.2	0	0	-	
Wider Site R3	10/10/22	14:33	WS241	S	GL	1.57		1.94	-	-	1016	R	-0.04	-	0.1	0.1	0.1	1.1	1.0	21.1	21.3	0	0	-	
Wider Site R3	10/10/22	15:50	WS242	S	GL	0.72		3.61	-	-	1014	R	0.04	-	0.2	0.1	0.1	1.2	1.2	19.0	18.8	1	0	-	
Wider Site R3	10/10/22	14:56	WS243	S	GL	Dry	D	1.00	-	-	1014	R	0.07	-	0.3	0.1	0.1	0.4	0.4	20.0	20.5	0	0	-	
Wider Site R3	10/10/22	14:37	WS244	S	GL	Dry	D	0.88	-	-	1016	R	-0.07	-	0.3	0.1	0.1	0.5	0.5	21.8	21.8	0	0	-	
Wider Site R3	10/10/22	16:04	WS245	S	GL	1.10		2.56	-	-	1014	R	0.02	-	-0.2	0.1	0.1	0.1	0.3	21.0	21.3	1	0	-	
Wider Site R3	10/10/22	16:14	WS246	S	GL	Dry	D	4.55	-	-	1014	R	0.05	-	0.2	0.1	0.1	0.4	0.8	20.5	21.0	0	0	-	
Wider Site R3	10/10/22	14:43	WS247	S	GL	Dry	D	0.92	-	-	1016	R	0.00	-	0.3	0.1	0.1	1.1	1.1	21.2	21.2	0	0	-	
Wider Site R3	10/10/22	13:32	WS248	S	GL	Dry	D*	1.60	-	-	1015	R	-0.07	-	0.1	0.1	0.1	0.5	0.5	21.2	21.4	0	0	-	
Wider Site R3	10/10/22	13:50	WS249	S	GL	0.07		0.97	-	-	1016	R	0.04	-	0.0	0.1	0.1	0.6	0.6	21.3	21.4	0	0	-	
Wider Site R3	10/10/22	13:41	WS250	S	GL	Dry	D	0.85	-	-	1016	R	0.02	-	0.3	0.1	0.1	0.5	0.5	21.3	21.3	0	0	-	
Wider Site R3	10/10/22	14:09	WS251	S	GL	0.93		1.96	-	-	1016	R	-0.28	-	-0.5	0.1	0.1	1.0	0.9	20.3	20.7	1	0	-	
Wider Site R3	10/10/22	13:58	WS252	S	GL	1.00		5.05	-	-	1014	R	0.12	-	0.2	0.1	0.1	0.8	1.0	20.5	20.6	1	0	-	
Wider Site R4	19/10/22	16:13	BH201	S	GL	4.29		5.00	-	-	1006	F	0.09	-	0.2	0.1	0.1	1.0	0.9	21.5	21.5	0	0	-	OK
Wider Site R4	19/10/22	14:02	BH202	S	GL	3.38		5.24	-	-	1009	F	0.14	-	0.3	0.1	0.1	0.7	0.7	21.1	21.1	0	0	-	OK
Wider Site R4	19/10/22	12:39	BH203	S	GL	3.54		6.00	-	-	1010	F	0.12	-	0.2	0.1	0.1	0.4	0.4	21.1	21.1	0	0	-	OK
Wider Site R4	19/10/22	13:42	BH204	S	GL	2.60		5.10	-	-	1009	F	0.14	-	0.1	0.1	0.1	0.8	0.8	21.1	21.1	0	0	-	OK
Wider Site R4	19/10/22	12:46	BH205	S	GL	1.16		4.12	-	-	1010	F	0.00	-	0.2	0.1	0.1	0.3	0.3	21.3	21.4	0	0	-	OK
Wider Site R4	19/10/22	16:51	WS201	S	GL	Dry	D	1.86	-	-	1006	F	0.19	-	0.2	0.1	0.1	0.6	0.4	20.7	21.9	0	0	-	DRY
Wider Site R4	19/10/22	17:02	WS202	S	GL	1.72		1.97	-	-	1007	F	-0.02	-	0.1	0.1	0.1	0.2	0.2	21.9	21.9	0	0	-	OK
Wider Site R4	19/10/22	15:25	WS203	S	GL	Dry	D	1.99	-	-	1007	F	0.00	-	0.2	0.1	0.1	0.7	0.7	21.4	21.5	0	0	-	DRY
Wider Site R4	19/10/22	15:18	WS204	S	GL	Dry	D	1.00	-	-	1008	F	-0.21	-	0.2	0.1	0.1	0.6	0.4	20.8	20.9	0	0	-	DRY
Wider Site R4	19/10/22	15:33	WS205	S	GL	1.47		2.96	-	-	1007	F	-0.02	-	0.2	0.1	0.1	2.3	2.2	20.0	20.0	0	0	-	OK
Wider Site R4	19/10/22	15:11	WS206	S	GL	2.21		4.30	-	-	1008	F	-0.11	-	0.3	0.1	0.1	1.5	1.5	20.4	20.5	0	0	-	OK
Wider Site R4	19/10/22	15:02	WS207	S	GL	0.81		2.15	-	-	1008	F	0.05	-	-1.7	0.1	0.1	1.9	1.9	20.6	20.7	1	0	-	OK
Wider Site R4	19/10/22	14:52	WS208	S	GL	0.57		2.22	-	-	1008	F	2.98	-	-5.8	0.1	0.1	2.3	2.3	20.0	20.2	3	0	-	OK
Wider Site R4	19/10/22	15:05	WS209	S	GL	1.67		2.99	-	-	1008	F	0.04	-	0.2	0.1	0.1	1.8	1.8	20.5	20.5	0	0	-	OK
Wider Site R4	19/10/22	14:24	WS210	S	GL	0.76		2.60	-	-	1009	F	-0.07	-	-2.6	0.1	0.1	1.3	1.3	20.5	20.6	2	0	-	OK
Wider Site R4	19/10/22	16:42	WS211	S	GL	3.15		3.52	-	-	1006	F	0.16	-	0.1	0.1	0.1	3.5	3.2	18.8	18.9	0	0	-	OK
Wider Site R4	19/10/22	14:36	WS213	S	GL	Dry	D	3.63	-	-	1006	F	0.09	-	0.3	0.1	0.1	1.1	1.1	21.0	21.0	0	0	-	DRY
Wider Site R4	19/10/22	15:41	WS214	S	GL	Dry	D	0.97	-	-	1007	F	0.12	-	0.2	0.1	0.1	0.9	0.9	21.1	21.5	0	0	-	DRY
Wider Site R4	19/10/22	14:43	WS215	S	GL	0.92		2.53	-	-	1009	F	-0.14	-	0.2	0.1	0.1	0.2	0.2	21.4	21.5	0	0	-	OK
Wider Site R4	19/10/22	17:12	WS216	S	GL	Dry	D*	4.05	-	-	1006	F	0.04	-	0.2	0.1	0.1	1.0	1.0	19.0	18.2	0	0	-	OK
Wider Site R4	19/10/22	16:34	WS217	S	GL	Dry	D	2.02	-	-	1006	F	0.02	-	0.2	0.1	0.1	0.6	0.6	21.8	21.8	0	0	-	DRY
Wider Site R4	19/10/22	15:47	WS218	S	GL	Dry	D	1.76	-	-	1007	F	-0.02	-	0.2	0.1	0.1	0.9	0.9	21.4	21.4	0	0	-	DRY
Wider Site R4	19/10/22	14:32	WS219	S	GL	3.92		4.95	-	-	1008	F	0.05	-	0.2	0.1	0.1	1.3	1.3	20.6	20.6	0	0	-	OK
Wider Site R4	19/10/22	14:37	WS220	S	GL	1.73		2.98	-	-	1009	F	0.00	-	0.2	0.1	0.1	0.6	0.6	21.0	21.2	0	0	-	OK
W																									



Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R)/ steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any
Wider Site R4	19/10/22	16:08	WS226	S	GL	Dry	D	1.14	-	-	998	F	0.09	-	0.2	0.1	0.1	0.4	0.3	21.8	21.8	0	0	-	DRY
Wider Site R4	19/10/22	16:00	WS227	S	GL	Dry	D	2.72	-	-	1006	F	0.00	-	0.2	0.1	0.1	0.9	0.9	21.6	21.6	0	0	-	DRY
Wider Site R4	19/10/22	12:32	WS228	S	GL	Dry	D	0.99	-	-	1010	F	-0.07	-	0.1	0.1	0.1	0.5	0.5	21.2	21.3	0	0	-	DRY
Wider Site R4	19/10/22	12:28	WS229	S	GL	Dry	D	1.95	-	-	1010	F	-0.12	-	0.2	0.1	0.1	0.6	0.6	21.2	21.4	0	0	-	DRY
Wider Site R4	19/10/22	16:21	WS230	S	GL	Dry	D	1.10	-	-	1007	F	0.04	-	0.2	0.1	0.1	0.6	0.6	21.7	21.7	0	0	-	DRY
Wider Site R4	19/10/22	12:05	WS231	S	GL	4.55		5.07	-	-	1011	F	0.14	-	0.2	0.1	0.1	2.2	2.2	20.1	20.1	0	0	-	OK
Wider Site R4	19/10/22	14:08	WS232	S	GL	1.45		2.97	-	-	1009	F	0.12	-	0.2	0.1	0.1	0.6	0.6	21.1	21.3	0	0	-	OK
Wider Site R4	19/10/22	11:37	WS233	S	GL	1.35		2.25	-	-	1011	F	0.14	-	0.2	0.1	0.1	1.8	1.8	20.3	20.3	0	0	-	OK
Wider Site R4	19/10/22	11:45	WS234	S	GL	1.22		1.64	-	-	1011	F	-0.05	-	0.2	0.1	0.1	0.4	0.4	20.9	21.3	0	0	-	OK
Wider Site R4	19/10/22	12:54	WS235	S	GL	1.41		4.91	-	-	1010	F	0.16	-	0.2	0.1	0.1	1.3	1.3	20.7	20.7	0	0	-	OK
Wider Site R4	19/10/22	13:00	WS236	S	GL	Dry	D	1.96	-	-	1010	F	0.19	-	0.2	0.1	0.1	1.8	1.8	20.2	20.2	0	0	-	DRY
Wider Site R4	19/10/22	12:22	WS237	S	GL	Dry	D	1.01	-	-	1010	F	0.02	-	0.2	0.1	0.1	0.4	0.4	21.3	21.4	0	0	-	DRY
Wider Site R4	19/10/22	12:10	WS238	S	GL	3.97		5.06	-	-	1010	F	0.16	-	0.2	0.1	0.1	2.0	2.0	20.0	20.0	0	0	-	OK
Wider Site R4	19/10/22	11:27	WS239	S	GL	1.37		2.22	-	-	1012	F	0.05	-	0.3	0.1	0.1	0.6	0.6	21.2	21.3	0	0	-	OK
Wider Site R4	19/10/22	11:32	WS240	S	GL	Dry	D	1.10	-	-	1012	F	0.09	-	0.3	0.1	0.1	1.0	1.0	20.9	21.0	0	0	-	DRY
Wider Site R4	19/10/22	10:28	WS241	S	GL	1.54		1.94	-	-	1013	F	0.18	-	0.3	0.1	0.1	1.6	1.6	19.6	19.7	0	0	-	OK
Wider Site R4	19/10/22	13:09	WS242	S	GL	0.72		3.61	-	-	1010	F	0.21	-	-3.8	0.1	0.1	2.3	2.3	18.8	18.8	1	0	-	OK
Wider Site R4	19/10/22	12:16	WS243	S	GL	Dry	D	1.00	-	-	1010	F	0.16	-	0.2	0.1	0.1	0.7	0.6	20.9	21.1	0	0	-	DRY
Wider Site R4	19/10/22	13:58	WS244	S	GL	Dry	D	0.88	-	-	1010	F	0.00	-	0.1	0.1	0.1	0.3	0.3	21.1	21.5	0	0	-	DRY
Wider Site R4	19/10/22	13:25	WS245	S	GL	1.10		2.56	-	-	1010	F	0.16	-	-0.2	0.1	0.1	0.3	0.3	21.3	21.5	1	0	-	OK
Wider Site R4	19/10/22	13:38	WS246	S	GL	1.43		4.55	-	-	1010	F	0.05	-	0.1	0.1	0.1	0.8	0.8	21.0	21.1	0	0	-	OK
Wider Site R4	19/10/22	13:47	WS247	S	GL	Dry	D*	0.92	-	-	1010	F	0.07	-	0.1	0.1	0.1	1.2	1.2	20.5	20.7	0	0	-	OK
Wider Site R4	19/10/22	11:16	WS248	S	GL	Dry	D*	1.60	-	-	1012	F	-0.05	-	0.3	0.1	0.1	0.5	0.5	21.2	21.3	0	0	-	OK
Wider Site R4	19/10/22	11:03	WS249	S	GL	Dry	D	0.95	-	-	1012	F	0.04	-	0.1	0.1	0.1	0.4	0.4	21.2	21.2	0	0	-	DRY
Wider Site R4	19/10/22	11:09	WS250	S	GL	Dry	D	0.86	-	-	1012	F	0.18	-	0.2	0.1	0.1	0.5	0.5	21.2	21.3	0	0	-	DRY
Wider Site R4	19/10/22	10:38	WS251	S	GL	0.84		1.96	-	-	1013	F	-0.16	-	-0.5	0.1	0.1	1.4	1.4	19.2	19.2	1	0	-	OK
Wider Site R4	19/10/22	10:51	WS252	S	GL	0.90		5.05	-	-	1012	F	-0.02	-	-5.2	0.1	0.1	1.0	0.9	20.3	20.6	1	0	-	OK
Wider Site R5	26/10/22	15:43	BH201	S	GL	4.27		5.00	-	-	1004	R	0.11	-	0.3	0.1	0.1	0.8	0.7	20.8	20.8	0	0	-	OK
Wider Site R5	26/10/22	13:35	BH202	S	GL	3.33		5.24	-	-	1003	R	-0.05	-	0.2	0.1	0.1	0.8	0.8	19.9	20.1	0	0	-	OK
Wider Site R5	25/10/22	13:14	BH203	S	GL	3.21		6.00	-	-	1005	R	-0.02	-	0.3	0.1	0.1	0.8	0.8	19.7	19.8	0	0	-	OK
Wider Site R5	25/10/22	13:45	BH204	S	GL	2.48		5.10	-	-	997	R	-0.07	-	0.1	0.1	0.1	0.8	0.8	20.3	20.4	0	0	-	OK
Wider Site R5	25/10/22	13:21	BH205	S	GL	0.73		4.12	-	-	1005	R	0.02	-	-3.6	0.1	0.1	0.7	0.6	20.6	20.9	1	0	-	OK
Wider Site R5	25/10/22	11:36	WS201	S	GL	Dry	D	1.86	-	-	1004	R	0.11	-	0.1	0.1	0.1	1.3	0.7	19.9	20.3	0	0	-	DRY
Wider Site R5	25/10/22	11:42	WS202	S	GL	1.14		1.99	-	-	1005	R	0.12	-	0.2	0.1	0.1	0.6	0.6	20.4	20.5	0	0	-	OK
Wider Site R5	26/10/22	14:42	WS203	S	GL	Dry	D	1.99	-	-	1004	R	0.18	-	0.3	0.1	0.1	0.6	0.6	20.7	20.7	0	0	-	DRY
Wider Site R5	26/10/22	14:34	WS204	S	GL	Dry	D	1.00	-	-	1004	R	-0.02	-	0.2	0.1	0.1	0.2	0.2	21.3	21.4	0	0	-	DRY
Wider Site R5	26/10/22	14:48	WS205	S	GL	1.03		2.96	-	-	1004	R	0.07	-	0.2	0.1	0.1	1.7	1.6	20.1	20.3	0	0	-	OK
Wider Site R5	26/10/22	15:07	WS206	S	GL	1.74		4.30	-	-	1004	R	0.04	-	0.3	0.1	0.1	1.6	1.6	19.0	19.0	0	0	-	OK
Wider Site R5	26/10/22	14:28	WS207	S	GL	0.59		2.15	-	-	1004	R	-0.58	-	-2.3	0.1	0.1	1.5	1.5	20.5	20.5	2	0	-	OK
Wider Site R5	26/10/22	14:23	WS208	S	GL	0.43		2.22	-	-	1004	R	15.96	-	0.6	0.1	0.1	1.7	1.7	20.2	20.3	3	0	-	OK
Wider Site R5	26/10/22	15:02	WS209	S	GL	1.52		2.99	-	-	1004	R	0.05	-	0.2	0.1	0.1	1.6	1.6	19.9	19.9	0	0	-	OK
Wider Site R5	26/10/22	14:15	WS210	S	GL	0.53		2.60	-	-	1004	R	11.62	-	0.2	0.1	0.1	1.3	1.3	20.3	20.4	2	0	-	OK
Wider Site R5	25/10/22	11:27	WS211	S	GL	3.10		3.52	-	-	1004	R	0.23	-	0.2	0.1	0.1	3.3	3.3	18.1	18.1	0	0	-	OK
Wider Site R5	26/10/22	14:54	WS213	S	GL	Dry	D	3.63	-	-	1004	R	0.00	-	0.3	0.1	0.1	0.5	0.5	20.6	20.7	0	0	-	DRY
Wider Site R5	26/10/22	15:14	WS214	S	GL	Dry	D	0.97	-	-	1004	R	0.02	-	0.2	0.1	0.1	0.9	0.9	20.2	20.4	0	0	-	DRY
Wider Site R5	26/10/22	14:09	WS215	S	GL	0.57		2.53	-	-	1004	R	9.63	-	-1.7	0.1	0.1	0.6	0.6	20.7	20.7	1	0	-	OK
Wider Site R5	25/10/22	10:56	WS216	S	GL	Dry	D*	4.05	-	-	1005	R	-0.14	-	0.2	0.1	0.1	1.5	1.5	19.7	19.8	0	0	-	OK
Wider Site R5	25/10/22	11:53	WS217	S	GL	Dry	D	2.02	-	-	1004	R	-0.11	-	0.3	0.1	0.1	1.5	1.4	19.8	19.9	0	0	-	DRY
Wider Site R5	26/10/22	15:19	WS218	S	GL	Dry	D	1.76	-	-	1004	R	-0.07	-	0.2	0.1	0.1	1.0	1.0	20.4	20.6	0	0	-	DRY
Wider Site R5	26/10/22	13:55	WS219	S	GL	3.82		4.95	-	-	1003	R	-0.05	-	0.3	0.1	0.1	1.0	1.0	19.8	19.9	0	0	-	OK
Wider Site R5	26/10/22	13:50	WS220	S	GL	1.42		2.98	-	-	1004	R	0.07	-	0.3	0.1	0.1	0.6	0.6	19.7	19.8	0	0	-	OK
Wider Site R5	25/10/22	11:03	WS221	S	GL	Dry	D	1.99	-	-	1004	R	0.07	-	0.2	0.1	0.1	1.4	1.4	19.8	19.9	0	0	-	DRY
Wider Site R5	26/10/22	15:25	WS222	S	GL	Dry	D	2.44	-	-	1004	R	-0.09	-	0.2	0.1	0.1	0.7	0.7	20.7	20.8	0	0	-	DRY
Wider Site R5	26/10/22	14:01	WS223	S	GL	Dry	D	1.98	-	-	1003	R	0.09	-	0.1	0.1	0.1	0.5	0.5	20.4	20.5	0	0	-	DRY
Wider Site R5	26/10/22	13:22	WS224	S	GL	0.95		1.36	-	-	1003	R	0.07	-	0.1	0.1	0.1	0.3	0.2	19.9	21.0	0	0	-	OK
Wider Site R5	25/10/22	11:09	WS225	S	GL	Dry	D	1.98	-	-	1005	R	0.02	-	0.1	0.1	0.1	1.0	1.0	19.9	20.0	0	0	-	DRY
Wider Site R5	26/10/22	15:38	WS226	S	GL	Dry	D	1.14	-	-	1004	R	0.04	-	0.2	0.1	0.1	0.5	0.5	20.5	20.5	0	0	-	DRY
Wider Site R5	26/10/22	15:30	WS227	S	GL	Dry	D	2.72	-	-	1004	R	0.19	-	0.2	0.1	0.1	0.8	0.8	20.8	20.8	0	0	-	DRY
Wider Site R5	25/10/22	13:06	WS228	S	GL	Dry	D	0.99	-	-	1004	R	0.00	-	0.3	0.1	0.1	0.7	0.7	20.0	20.0	0	0	-	DRY
Wider Site R5	25/10/22	12:57	WS229	S	GL	Dry	D	1.95	-	-	1004	R	0.09	-	0										

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R)/ steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Wider Site R5	25/10/22	12:12	WS235	S	GL	1.23		4.91	-	-	1005	R	0.16	-	0.3	0.1	0.1	1.7	1.7	19.0	19.0	0	0	-	OK
Wider Site R5	25/10/22	12:06	WS236	S	GL	Dry	D	1.96	-	-	1005	R	0.02	-	0.3	0.1	0.1	1.9	1.9	19.2	19.2	0	0	-	DRY
Wider Site R5	25/10/22	12:52	WS237	S	GL	Dry	D	1.01	-	-	1004	R	0.12	-	0.4	0.1	0.1	0.4	0.4	20.4	20.5	0	0	-	DRY
Wider Site R5	25/10/22	12:40	WS238	S	GL	3.90		5.06	-	-	1005	R	-0.14	-	0.2	0.1	0.1	2.2	2.2	19.6	19.7	0	0	-	OK
Wider Site R5	26/10/22	12:55	WS239	S	GL	1.27		2.22	-	-	1003	R	0.02	-	0.3	0.1	0.1	0.7	0.7	19.8	19.9	0	0	-	OK
Wider Site R5	26/10/22	13:00	WS240	S	GL	Dry	D	1.10	-	-	1003	R	0.09	-	0.3	0.1	0.1	1.1	1.1	19.7	19.8	0	0	-	DRY
Wider Site R5	26/10/22	11:59	WS241	S	GL	1.36		1.94	-	-	1002	R	0.16	-	0.2	0.1	0.1	1.2	1.2	19.9	19.9	0	0	-	OK
Wider Site R5	25/10/22	12:17	WS242	S	GL	0.52		3.61	-	-	1005	R	19.09	-	1.0	0.1	0.1	2.4	2.4	18.6	18.8	1	0	-	OK
Wider Site R5	25/10/22	12:46	WS243	S	GL	Dry	D	1.00	-	-	1004	R	-0.02	-	0.3	0.1	0.1	0.6	0.6	20.3	20.3	0	0	-	DRY
Wider Site R5	25/10/22	14:00	WS244	S	GL	Dry	D	0.88	-	-	1005	R	-0.18	-	0.3	0.1	0.1	0.5	0.5	19.7	19.8	0	0	-	DRY
Wider Site R5	25/10/22	13:26	WS245	S	GL	0.63		2.56	-	-	1005	R	0.04	-	-4.5	0.1	0.1	0.8	0.8	20.9	20.9	1	0	-	OK
Wider Site R5	25/10/22	13:35	WS246	S	GL	1.14		4.55	-	-	1005	R	0.14	-	-2.2	0.1	0.1	1.0	1.0	20.2	20.3	0	0	-	OK
Wider Site R5	25/10/22	13:53	WS247	S	GL	0.71		0.92	-	-	1005	R	0.05	-	0.1	0.1	0.1	1.2	1.2	18.5	18.8	0	0	-	OK
Wider Site R5	26/10/22	12:44	WS248	S	GL	1.37		1.60	-	-	1003	R	0.07	-	0.3	0.1	0.1	0.7	0.7	20.0	20.1	0	0	-	OK
Wider Site R5	26/10/22	12:30	WS249	S	GL	Dry	D	0.95	-	-	1003	R	0.11	-	0.2	0.1	0.1	1.1	1.1	19.3	19.3	0	0	-	DRY
Wider Site R5	26/10/22	12:37	WS250	S	GL	Dry	D	0.86	-	-	1003	R	-0.04	-	0.3	0.1	0.1	0.6	0.6	19.8	19.8	0	0	-	DRY
Wider Site R5	26/10/22	12:08	WS251	S	GL	0.54		1.96	-	-	1003	R	-3.08	-	-1.4	0.1	0.1	1.3	1.1	19.2	19.4	1	0	-	OK
Wider Site R5	26/10/22	12:20	WS252	S	GL	0.48		5.05	-	-	1003	R	-2.38	-	-4.9	0.1	0.1	1.2	1.2	19.5	19.6	1	0	-	OK
Wider Site R6	02/11/22	14:15	BH201	S	GL	4.20		5.80	-	-	1003	R	0.00	-	0.1	0.1	0.1	0.9	0.9	20.3	20.3	0	0	-	
Wider Site R6	02/11/22	11:48	BH202	S	GL	3.27		5.15	-	-	1006	R	0.09	-	0.1	0.1	0.1	1.1	1.1	19.2	19.5	0	0	-	
Wider Site R6	01/11/22	14:43	BH203	S	GL	3.16		5.00	-	-	998	F	0.12	-	0.2	0.1	0.1	0.8	0.8	20.1	20.1	0	0	-	
Wider Site R6	01/11/22	15:09	BH204	S	GL	2.43		5.18	-	-	998	F	-0.02	-	0.2	0.1	0.1	0.9	0.9	19.7	19.9	0	0	-	
Wider Site R6	01/11/22	14:51	BH205	S	GL	0.69		4.16	-	-	999	F	0.12	-	-2.9	0.1	0.1	0.3	0.3	20.9	21.1	1	0	-	
Wider Site R6	02/11/22	11:16	WS201	S	GL	Dry	D	1.90	-	-	1006	R	0.00	-	0.1	0.1	0.1	2.9	0.8	19.4	19.8	0	0	-	Dry
Wider Site R6	02/11/22	11:21	WS202	S	GL	1.05		2.00	-	-	1006	R	0.00	-	-4.5	0.1	0.1	1.2	1.2	19.7	19.7	0	0	-	
Wider Site R6	02/11/22	13:04	WS203	S	GL	Dry	D	2.00	-	-	1005	R	0.00	-	0.1	0.1	0.1	0.7	0.7	20.0	20.2	0	0	-	Dry
Wider Site R6	02/11/22	12:54	WS204	S	GL	Dry	D	1.00	-	-	1005	R	-0.12	-	0.1	0.1	0.1	0.2	0.2	20.9	20.9	0	0	-	Dry
Wider Site R6	02/11/22	13:10	WS205	S	GL	0.95		3.11	-	-	1004	R	0.00	-	0.1	0.1	0.1	0.9	0.8	20.2	20.5	1	0	-	
Wider Site R6	02/11/22	13:30	WS206	S	GL	1.64		4.20	-	-	1004	R	-0.21	-	0.1	0.1	0.1	2.0	2.0	18.2	18.2	0	0	-	
Wider Site R6	02/11/22	12:47	WS207	S	GL	0.57		2.20	-	-	1006	R	0.07	-	-4.0	0.1	0.1	1.3	1.3	20.1	20.2	0	0	-	
Wider Site R6	02/11/22	12:41	WS208	S	GL	0.38		2.15	-	-	1006	R	2.45	-	-6.1	0.1	0.1	1.7	1.7	19.8	19.8	0	0	-	
Wider Site R6	02/11/22	13:27	WS209	S	GL	1.47		3.00	-	-	1004	R	0.09	-	0.1	0.1	0.1	2.0	2.0	18.6	18.8	0	0	-	
Wider Site R6	02/11/22	12:33	WS210	S	GL	0.50		2.60	-	-	1006	R	1.44	-	-6.1	0.1	0.1	1.3	1.3	19.7	20.0	0	0	-	
Wider Site R6	02/11/22	11:09	WS211	S	GL	3.05		3.40	-	-	1007	R	0.04	-	0.1	0.1	0.1	3.5	3.3	17.3	17.4	0	0	-	
Wider Site R6	02/11/22	13:18	WS213	S	GL	Dry	D	3.65	-	-	1004	R	0.00	-	0.1	0.1	0.1	0.6	0.6	19.8	20.1	0	0	-	Dry
Wider Site R6	02/11/22	13:45	WS214	S	GL	Dry	D	1.00	-	-	1004	R	0.00	-	0.1	0.1	0.1	1.2	1.2	19.4	19.4	0	0	-	Dry
Wider Site R6	02/11/22	12:25	WS215	S	GL	0.54		2.50	-	-	1006	R	2.40	-	0.1	0.1	0.1	1.0	1.0	20.2	20.2	0	0	-	
Wider Site R6	02/11/22	10:36	WS216	S	GL	3.90		4.20	-	-	1006	R	-0.07	-	0.1	0.1	0.1	0.9	0.9	19.9	19.9	0	0	-	
Wider Site R6	02/11/22	11:36	WS217	S	GL	Dry	D	2.05	-	-	1006	R	0.00	-	0.1	0.1	0.1	1.8	1.8	19.1	19.4	0	0	-	Dry
Wider Site R6	02/11/22	13:51	WS218	S	GL	Dry	D	1.80	-	-	1003	R	0.00	-	0.1	0.1	0.1	1.1	1.1	19.6	19.7	0	0	-	Dry
Wider Site R6	02/11/22	12:10	WS219	S	GL	3.72		5.00	-	-	1006	R	0.04	-	0.1	0.1	0.1	1.4	1.4	19.2	19.2	0	0	-	
Wider Site R6	02/11/22	12:04	WS220	S	GL	1.38		3.00	-	-	1006	R	1.38	-	0.1	0.1	0.1	0.8	0.8	19.2	19.2	0	0	-	
Wider Site R6	02/11/22	10:49	WS221	S	GL	Dry	D	2.05	-	-	1007	R	0.00	-	0.1	0.1	0.1	1.6	1.6	19.2	19.2	0	0	-	Dry
Wider Site R6	02/11/22	13:58	WS222	S	GL	Dry	D	2.53	-	-	1003	R	0.14	-	0.1	0.1	0.1	0.8	0.8	19.8	20.1	0	0	-	Dry
Wider Site R6	02/11/22	12:16	WS223	S	GL	Dry	D	2.00	-	-	1006	R	0.07	-	0.1	0.1	0.1	0.6	0.6	19.6	19.6	0	0	-	Dry
Wider Site R6	01/11/22	13:48	WS224	S	GL	1.04		1.40	-	-	998	F	0.11	-	0.3	0.1	0.1	0.4	0.1	20.3	21.0	0	0	-	OK
Wider Site R6	02/11/22	10:56	WS225	S	GL	Dry	D	2.00	-	-	1007	R	0.00	-	0.1	0.1	0.1	1.2	1.2	19.3	19.3	0	0	-	Dry
Wider Site R6	02/11/22	14:10	WS226	S	GL	Dry	D	1.10	-	-	1003	R	0.00	-	0.1	0.1	0.1	0.7	0.7	19.9	19.9	0	0	-	Dry
Wider Site R6	02/11/22	14:04	WS227	S	GL	Dry	D	2.80	-	-	1003	R	0.00	-	0.1	0.1	0.1	0.8	0.8	20.2	20.2	0	0	-	Dry
Wider Site R6	01/11/22	14:36	WS228	S	GL	Dry	D	1.01	-	-	998	F	0.02	-	0.2	0.1	0.1	0.9	0.9	19.6	19.7	0	0	-	DRY
Wider Site R6	01/11/22	14:32	WS229	S	GL	Dry	D	1.00	-	-	998	F	0.05	-	0.2	0.1	0.1	0.7	0.7	20.4	20.6	0	0	-	DRY
Wider Site R6	02/11/22	14:22	WS230	S	GL	Dry	D	1.10	-	-	1003	R	0.00	-	0.1	0.1	0.1	0.8	0.8	19.7	19.7	0	0	-	Dry
Wider Site R6	01/11/22	14:12	WS231	S	GL	4.47		5.18	-	-	998	F	0.07	-	0.2	0.1	0.1	2.7	2.7	17.9	17.9	0	0	-	OK
Wider Site R6	02/11/22	11:56	WS232	S	GL	1.27		3.00	-	-	1006	R	0.00	-	0.1	0.1	0.1	0.7	0.7	19.5	19.7	0	0	-	
Wider Site R6	01/11/22	13:40	WS233	S	GL	1.19		2.35	-	-	999	F	0.00	-	0.1	0.1	0.1	2.0	2.0	18.9	19.2	0	0	-	OK
Wider Site R6	01/11/22	13:55	WS234	S	GL	1.03		1.68	-	-	999	F	0.05	-	0.3	0.1	0.1	0.3	0.3	20.6	20.6	0	0	-	OK
Wider Site R6	01/11/22	11:53	WS235	S	GL	1.20		5.06	-	-	999	F	0.02	-	0.2	0.1	0.1	1.7	1.6	17.5	17.5	0	0	-	OK
Wider Site R6	01/11/22	11:47	WS236	S	GL	Dry	D	2.00	-	-	998	F	-0.02	-	0.2	0.1	0.1	0.6	0.6	19.9	19.9	0	0	-	DRY
Wider Site R6	01/11/22	14:28	WS237	S	GL	Dry	D	1.05	-	-	998	F	-0.04	-	0.3	0.1	0.1	0.5	0.5	20.3	20.3	0	0	-	DRY
Wider Site R6	01/11/22	14:16	WS238	S	GL	3.88		4.97	-	-	998	F	0.00	-	0.2	0.1	0.1	2.2	2.1	18.9	19.0</				

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Wider Site R6	01/11/22	15:19	WS244	S	GL	Dry	D	0.93	-	-	999	F	0.00	-	0.3	0.1	0.1	0.7	0.7	19.3	19.5	0	0	-	DRY
Wider Site R6	01/11/22	14:57	WS245	S	GL	0.61		2.58	-	-	999	F	-0.02	-	-6.5	0.1	0.1	0.6	0.6	20.9	21.0	1	0	-	OK
Wider Site R6	01/11/22	15:03	WS246	S	GL	1.11		4.49	-	-	999	F	2.78	-	-3.3	0.1	0.1	0.9	0.9	18.9	18.9	0	0	-	OK
Wider Site R6	01/11/22	15:14	WS247	S	GL	0.67		0.93	-	-	999	F	0.28	-	0.2	0.1	0.1	1.6	1.6	16.9	16.9	0	0	-	OK
Wider Site R6	01/11/22	13:08	WS248	S	GL	1.34		1.65	-	-	999	F	0.14	-	0.3	0.1	0.1	0.9	0.9	19.8	19.8	0	0	-	OK
Wider Site R6	01/11/22	12:54	WS249	S	GL	Dry	D	1.00	-	-	999	F	0.04	-	0.2	0.1	0.1	1.3	1.3	19.3	19.3	0	0	-	DRY
Wider Site R6	01/11/22	13:00	WS250	S	GL	Dry	D	0.89	-	-	999	F	1.39	-	0.3	0.1	0.1	0.8	0.8	19.8	19.8	0	0	-	DRY
Wider Site R6	01/11/22	12:28	WS251	S	GL	0.50		2.00	-	-	999	F	1.44	-	-1.0	0.1	0.1	1.0	1.0	19.4	19.4	2	0	-	OK
Wider Site R6	01/11/22	12:40	WS252	S	GL	0.47		5.18	-	-	999	F	6.53	-	-2.5	0.2	0.2	1.2	1.2	19.5	19.5	1	0	-	OK
Wider Site R7	17/11/22	13:55	BH201	S	GL	4.19		5.86	-	-	1004	F	0.11	-	0.3	0.1	0.1	0.8	0.7	20.8	20.8	0	0	-	OK
Wider Site R7	17/11/22	11:47	BH202	S	GL	3.26		5.15	-	-	1004	F	0.09	-	0.1	0.1	0.1	1.1	1.1	19.2	19.5	0	0	-	OK
Wider Site R7	16/11/22	15:27	BH203	S	GL	3.15		5.00	-	-	981	F	-0.02	-	0.3	0.1	0.1	0.8	0.8	19.7	19.8	0	0	-	OK
Wider Site R7	16/11/22	15:58	BH204	S	GL	2.42		5.18	-	-	981	F	-0.07	-	0.1	0.1	0.1	0.8	0.8	20.3	20.4	0	0	-	OK
Wider Site R7	16/11/22	15:34	BH205	S	GL	0.68		4.16	-	-	981	F	0.02	-	-3.6	0.1	0.1	0.7	0.6	20.6	20.9	1	0	-	OK
Wider Site R7	17/11/22	14:47	WS201	S	GL	Dry	D	1.90	-	-	1004	F	-0.07	-	0.1	0.1	0.1	2.9	0.8	19.4	19.8	0	0	-	DRY
Wider Site R7	17/11/22	14:53	WS202	S	GL	1.04		2.00	-	-	1004	F	0.12	-	0.2	0.1	0.1	0.6	0.6	20.4	20.5	0	0	-	OK
Wider Site R7	17/11/22	12:54	WS203	S	GL	Dry	D	2.00	-	-	1004	F	-0.04	-	0.1	0.1	0.1	0.7	0.7	20.0	20.2	0	0	-	DRY
Wider Site R7	17/11/22	12:46	WS204	S	GL	Dry	D	1.00	-	-	1004	F	-0.02	-	0.2	0.1	0.1	0.2	0.2	21.3	21.4	0	0	-	DRY
Wider Site R7	17/11/22	13:00	WS205	S	GL	0.94		3.00	-	-	1004	F	0.02	-	0.1	0.1	0.1	0.9	0.8	20.2	20.5	1	0	-	OK
Wider Site R7	17/11/22	13:19	WS206	S	GL	1.63		4.20	-	-	1004	F	0.04	-	0.3	0.1	0.1	1.6	1.6	19.0	19.0	0	0	-	OK
Wider Site R7	17/11/22	12:40	WS207	S	GL	0.55		2.20	-	-	1004	F	0.07	-	-4.0	0.1	0.1	1.3	1.3	20.1	20.2	1	0	-	OK
Wider Site R7	17/11/22	12:35	WS208	S	GL	0.29		2.15	-	-	1004	F	2.45	-	-6.1	0.1	0.1	1.7	1.7	19.8	19.8	3	0	-	OK
Wider Site R7	17/11/22	13:14	WS209	S	GL	1.20		3.00	-	-	1004	F	0.05	-	0.2	0.1	0.1	1.6	1.6	19.9	19.9	0	0	-	OK
Wider Site R7	17/11/22	12:27	WS210	S	GL	0.36		2.60	-	-	1004	F	1.44	-	-6.1	0.1	0.1	1.3	1.3	19.7	20.0	3	0	-	OK
Wider Site R7	17/11/22	14:38	WS211	S	GL	2.20		3.40	-	-	1004	F	0.23	-	0.2	0.1	0.1	3.3	3.3	18.1	18.1	0	0	-	OK
Wider Site R7	17/11/22	13:06	WS213	S	GL	Dry	D	3.65	-	-	1004	F	0.00	-	0.3	0.1	0.1	0.5	0.5	20.6	20.7	0	0	-	DRY
Wider Site R7	17/11/22	13:26	WS214	S	GL	Dry	D	1.00	-	-	1004	F	0.02	-	0.1	0.1	0.1	1.2	1.2	19.4	19.4	0	0	-	DRY
Wider Site R7	17/11/22	12:21	WS215	S	GL	0.40		2.50	-	-	1004	F	2.40	-	0.1	0.1	0.1	1.0	1.0	20.2	20.2	2	0	-	OK
Wider Site R7	17/11/22	14:15	WS216	S	GL	3.85		4.20	-	-	1004	F	-0.07	-	0.1	0.1	0.1	0.9	0.9	19.9	19.9	0	0	-	OK
Wider Site R7	17/11/22	15:02	WS217	S	GL	Dry	D	2.05	-	-	1004	F	-0.05	-	0.1	0.1	0.1	1.8	1.8	19.1	19.4	0	0	-	DRY
Wider Site R7	17/11/22	13:31	WS218	S	GL	Dry	D	1.80	-	-	1004	F	-0.07	-	0.2	0.1	0.1	1.0	1.0	20.4	20.6	0	0	-	DRY
Wider Site R7	17/11/22	12:07	WS219	S	GL	3.34		5.00	-	-	1004	F	0.04	-	0.1	0.1	0.1	1.4	1.4	19.2	19.2	0	0	-	OK
Wider Site R7	17/11/22	12:02	WS220	S	GL	1.20		3.00	-	-	1004	F	0.07	-	0.3	0.1	0.1	0.6	0.6	19.7	19.8	0	0	-	OK
Wider Site R7	17/11/22	14:22	WS221	S	GL	Dry	D	2.05	-	-	1004	F	0.00	-	0.1	0.1	0.1	1.6	1.6	19.2	19.2	0	0	-	DRY
Wider Site R7	17/11/22	13:37	WS222	S	GL	Dry	D	2.50	-	-	1004	F	-0.09	-	0.2	0.1	0.1	0.7	0.7	20.7	20.8	0	0	-	DRY
Wider Site R7	17/11/22	12:13	WS223	S	GL	Dry	D	2.00	-	-	1004	F	0.07	-	0.1	0.1	0.1	0.6	0.6	19.6	19.6	0	0	-	DRY
Wider Site R7	17/11/22	11:34	WS224	S	GL	0.84		1.40	-	-	1004	F	0.07	-	0.1	0.1	0.1	0.3	0.2	19.9	21.0	0	0	-	OK
Wider Site R7	17/11/22	14:28	WS225	S	GL	Dry	D	2.00	-	-	1004	F	0.02	-	0.1	0.1	0.1	1.0	1.0	19.9	20.0	0	0	-	DRY
Wider Site R7	17/11/22	13:50	WS226	S	GL	Dry	D	1.10	-	-	1004	F	0.00	-	0.1	0.1	0.1	0.7	0.7	19.9	19.9	0	0	-	DRY
Wider Site R7	17/11/22	13:42	WS227	S	GL	Dry	D	2.80	-	-	1004	F	0.19	-	0.2	0.1	0.1	0.8	0.8	20.8	20.8	0	0	-	DRY
Wider Site R7	16/11/22	15:19	WS228	S	GL	Dry	D	1.01	-	-	981	F	0.02	-	0.2	0.1	0.1	0.9	0.9	19.6	19.7	0	0	-	DRY
Wider Site R7	16/11/22	15:10	WS229	S	GL	Dry	D	1.00	-	-	981	F	0.05	-	0.2	0.1	0.1	0.7	0.7	20.4	20.6	0	0	-	DRY
Wider Site R7	17/11/22	14:03	WS230	S	GL	Dry	D	1.10	-	-	1004	F	0.02	-	0.1	0.1	0.1	0.8	0.8	19.7	19.7	0	0	-	DRY
Wider Site R7	16/11/22	14:02	WS231	S	GL	4.29		5.18	-	-	982	F	0.02	-	0.3	0.1	0.1	3.7	3.5	17.8	17.8	0	0	-	OK
Wider Site R7	17/11/22	11:54	WS232	S	GL	1.12		3.00	-	-	1004	F	-0.05	-	0.2	0.1	0.1	0.6	0.6	20.2	20.2	0	0	-	OK
Wider Site R7	17/11/22	11:18	WS233	S	GL	0.99		2.35	-	-	1004	F	0.00	-	0.1	0.1	0.1	2.0	2.0	18.9	19.2	0	0	-	OK
Wider Site R7	17/11/22	11:26	WS234	S	GL	1.01		1.68	-	-	1004	F	0.05	-	0.3	0.1	0.1	0.3	0.3	20.6	20.6	0	0	-	OK
Wider Site R7	16/11/22	11:53	WS235	S	GL	0.98		5.06	-	-	984	F	-0.02	-	0.1	0.1	0.1	1.7	1.2	18.5	18.5	1	0	-	OK
Wider Site R7	16/11/22	11:46	WS236	S	GL	Dry	D	1.98	-	-	984	F	-0.02	-	0.2	0.1	0.1	1.9	1.9	18.1	18.1	0	0	-	DRY
Wider Site R7	16/11/22	15:05	WS237	S	GL	Dry	D	1.05	-	-	981	F	-0.04	-	0.3	0.1	0.1	0.5	0.5	20.3	20.3	0	0	-	DRY
Wider Site R7	16/11/22	14:12	WS238	S	GL	3.74		4.97	-	-	982	F	0.07	-	0.1	0.1	0.1	2.6	2.1	19.8	19.8	0	0	-	OK
Wider Site R7	17/11/22	11:07	WS239	S	GL	1.25		2.28	-	-	1004	F	0.02	-	0.3	0.1	0.1	0.7	0.7	19.8	19.9	0	0	-	OK
Wider Site R7	17/11/22	11:12	WS240	S	GL	Dry	D	1.10	-	-	1004	F	0.09	-	0.3	0.1	0.1	1.1	1.1	19.7	19.8	0	0	-	DRY
Wider Site R7	17/11/22	10:05	WS241	S	GL	1.24		1.98	-	-	1004	F	0.16	-	0.2	0.1	0.1	1.2	1.2	19.9	19.9	0	0	-	OK
Wider Site R7	16/11/22	12:01	WS242	S	GL	0.31		3.65	-	-	984	F	17.55	-	0.1	0.1	0.1	2.6	2.6	16.9	17.0	2	0	-	OK
Wider Site R7	16/11/22	14:35	WS243	S	GL	Dry	D	1.03	-	-	981	F	0.02	-	0.3	0.1	0.1	0.7	0.7	21.4	21.4	0	0	-	DRY
Wider Site R7	16/11/22	16:15	WS244	S	GL	Dry	D	0.93	-	-	981	F	0.00	-	0.3	0.1	0.1	0.7	0.7	19.3	19.5	0	0	-	DRY
Wider Site R7	16/11/22	15:39	WS245	S	GL	0.56		2.58	-	-	981	F	0.04	-	-4.5	0.1	0.1	0.8	0.8	20.9	20.9	1	0	-	OK
Wider Site R7	16/11/22	15:48	WS246	S	GL	0.98		4.49	-	-	981	F	0.14	-	-2.2	0.1	0.1	1.0	1.0	20.2	20.3	0	0	-	OK
Wider Site R7	16/11/22	16:06	WS247	S	GL	0.56		0.93	-	-	981	F	0.05	-	0.1	0.1									

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any
Wider Site R8	21/12/22	10:26	BH201	S	GL	4.20		5.86	-	-	1003	F	0.12	-	0.1	0.1	0.1	0.9	0.9	20.3	20.3	0	0	-	OK
Wider Site R8	21/12/22	10:45	BH202	S	GL	3.30		5.15	-	-	1003	F	-0.05	-	0.2	0.1	0.1	0.8	0.8	19.9	20.1	0	0	-	OK
Wider Site R8	19/12/22	12:23	BH203	S	GL	2.82		5.00	-	-	997	F	-0.04	-	0.2	0.1	0.1	0.6	0.6	20.5	20.9	0	0	-	OK
Wider Site R8	19/12/22	13:00	BH204	S	GL	1.83		5.18	-	-	996	F	0.07	-	0.2	0.1	0.1	0.8	0.8	20.1	20.4	0	0	-	OK
Wider Site R8	19/12/22	12:32	BH205	S	GL	0.42		4.16	-	-	997	F	8.77	-	-2.0	0.1	0.1	2.3	2.3	17.1	17.4	18	0	-	OK
Wider Site R8	21/12/22	09:49	WS201	S	GL	Dry	D	1.90	-	-	1003	F	0.11	-	0.1	0.1	0.1	1.3	0.7	19.9	20.3	0	0	-	DRY
Wider Site R8	21/12/22	09:57	WS202	S	GL	1.10		2.00	-	-	1003	F	1.07	-	-4.5	0.1	0.1	1.2	1.2	19.7	19.7	1	0	-	OK
Wider Site R8	21/12/22	12:06	WS203	S	GL	Dry	D	2.00	-	-	1003	F	-0.04	-	0.1	0.1	0.1	0.7	0.7	20.0	20.2	0	0	-	DRY
Wider Site R8	21/12/22	11:58	WS204	S	GL	Dry	D	1.00	-	-	1003	F	-0.02	-	0.2	0.1	0.1	0.2	0.2	21.3	21.4	0	0	-	DRY
Wider Site R8	21/12/22	12:13	WS205	S	GL	0.55		3.00	-	-	1003	F	0.07	-	0.2	0.1	0.1	1.7	1.6	20.1	20.3	0	0	-	OK
Wider Site R8	21/12/22	11:51	WS206	S	GL	1.44		4.20	-	-	1003	F	-0.21	-	0.1	0.1	0.1	2.0	2.0	18.2	18.2	0	0	-	OK
Wider Site R8	21/12/22	11:42	WS207	S	GL	0.42		2.20	-	-	1003	F	-0.58	-	-2.3	0.1	0.1	1.5	1.5	20.5	20.5	2	0	-	OK
Wider Site R8	21/12/22	11:37	WS208	S	GL	0.24		2.15	-	-	1003	F	10.96	-	3.2	0.1	0.1	1.7	1.7	20.2	20.3	3	0	-	OK
Wider Site R8	21/12/22	12:19	WS209	S	GL	0.98		3.00	-	-	1003	F	0.09	-	0.0	0.1	0.1	2.0	2.0	18.6	18.8	0	0	-	OK
Wider Site R8	21/12/22	11:20	WS210	S	GL	0.33		2.60	-	-	1003	F	2.25	-	0.9	0.1	0.1	1.3	1.3	20.3	20.4	2	0	-	OK
Wider Site R8	21/12/22	09:38	WS211	S	GL	1.98		3.40	-	-	1003	F	0.04	-	0.1	0.1	0.1	3.5	3.3	17.3	17.4	0	0	-	OK
Wider Site R8	21/12/22	10:03	WS213	S	GL	Dry	D	3.66	-	-	1003	F	0.00	-	0.2	0.1	0.1	0.6	0.5	19.7	19.8	0	0	-	DRY
Wider Site R8	21/12/22	12:25	WS214	S	GL	Dry	D	1.00	-	-	1003	F	0.02	-	0.1	0.1	0.1	1.1	1.0	20.2	20.2	0	0	-	DRY
Wider Site R8	21/12/22	11:29	WS215	S	GL	0.33		2.50	-	-	1003	F	3.50	-	-1.4	0.1	0.1	0.6	0.6	20.7	20.7	1	0	-	OK
Wider Site R8	21/12/22	09:25	WS216	S	GL	3.80		4.20	-	-	1003	F	-0.10	-	0.2	0.1	0.1	1.5	1.5	19.7	19.8	0	0	-	OK
Wider Site R8	21/12/22	10:11	WS217	S	GL	Dry	D	2.05	-	-	1003	F	-0.11	-	0.3	0.1	0.1	1.5	1.4	19.8	19.9	0	0	-	DRY
Wider Site R8	21/12/22	12:31	WS218	S	GL	Dry	D	1.80	-	-	1003	F	-0.09	-	0.1	0.1	0.1	1.1	1.1	19.6	19.7	0	0	-	DRY
Wider Site R8	21/12/22	11:05	WS219	S	GL	3.31		5.00	-	-	1003	F	0.02	-	0.3	0.1	0.1	1.0	1.0	19.8	19.9	0	0	-	OK
Wider Site R8	21/12/22	11:11	WS220	S	GL	0.99		3.00	-	-	1003	F	0.02	-	0.2	0.1	0.1	0.8	0.8	19.2	19.2	0	0	-	OK
Wider Site R8	21/12/22	09:30	WS221	S	GL	Dry	D	2.05	-	-	1003	F	0.02	-	0.2	0.1	0.1	1.7	1.7	18.8	18.9	0	0	-	DRY
Wider Site R8	21/12/22	12:44	WS222	S	GL	Dry	D	2.50	-	-	1003	F	0.10	-	0.3	0.1	0.1	0.8	0.8	19.8	20.1	0	0	-	DRY
Wider Site R8	21/12/22	10:58	WS223	S	GL	Dry	D	2.00	-	-	1003	F	0.02	-	0.2	0.1	0.1	0.5	0.5	20.4	20.5	0	0	-	DRY
Wider Site R8	19/12/22	11:13	WS224	S	GL	0.64		1.40	-	-	1003	F	0.11	-	0.3	0.1	0.1	0.4	0.1	20.3	21.0	0	0	-	OK
Wider Site R8	21/12/22	09:35	WS225	S	GL	Dry	D	2.00	-	-	1003	F	0.07	-	0.1	0.1	0.1	1.2	1.2	19.3	19.3	0	0	-	DRY
Wider Site R8	21/12/22	10:21	WS226	S	GL	Dry	D	1.10	-	-	1003	F	0.02	-	0.3	0.1	0.1	0.5	0.5	20.5	20.5	0	0	-	DRY
Wider Site R8	21/12/22	12:49	WS227	S	GL	Dry	D	2.80	-	-	1003	F	0.20	-	0.2	0.1	0.1	0.8	0.8	20.2	20.2	0	0	-	DRY
Wider Site R8	19/12/22	12:17	WS228	S	GL	Dry	D	1.01	-	-	996	F	-0.16	-	0.2	0.1	0.1	0.8	0.8	20.1	20.2	0	0	-	DRY
Wider Site R8	19/12/22	12:12	WS229	S	GL	Dry	D	1.00	-	-	996	F	0.21	-	0.3	0.1	0.1	0.6	0.6	20.6	20.6	0	0	-	DRY
Wider Site R8	21/12/22	10:40	WS230	S	GL	Dry	D	1.10	-	-	1003	F	0.03	-	0.2	0.1	0.1	0.7	0.7	20.4	20.6	0	0	-	DRY
Wider Site R8	19/12/22	11:20	WS231	S	GL	3.49		5.18	-	-	997	F	-0.05	-	0.3	0.1	0.1	3.6	3.6	17.1	17.1	0	0	-	OK
Wider Site R8	21/12/22	10:51	WS232	S	GL	0.87		3.00	-	-	1003	F	-0.20	-	-2.9	0.1	0.1	0.7	0.7	19.5	19.7	0	0	-	OK
Wider Site R8	19/12/22	11:02	WS233	S	GL	0.33		2.35	-	-	1003	F	-0.10	-	0.2	0.1	0.1	1.8	1.8	19.1	19.2	0	0	-	OK
Wider Site R8	19/12/22	11:13	WS234	S	GL	0.59		1.68	-	-	1003	F	0.04	-	0.2	0.1	0.1	0.2	0.3	20.5	20.6	0	0	-	OK
Wider Site R8	19/12/22	14:37	WS235	S	GL	0.94		5.06	-	-	1003	F	0.01	-	0.3	0.1	0.1	1.6	1.7	17.5	17.6	0	0	-	OK
Wider Site R8	19/12/22	14:29	WS236	S	GL	Dry	D	1.98	-	-	1003	F	0.02	-	0.3	0.1	0.1	1.9	1.9	19.2	19.2	0	0	-	DRY
Wider Site R8	19/12/22	12:01	WS237	S	GL	Dry	D	1.05	-	-	996	F	0.16	-	0.3	0.1	0.1	0.5	0.5	20.6	20.8	0	0	-	DRY
Wider Site R8	19/12/22	11:29	WS238	S	GL	1.96		4.97	-	-	996	F	0.00	-	0.2	0.1	0.1	1.8	1.6	19.1	19.6	1	0	-	OK
Wider Site R8	19/12/22	10:49	WS239	S	GL	0.98		2.28	-	-	1003	F	-0.02	-	0.3	0.1	0.1	0.8	0.8	19.5	19.6	0	0	-	OK
Wider Site R8	19/12/22	10:55	WS240	S	GL	Dry	D	1.10	-	-	1003	F	0.12	-	0.3	0.1	0.1	1.2	1.2	19.4	19.4	0	0	-	OK
Wider Site R8	19/12/22	09:50	WS241	S	GL	0.88		1.98	-	-	1003	F	0.03	-	-1.6	0.1	0.1	1.5	1.5	19.2	19.3	0	0	-	OK
Wider Site R8	19/12/22	14:55	WS242	S	GL	0.28		3.65	-	-	1003	F	8.85	-	-1.2	0.1	0.1	2.3	2.4	18.5	18.5	1	0	-	OK
Wider Site R8	19/12/22	11:42	WS243	S	GL	Dry	D	1.03	-	-	996	F	0.12	-	0.2	0.1	0.1	0.7	0.7	20.5	20.6	0	0	-	DRY
Wider Site R8	19/12/22	13:11	WS244	S	GL	0.65		0.93	-	-	996	F	0.11	-	0.2	0.1	0.1	0.6	0.6	18.8	20.7	0	0	-	OK
Wider Site R8	19/12/22	12:46	WS245	S	GL	0.45		2.58	-	-	997	F	9.90	-	0.3	0.1	0.1	2.0	2.0	16.3	16.4	2	0	-	OK
Wider Site R8	19/12/22	12:53	WS246	S	GL	0.84		4.49	-	-	996	F	1.81	-	0.1	0.1	0.1	2.8	2.7	17.1	17.2	2	0	-	OK
Wider Site R8	19/12/22	13:05	WS247	S	GL	0.30		0.93	-	-	997	F	41.77	-	6.3	0.1	0.1	1.2	1.2	13.4	13.4	2	0	-	OK
Wider Site R8	19/12/22	10:37	WS248	S	GL	1.28		1.65	-	-	1003	F	0.14	-	0.3	0.1	0.1	0.9	0.9	19.8	19.8	0	0	-	OK
Wider Site R8	19/12/22	10:19	WS249	S	GL	Dry	D	1.00	-	-	1003	F	0.06	-	0.3	0.1	0.1	1.2	1.3	18.9	19.0	0	0	-	DRY
Wider Site R8	19/12/22	10:29	WS250	S	GL	0.68		0.89	-	-	1003	F	1.02	-	0.2	0.1	0.1	1.0	1.0	19.9	20.1	0	0	-	OK
Wider Site R8	19/12/22	09:59	WS251	S	GL	0.32		2.00	-	-	1003	F	-0.02	-	0.1	0.1	0.1	1.1	1.2	20.1	19.8	1	0	-	OK
Wider Site R8	19/12/22	10:05	WS252	S	GL	0.25		5.18	-	-	1003	F	1.03	-	-3.2	0.1	0.2	1.1	1.2	18.8	17.9	0	0	-	OK
Wider Site R9	10/01/23	12:58	BH201	S	GL	3.61		5.86	-	-	997	R	0.09	-	0.2	0.1	0.1	0.8	0.8	20.2	20.2	0	0	-	OK
Wider Site R9	10/01/23	13:12	BH202	S	GL	0.95		5.15	-	-	997	R	0.25	-	-4.1	0.1	0.1	0.7	0.6	20.4	20.6	0	0	-	OK
Wider Site R9	11/01/23	11:55	BH203	S	GL	2.75		5.00	-	-	1003	R	-0.04	-	0.2	0.1	0.1	0.6	0.6	20.5	20.9	0	0	-	OK
Wider Site R9	11/01/23	12:26	BH204	S	GL	1.74		5.18	-	-	1003	R	0.07	-											



Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Wider Site R9	10/01/23	14:40	WS205	S	GL	0.30		3.00	-	-	996	R	-0.11	-	0.2	0.1	0.1	1.5	1.5	20.4	20.4	0	0	-	OK
Wider Site R9	10/01/23	14:19	WS206	S	GL	1.22		4.20	-	-	996	R	-0.04	-	0.2	0.1	0.1	1.9	1.9	19.5	19.5	0	0	-	OK
Wider Site R9	10/01/23	14:10	WS207	S	GL	0.30		2.20	-	-	996	R	-0.44	-	-6.1	0.1	0.1	2.7	2.7	17.9	19.7	1	0	-	OK
Wider Site R9	10/01/23	14:05	WS208	S	GL	0.18		2.15	-	-	996	R	25.38	-	4.7	0.1	0.1	4.0	4.0	11.6	11.6	4	0	-	OK
Wider Site R9	10/01/23	14:46	WS209	S	GL	0.82		3.00	-	-	996	R	-0.30	-	-1.5	0.1	0.1	1.2	1.2	19.7	19.9	1	0	-	OK
Wider Site R9	10/01/23	13:43	WS210	S	GL	0.24		2.60	-	-	997	R	23.39	-	4.1	0.1	0.1	2.0	2.0	14.6	14.7	0	0	-	OK
Wider Site R9	10/01/23	12:14	WS211	S	GL	1.54		3.40	-	-	997	R	4.93	-	0.2	0.1	0.1	2.8	2.8	16.6	16.6	0	0	-	OK
Wider Site R9	10/01/23	12:38	WS213	S	GL	Dry	D	3.66	-	-	997	R	0.28	-	0.2	0.1	0.1	0.5	0.5	20.6	20.6	0	0	-	DRY
Wider Site R9	10/01/23	14:52	WS214	S	GL	Dry	D	1.02	-	-	995	R	0.04	-	0.2	0.1	0.1	0.9	0.9	19.8	19.8	0	0	-	DRY
Wider Site R9	10/01/23	13:58	WS215	S	GL	0.27		2.50	-	-	996	R	12.26	-	0.2	0.1	0.1	1.9	1.9	12.6	12.6	4	0	-	OK
Wider Site R9	10/01/23	11:54	WS216	S	GL	3.23		4.20	-	-	997	R	0.00	-	0.2	0.1	0.1	1.2	1.2	19.5	19.6	0	0	-	OK
Wider Site R9	10/01/23	12:46	WS217	S	GL	Dry	D	2.09	-	-	997	R	-0.04	-	0.2	0.1	0.1	1.7	1.7	19.9	19.9	0	0	-	DRY
Wider Site R9	10/01/23	14:56	WS218	S	GL	Dry	D	1.82	-	-	995	R	0.00	-	0.2	0.1	0.1	1.0	1.0	19.7	19.7	0	0	-	DRY
Wider Site R9	10/01/23	13:30	WS219	S	GL	3.28		5.00	-	-	996	R	0.05	-	0.2	0.1	0.1	1.7	1.7	19.3	19.6	0	0	-	OK
Wider Site R9	10/01/23	13:35	WS220	S	GL	0.84		3.00	-	-	997	R	-0.95	-	-4.5	0.1	0.1	1.0	1.0	18.2	18.2	2	0	-	OK
Wider Site R9	10/01/23	11:59	WS221	S	GL	Dry	D	1.99	-	-	997	R	-0.04	-	0.2	0.1	0.1	1.7	1.7	18.8	18.9	0	0	-	DRY
Wider Site R9	10/01/23	15:09	WS222	S	GL	Dry	D	2.49	-	-	995	R	0.19	-	0.2	0.1	0.1	0.7	0.7	20.5	20.5	0	0	-	DRY
Wider Site R9	10/01/23	13:26	WS223	S	GL	1.73		2.00	-	-	996	R	-0.04	-	0.2	0.1	0.1	0.5	0.5	20.3	20.4	0	0	-	OK
Wider Site R9	11/01/23	10:17	WS224	S	GL	0.44		1.40	-	-	1003	R	0.07	-	0.2	0.1	0.1	0.3	0.3	21.2	21.4	0	0	-	OK
Wider Site R9	10/01/23	12:04	WS225	S	GL	Dry	D	2.00	-	-	997	R	-0.05	-	0.2	0.1	0.1	1.0	1.0	19.5	19.5	0	0	-	DRY
Wider Site R9	10/01/23	12:53	WS226	S	GL	Dry	D	1.18	-	-	997	R	0.09	-	0.2	0.1	0.1	0.7	0.7	20.2	20.4	0	0	-	DRY
Wider Site R9	10/01/23	15:14	WS227	S	GL	Dry	D	2.78	-	-	995	R	0.14	-	0.2	0.1	0.1	0.8	0.8	20.3	20.4	0	0	-	DRY
Wider Site R9	11/01/23	11:47	WS228	S	GL	Dry	D	1.01	-	-	1003	R	0.02	-	0.2	0.1	0.1	0.9	0.9	19.6	19.7	0	0	-	DRY
Wider Site R9	11/01/23	11:38	WS229	S	GL	Dry	D	1.00	-	-	1003	R	0.05	-	0.2	0.1	0.1	0.7	0.7	20.4	20.6	0	0	-	DRY
Wider Site R9	10/01/23	13:08	WS230	S	GL	Dry	D	1.15	-	-	997	R	-0.19	-	0.2	0.1	0.1	0.7	0.7	20.0	20.1	0	0	-	DRY
Wider Site R9	11/01/23	10:31	WS231	S	GL	3.28		5.18	-	-	1003	R	0.02	-	0.3	0.1	0.1	3.7	3.5	17.8	17.8	0	0	-	OK
Wider Site R9	10/01/23	13:18	WS232	S	GL	0.13		3.00	-	-	997	R	-0.23	-	-4.1	0.1	0.1	0.6	0.6	20.6	20.8	0	0	-	OK
Wider Site R9	11/01/23	10:08	WS233	S	GL	0.12		2.35	-	-	1003	R	-0.53	-	-2.8	0.1	0.1	1.5	1.5	17.6	17.7	0	0	-	OK
Wider Site R9	11/01/23	10:24	WS234	S	GL	0.21		1.68	-	-	1003	R	4.12	-	-3.2	0.1	0.1	0.9	0.9	15.8	15.8	2	0	-	OK
Wider Site R9	11/01/23	14:16	WS235	S	GL	0.91		5.06	-	-	1003	R	0.02	-	0.2	0.1	0.1	1.7	1.6	17.5	17.5	0	0	-	OK
Wider Site R9	11/01/23	14:09	WS236	S	GL	Dry	D	1.98	-	-	1003	R	0.02	-	0.3	0.1	0.1	1.9	1.9	19.2	19.2	0	0	-	DRY
Wider Site R9	11/01/23	11:28	WS237	S	GL	Dry	D	1.05	-	-	1003	R	0.16	-	0.3	0.1	0.1	0.5	0.5	20.6	20.8	0	0	-	DRY
Wider Site R9	11/01/23	10:41	WS238	S	GL	1.88		4.97	-	-	1003	R	0.07	-	0.2	0.1	0.1	2.6	2.1	19.8	19.8	0	0	-	OK
Wider Site R9	11/01/23	09:55	WS239	S	GL	0.13		2.28	-	-	1003	R	-1.48	-	-3.1	0.1	0.1	1.0	1.0	16.6	16.8	2	0	-	OK
Wider Site R9	11/01/23	10:01	WS240	S	GL	0.14		1.14	-	-	1003	R	24.04	-	1.8	0.1	0.1	2.0	2.0	17.4	17.4	2	0	-	OK
Wider Site R9	11/01/23	08:51	WS241	S	GL	0.55		1.98	-	-	1002	R	0.02	-	-1.7	0.1	0.1	0.7	0.7	19.8	19.8	0	0	-	OK
Wider Site R9	11/01/23	14:24	WS242	S	GL	0.22		3.65	-	-	1003	R	7.94	-	-3.3	0.1	0.1	2.4	2.4	18.6	18.8	1	0	-	OK
Wider Site R9	11/01/23	11:04	WS243	S	GL	Dry	D	1.03	-	-	1003	R	0.02	-	0.3	0.1	0.1	0.7	0.7	21.4	21.4	0	0	-	DRY
Wider Site R9	11/01/23	12:31	WS244	S	GL	0.66		0.93	-	-	1003	R	0.11	-	0.2	0.1	0.1	0.7	0.7	19.3	19.5	0	0	-	DRY
Wider Site R9	11/01/23	12:07	WS245	S	GL	0.28		2.58	-	-	1003	R	0.04	-	-4.5	0.1	0.1	0.8	0.8	20.9	20.9	1	0	-	OK
Wider Site R9	11/01/23	12:16	WS246	S	GL	0.75		4.49	-	-	1003	R	0.14	-	-2.2	0.1	0.1	1.0	1.0	20.2	20.3	0	0	-	OK
Wider Site R9	11/01/23	12:34	WS247	S	GL	0.25		0.93	-	-	1003	R	0.05	-	0.1	0.1	0.1	1.2	1.2	18.5	18.8	0	0	-	OK
Wider Site R9	11/01/23	09:43	WS248	S	GL	0.36		1.65	-	-	1003	R	2.68	-	-5.6	0.1	0.1	1.0	1.0	15.7	15.8	3	0	-	OK
Wider Site R9	11/01/23	09:26	WS249	S	GL	0.65		1.00	-	-	1003	R	-0.02	-	-1.6	0.1	0.1	1.8	1.8	19.5	19.6	1	0	-	OK
Wider Site R9	11/01/23	09:35	WS250	S	GL	0.22		0.89	-	-	1003	R	0.55	-	-4.0	0.1	0.1	1.0	1.0	20.7	20.8	1	0	-	OK
Wider Site R9	11/01/23	09:02	WS251	S	GL	0.25		2.00	-	-	1003	R	-0.16	-	-0.4	0.1	0.1	1.3	1.1	19.4	19.5	0	0	-	WATER LOGGED FIELD
Wider Site R9	11/01/23	09:14	WS252	S	GL	0.19		5.18	-	-	1003	R	-0.39	-	-4.4	0.1	0.1	1.3	1.3	16.9	17.0	0	0	-	OK
Wider Site R10	09/02/23	14:29	BH201	S	GL	3.35		4.87	-	-	1027	R	-0.05	-	0.1	0.1	0.1	0.7	0.7	21.1	21.4	0	0	-	OK
Wider Site R10	10/02/23	14:55	BH203	S	GL	2.82		4.84	-	-	1030	R	0.05	-	0.1	0.1	0.1	0.6	0.6	20.3	20.3	0	0	-	OK
Wider Site R10	10/02/23	15:49	BH204	S	GL	1.82		5.01	-	-	1030	R	-0.05	-	0.1	0.1	0.1	0.8	0.8	20.1	20.3	0	0	-	SILT
Wider Site R10	10/02/23	15:11	BH205	S	GL	0.60		4.16	-	-	1030	R	-6.63	-	-0.1	0.1	0.1	1.9	1.9	15.4	15.4	2	0	-	OK
Wider Site R10	09/02/23	13:47	WS201	S	GL	1.64		1.95	-	-	1027	R	-0.58	-	0.1	0.1	0.1	0.7	0.5	14.2	15.7	0	0	-	OK
Wider Site R10	09/02/23	13:56	WS202	S	GL	0.57		2.03	-	-	1027	R	-1.13	-	-0.1	0.1	0.1	0.5	0.5	20.2	20.4	2	0	-	OK
Wider Site R10	09/02/23	15:49	WS203	S	GL	2.03	D	2.03	-	-	1027	R	-0.11	-	0.1	0.1	0.1	0.6	0.6	20.8	21.4	0	0	-	DRY
Wider Site R10	09/02/23	15:58	WS204	S	GL	1.35	D	1.35	-	-	1028	R	0.05	-	0.1	0.1	0.1	0.6	0.6	20.5	20.5	0	0	-	DRY
Wider Site R10	09/02/23	15:35	WS205	S	GL	0.57		2.99	-	-	1028	R	-0.86	-	-0.1	0.1	0.1	2.6	2.5	17.9	18.1	1	0	-	OK
Wider Site R10	09/02/23	15:24	WS206	S	GL	1.54		4.19	-	-	1028	R	-0.11	-	0.1	0.1	0.1	1.6	1.6	20.7	20.8	0	0	-	SILT
Wider Site R10	09/02/23	16:09	WS207	S	GL	0.58		2.16	-	-	1029	R	0.04	-	0.1	0.1	0.1	2.2	2.2	19.3	19.3	15	0	-	SILT
Wider Site R10	09/02/23	16:29	WS208	S	GL	0.40		2.20	-	-	1029	R	-22.80	-	-0.4	0.1	0.1	3.2	3.2	12.5	12.5	4	0	-	WATER SILT 3rd run on gas, 2.30min water up pipe. Pi
Wider Site R10	09/02/23	15:15	WS209	S	GL	1.00		3.																	

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)							Local conditions		
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R)/ steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Wider Site R10	09/02/23	13:03	WS216	S	GL	2.97		4.07	-	-	1026	R	0.35	-	0.1	0.1	0.1	1.0	1.0	19.1	19.1	0	1	-	OK
Wider Site R10	09/02/23	14:14	WS217	S	GL	2.08	D	2.08	-	-	1027	R	0.04	-	0.1	0.1	0.1	1.4	1.4	20.6	20.7	0	0	-	DRY
Wider Site R10	09/02/23	14:49	WS218	S	GL	1.81	D	1.81	-	-	1027	R	0.07	-	0.1	0.1	0.1	0.8	0.8	20.9	20.9	0	0	-	DRY
Wider Site R10	09/02/23	13:14	WS221	S	GL	2.04	D	2.04	-	-	1027	R	0.02	-	0.1	0.1	0.1	1.2	1.2	19.7	20.0	0	0	-	DRY
Wider Site R10	09/02/23	14:42	WS222	S	GL	2.49	D	2.49	-	-	1027	R	0.07	-	0.1	0.1	0.1	0.8	0.8	20.8	20.8	0	0	-	DRY
Wider Site R10	10/02/23	13:47	WS224	S	GL	0.56		1.39	-	-	1030	R	-0.02	-	0.1	0.1	0.1	0.4	0.3	20.6	21.2	0	0	-	OK
Wider Site R10	09/02/23	13:20	WS225	S	GL	2.04	D	2.04	-	-	1026	R	-0.02	-	0.1	0.1	0.1	0.8	0.8	20.4	20.5	0	0	-	DRY
Wider Site R10	09/02/23	14:22	WS226	S	GL	1.18	D	1.18	-	-	1027	R	0.11	-	0.1	0.1	0.1	0.6	0.6	21.2	21.3	0	0	-	DRY
Wider Site R10	09/02/23	14:36	WS227	S	GL	2.77	D	2.77	-	-	1027	R	0.07	-	0.1	0.1	0.1	0.7	0.7	21.2	21.4	0	0	-	DRY
Wider Site R10	10/02/23	14:47	WS228	S	GL	1.03	D	1.03	-	-	1029	R	0.05	-	0.1	0.1	0.1	0.8	0.8	20.1	20.3	0	0	-	DRY
Wider Site R10	10/02/23	14:42	WS229	S	GL	2.00	D	2.00	-	-	1029	R	0.02	-	0.1	0.1	0.1	0.5	0.5	20.9	20.9	0	0	-	DRY
Wider Site R10	10/02/23	14:08	WS231	S	GL	2.80		4.96	-	-	1030	R	0.14	-	0.1	0.1	0.1	3.3	3.3	18.5	18.5	0	0	-	OK
Wider Site R10	10/02/23	14:35	WS232	S	GL	1.06	D	1.06	-	-	1029	R	-0.11	-	0.1	0.1	0.1	0.5	0.5	21.2	21.5	0	0	-	DRY
Wider Site R10	10/02/23	13:21	WS233	S	GL	0.40		2.27	-	-	1031	R	-0.04	-	0.1	0.1	0.1	1.0	0.7	20.5	20.8	0	0	-	SILT
Wider Site R10	10/02/23	13:39	WS234	S	GL	0.33		1.67	-	-	1031	R	-13.79	-	-0.2	0.1	0.1	0.5	0.5	17.2	17.2	1	0	-	OK
Wider Site R10	10/02/23	14:15	WS238	S	GL	1.86		4.98	-	-	1030	R	0.04	-	0.1	0.1	0.1	1.5	1.5	19.8	19.8	1	0	-	OK
Wider Site R10	10/02/23	12:58	WS239	S	GL	0.47		2.28	-	-	1030	R	-2.54	-	-0.3	0.1	0.1	1.2	1.1	18.9	19.0	1	0	-	OK
Wider Site R10	10/02/23	13:14	WS240	S	GL	0.69		1.50	-	-	1030	R	-23.61	-	-0.6	0.1	0.1	0.7	0.7	19.1	19.1	1	0	-	OK
Wider Site R10	10/02/23	11:06	WS241	S	GL	0.78		2.00	-	-	1031	R	-0.04	-	0.1	0.1	0.1	0.6	0.5	20.1	20.6	0	0	-	OK
Wider Site R10	10/02/23	14:24	WS243	S	GL	1.03	D	1.03	-	-	1029	R	0.02	-	0.1	0.1	0.1	0.7	0.6	20.8	21.1	0	0	-	DRY
Wider Site R10	10/02/23	16:20	WS244	S	GL	0.64		0.95	-	-	1030	R	-14.83	-	-0.3	0.1	0.1	0.4	0.4	20.1	20.2	2	0	-	OK
Wider Site R10	10/02/23	15:27	WS245	S	GL	0.59		2.56	-	-	1030	R	-20.03	-	-0.2	0.1	0.1	0.8	0.8	18.6	18.7	1	0	-	SILT
Wider Site R10	10/02/23	15:42	WS246	S	GL	0.93		4.48	-	-	1030	R	0.93	-	-0.2	0.1	0.1	2.4	2.1	17.6	18.2	2	0	-	OK
Wider Site R10	10/02/23	16:04	WS247	S	GL	0.03		0.96	-	-	1030	R	11.00	-	0.3	0.1	0.1	0.9	0.9	12.0	12.0	4	0	-	OK
Wider Site R10	10/02/23	12:14	WS248	S	GL	0.58		1.65	-	-	1031	R	-18.21	-	-0.2	0.1	0.1	0.5	0.5	19.5	19.5	1	0	-	OK
Wider Site R10	10/02/23	11:49	WS249	S	GL	1.01	D	1.01	-	-	1031	R	0.09	-	0.1	0.1	0.1	1.7	1.7	19.1	19.2	0	0	-	DRY
Wider Site R10	10/02/23	11:57	WS250	S	GL	0.57		0.90	-	-	1031	R	0.11	-	0.1	0.1	0.1	1.0	1.0	20.7	20.9	0	0	-	OK
Wider Site R10	10/02/23	11:21	WS251	S	GL	0.43		2.00	-	-	1031	R	-4.21	-	-0.1	0.1	0.1	1.0	0.8	19.1	19.3	7	0	-	OK
Wider Site R10	10/02/23	11:38	WS252	S	GL	0.43		5.03	-	-	1031	R	-9.78	-	-0.2	0.1	0.1	1.1	1.1	18.2	18.3	0	0	-	OK
Wider Site R11	09/03/23	14:21	BH201	S	GL	3.46		4.86	-	-	985	F	-0.04	-	0.1	0.1	0.1	0.8	0.8	21.0	20.9	0	0	-	OK
Wider Site R11	13/03/23	12:19	BH202	S	GL	1.30		5.16	-	-	984	F	0.19	-	0.1	0.1	0.1	0.5	0.5	20.6	20.6	0	0	-	OK
Wider Site R11	09/03/23	12:51	CP301	S	GL	2.36		4.74	-	-	986	F	0.37	-	0.1	0.1	0.1	1.6	1.6	19.5	19.5	0	0	-	SILT
Wider Site R11	09/03/23	12:41	CP302	S	GL	1.96		4.10	-	-	986	F	-0.04	-	0.1	0.1	0.1	1.0	1.0	20.3	20.2	0	0	-	OK
Wider Site R11	09/03/23	14:57	CP303	S	GL	3.29		4.05	-	-	984	F	0.05	-	0.1	0.1	0.1	0.6	0.6	21.0	21.0	0	0	-	OK
Wider Site R11	09/03/23	14:41	CP304	S	GL	3.03		4.05	-	-	985	F	0.05	-	0.1	0.1	0.1	0.7	0.7	21.1	20.8	0	0	-	OK
Wider Site R11	09/03/23	14:08	CP305	S	GL	3.08		4.72	-	-	985	F	0.04	-	0.1	0.1	0.1	1.2	1.2	20.5	20.4	0	0	-	OK
Wider Site R11	13/03/23	12:12	RO301	S	GL	0.34		7.72	-	-	984	F	0.44	-	0.1	0.1	0.1	0.3	0.4	20.2	20.1	1	0	-	OK
Wider Site R11	13/03/23	12:07	RO302	S	GL	0.15		3.16	-	-	984	F	-0.14	-	-0.1	0.1	0.1	0.1	0.1	21.1	20.9	0	0	-	OK
Wider Site R11	14/03/23	14:54	RO303	S	GL	0.18		3.54	-	-	1004	R	-0.18	-	0.1	0.1	0.1	0.1	0.1	20.9	20.8	0	0	-	OK
Wider Site R11	14/03/23	14:49	RO304	S	GL	0.32		8.04	-	-	1004	R	0.02	-	0.1	0.1	0.1	0.3	0.3	20.2	20.2	1	0	-	SILT
Wider Site R11	14/03/23	13:37	RO305	S	GL	0.13		2.38	-	-	1004	R	38.20	-	1.5	0.1	0.1	1.3	1.3	17.2	17.2	3	0	-	OK
Wider Site R11	09/03/23	13:30	RO306	S	GL	0.76		5.55	-	-	986	F	11.37	-	0.1	0.1	0.1	1.1	1.1	19.5	19.4	3	0	-	OK
Wider Site R11	09/03/23	13:36	RO307	S	GL	1.38		5.13	-	-	985	F	0.26	-	0.1	0.1	0.1	0.5	0.6	21.2	21.1	0	0	-	OK
Wider Site R11	09/03/23	13:42	RO307A	S	GL	1.39		2.16	-	-	985	F	0.02	-	0.1	0.1	0.1	0.4	0.4	21.4	21.0	1	0	-	OK
Wider Site R11	10/03/23	12:01	RO309	S	GL	5.05		5.60	-	-	998	R	0.12	-	0.1	0.1	0.1	1.0	1.0	20.2	20.2	0	0	-	OK
Wider Site R11	10/03/23	12:07	RO309A	S	GL	4.13	D*	4.23	-	-		R	-0.02	-	0.1	0.1	0.1	0.9	0.9	20.4	20.2	0	0	-	OK
Wider Site R11	10/03/23	11:50	RO310	S	GL	4.10		6.08	-	-	998	R	4.10	-	0.1	0.1	0.1	1.5	1.5	19.9	19.8	0	0	-	OK
Wider Site R11	10/03/23	11:34	RO311	S	GL	1.09		5.09	-	-	997	R	0.12	-	0.1	0.1	0.1	0.3	0.5	21.4	21.3	0	0	-	OK
Wider Site R11	10/03/23	11:21	RO312	S	GL	3.66		9.44	-	-	997	R	0.69	-	0.1	0.1	0.1	0.4	0.4	20.6	20.6	2	0	-	OK
Wider Site R11	10/03/23	11:28	RO312A	S	GL	2.12	D	2.12	-	-	997	R	0.11	-	0.1	0.1	0.1	0.3	0.4	21.3	21.0	0	0	-	DRY
Wider Site R11	10/03/23	12:15	RO313	S	GL	3.18		4.47	-	-	999	R	0.86	-	0.1	0.1	0.1	2.9	2.9	17.2	17.2	0	0	-	OK
Wider Site R11	10/03/23	12:20	RO313A	S	GL	0.79	D	0.79	-	-	999	R	0.09	-	0.1	0.1	0.1	0.8	0.9	19.6	19.3	0	0	-	DRY
Wider Site R11	10/03/23	12:49	RO314	S	GL	0.75		4.66	-	-	1000	R	15.71	-	0.3	0.1	0.1	1.6	1.6	18.2	18.2	9	0	-	OK
Wider Site R11	09/03/23	15:26	RO315	S	GL	0.19		5.03	-	-	985	F	79.12	-	1.5	0.1	0.1	1.6	1.6	4.0	4.0	1	0	-	FLOODED AROUND STANDPIPE
Wider Site R11	09/03/23	15:04	RO316	S	GL	2.29		5.47	-	-	985	F	0.32	-	0.1	0.1	0.1	0.7	0.7	19.6	19.6	2	0	-	OK
Wider Site R11	09/03/23	15:08	RO316A	S	GL	1.16		1.31	-	-	985	F	0.11	-	0.1	0.1	0.1	0.2	0.2	21.2	21.1	0	0	-	OK
Wider Site R11	10/03/23	12:59	RO317	S	GL	0.23		7.45	-	-	1000	R	0.30	-	0.1	0.1	0.1	0.5	0.6	20.2	20.2	1	0	-	OK
Wider Site R11	10/03/23	13:34	RO318	S	GL	0.50		5.84	-	-	1000	R	7.26	-	0.3	0.1	0.1	1.9	1.9	15.5	15.5	3	0	-	FLOODED AROUND STANDPIPE
Wider Site R11	10/03/23	13:38	RO318A	S	GL	0.42		4.17	-	-	1000	R	0.97	-	0.1	0.1	0.1	1.7	1.7	18.7	18.6	1	0	-	OK

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Wider Site R11	10/03/23	11:56	WS203	S	GL	2.69	D	2.69	-	-	998	R	-0.05	-	0.1	0.1	0.1	0.7	0.7	20.8	20.8	0	0	-	DRY
Wider Site R11	10/03/23	12:26	WS204	S	GL	2.91	D	3.11	-	-	1000	R	-0.04	-	0.1	0.1	0.1	1.0	1.0	18.4	18.4	0	0	-	DRY
Wider Site R11	10/03/23	11:44	WS205	S	GL	2.46		3.14	-	-	997	R	4.83	-	0.3	0.1	0.1	2.9	2.9	16.0	16.0	0	1	-	OK
Wider Site R11	10/03/23	12:34	WS206	S	GL	1.52		2.04	-	-	1000	R	0.05	-	0.1	0.1	0.1	1.9	1.9	19.2	19.3	0	0	-	SILT
Wider Site R11	10/03/23	13:05	WS207	S	GL	2.26		2.50	-	-	1000	R	0.62	-	0.1	0.1	0.1	2.4	2.4	18.8	19.0	0	5	-	OK
Wider Site R11	10/03/23	13:21	WS208	S	GL	3.45		3.84	-	-	1000	R	21.12	-	0.3	0.1	0.1	3.7	3.7	17.1	17.1	1	3	-	SILT
Wider Site R11	10/03/23	11:14	WS209	S	GL	2.89		3.00	-	-	997	R	1.23	-	0.2	0.1	0.1	1.6	1.6	19.4	19.4	0	0	-	OK
Wider Site R11	10/03/23	14:48	WS210	S	GL	2.83		3.09	-	-	1002	R	23.40	-	0.5	0.1	0.1	1.8	1.8	16.0	16.2	0	0	-	SILT
Wider Site R11	09/03/23	12:59	WS211	S	GL	0.98		1.95	-	-	985	F	4.23	-	0.2	0.1	0.1	2.5	2.5	17.4	17.4	1	0	-	OK
Wider Site R11	09/03/23	13:53	WS213	S	GL	0.41	D	2.03	-	-	985	F	0.00	-	0.1	0.1	0.1	0.6	0.6	21.0	21.0	3	0	-	DRY
Wider Site R11	09/03/23	14:52	WS214	S	GL	2.03	D	2.03	-	-	984	F	0.02	-	0.1	0.1	0.1	1.1	1.1	20.5	20.8	3	0	-	DRY
Wider Site R11	10/03/23	13:59	WS215	S	GL	1.05		1.05	-	-	1001	R	17.24	-	0.3	0.1	0.1	1.6	1.6	15.4	15.4	0	3	-	OK
Wider Site R11	09/03/23	12:23	WS216	S	GL	0.44		3.01	-	-	-	F	-0.05	-	0.1	0.1	0.1	1.0	1.0	20.0	20.0	1	0	-	OK
Wider Site R11	09/03/23	14:02	WS217	S	GL	1.52	D	4.22	-	-	985	F	0.02	-	0.1	0.1	0.1	1.2	1.2	21.0	21.3	0	0	-	DRY
Wider Site R11	09/03/23	14:46	WS218	S	GL	0.34	D	2.20	-	-	984	F	-0.12	-	0.1	0.1	0.1	1.0	1.0	20.6	21.0	0	0	-	DRY
Wider Site R11	13/03/23	11:35	WS219	S	GL	0.19		2.21	-	-	983	F	-0.02	-	0.1	0.1	0.1	1.6	1.6	19.5	19.6	0	0	-	OK
Wider Site R11	13/03/23	11:49	WS220	S	GL	1.01		3.01	-	-	983	F	13.84	-	0.2	0.1	0.1	1.1	1.1	17.9	17.9	0	2	-	OK
Wider Site R11	09/03/23	12:30	WS221	S	GL	0.26	D	2.60	-	-	986	F	-0.25	-	0.1	0.1	0.1	1.2	1.2	19.9	20.2	2	0	-	DRY
Wider Site R11	09/03/23	14:34	WS222	S	GL	2.34	D	3.56	-	-	985	F	-0.07	-	0.1	0.1	0.1	1.0	1.0	20.5	20.6	0	0	-	DRY
Wider Site R11	13/03/23	11:28	WS223	S	GL	3.65	D*	3.65	-	-	983	F	-0.07	-	0.1	0.1	0.1	0.5	0.5	20.2	20.2	0	0	-	OK
Wider Site R11	14/03/23	15:00	WS224	S	GL	1.00		1.00	-	-	1004	R	0.11	-	0.1	0.1	0.1	0.5	0.5	20.5	20.6	0	0	-	OK
Wider Site R11	09/03/23	12:36	WS225	S	GL	0.26	D	2.54	-	-	986	F	-0.05	-	0.1	0.1	0.1	0.9	0.9	20.2	20.7	9	0	-	DRY
Wider Site R11	09/03/23	14:15	WS226	S	GL	3.13	D	4.06	-	-	985	F	0.00	-	0.1	0.1	0.1	0.6	0.6	21.1	21.4	1	0	-	DRY
Wider Site R11	09/03/23	14:29	WS227	S	GL	2.09	D	2.09	-	-	985	F	0.16	-	0.1	0.1	0.1	0.8	0.8	20.9	21.2	2	0	-	DRY
Wider Site R11	13/03/23	12:32	WS230	S	GL	1.81	D	1.81	-	-	983	F	-0.05	-	0.1	0.1	0.1	0.6	0.6	20.4	20.4	0	0	-	DRY
Wider Site R11	13/03/23	13:48	WS231	S	GL	3.32		4.99	-	-	983	F	0.09	-	0.1	0.1	0.1	3.9	3.5	15.0	18.4	1	0	-	OK
Wider Site R11	14/03/23	12:00	WS231	S	GL	0.92		3.01	-	-	1004	R	0.07	-	0.1	0.1	0.1	0.6	0.6	18.7	18.7	3	2	-	SILT
Wider Site R11	13/03/23	14:45	WS232	S	GL	2.04		2.04	-	-	984	F	2.45	-	0.2	0.1	0.1	0.7	0.7	19.7	19.7	1	1	-	OK
Wider Site R11	14/03/23	15:08	WS233	S	GL	2.50		2.50	-	-	1004	R	0.11	-	0.1	0.1	0.1	0.6	0.5	20.4	20.4	1	0	-	OK
Wider Site R11	14/03/23	14:33	WS239	S	GL	1.91		2.01	-	-	1004	R	-2.64	-	-0.8	0.1	0.1	1.2	1.2	17.2	17.2	4	3	-	OK
Wider Site R11	14/03/23	14:39	WS240	S	GL	0.47		1.39	-	-	1004	R	-2.31	-	-0.6	0.1	0.1	1.3	1.3	18.0	18.0	3	2	-	OK
Wider Site R11	14/03/23	13:03	WS241	S	GL	2.05		2.05	-	-	1003	R	0.09	-	0.1	0.1	0.1	0.9	0.9	20.2	20.2	0	1	-	OK
Wider Site R11	14/03/23	14:21	WS248	S	GL	1.18		1.18	-	-		R	2.86	-	0.9	0.1	0.1	0.8	0.8	16.5	16.5	0	3	-	OK
Wider Site R11	14/03/23	13:56	WS249	S	GL	2.77		2.77	-	-	1004	R	-4.23	-	0.1	0.1	0.1	1.3	1.3	20.2	20.3	0	1	-	OK
Wider Site R11	14/03/23	14:08	WS250	S	GL	1.09		1.09	-	-	1004	R	2.31	-	0.2	0.1	0.1	2.6	2.6	16.7	16.8	0	1	-	OK
Wider Site R11	14/03/23	13:14	WS251	S	GL	2.61		4.97	-	-	1003	R	-0.78	-	-0.1	0.1	0.1	1.6	1.6	17.3	17.3	0	2	-	OK
Wider Site R11	14/03/23	13:42	WS252	S	GL	0.26		1.70	-	-	1004	R	0.07	-	0.1	0.1	0.1	0.9	0.9	20.2	20.3	1	1	-	OK
Wider Site R12	05/04/23	11:31	BH01	S	GL	0.17		2.94	-	-	1015	F	-0.05	-	0.1	0.1	0.1	12.5	12.5	6.2	6.2	1	0	-	OK
Wider Site R12	05/04/23	12:01	BH02	S	GL	0.23		2.28	-	-	1015	F	-0.04	-	0.1	0.1	0.1	5.1	5.3	16.8	16.4	1	0	-	SILT
Wider Site R12	05/04/23	11:27	WS01	S	GL	0.25		2.28	-	-	1015	F	0.07	-	0.1	0.1	0.1	4.3	4.3	15.9	15.9	0	0	-	OK
Wider Site R12	05/04/23	11:17	WS02	S	GL	0.17		1.19	-	-	1015	F	0.00	-	0.1	0.1	0.1	2.8	2.9	17.2	15.6	0	0	-	OK
Wider Site R12	05/04/23	11:22	WS03	S	GL	0.63	D	1.97	-	-	1015	F	-0.11	-	0.1	0.1	0.1	11.6	12.2	7.4	7.4	0	0	-	DRY
Wider Site R12	05/04/23	12:05	WS04	S	GL	0.44		1.65	-	-	1015	F	0.05	-	0.1	0.1	0.1	14.5	14.5	2.5	2.5	1	0	-	OK
Wider Site R12	05/04/23	11:36	WS05	S	GL	0.71		1.01	-	-	1015	F	-0.05	-	0.1	0.1	0.1	5.8	5.8	16.0	15.7	0	0	-	OK
Wider Site R12	05/04/23	11:40	WS06	S	GL	0.28		0.90	-	-	1015	F	0.12	-	0.1	0.1	0.1	12.0	12.0	8.9	8.9	0	0	-	OK
Wider Site R12	05/04/23	11:44	WS07	S	GL	0.32		2.00	-	-	1015	F	-0.07	-	0.1	0.1	0.1	2.4	2.6	18.6	17.1	2	0	-	OK
Wider Site R12	05/04/23	11:53	WS08	S	GL	0.22		5.02	-	-	1015	F	0.04	-	0.1	0.1	0.1	7.0	7.0	15.4	15.3	2	0	-	OK
Wider Site R12	05/04/23	11:49	WS09	S	GL	Dry	D*	3.36	-	-	1015	F	-0.05	-	0.1	0.1	0.1	2.9	2.9	18.8	18.5	0	0	-	OK
Wider Site R12	05/04/23	11:13	WS10	S	GL	2.95		3.43	-	-	1015	F	-0.04	-	0.1	0.1	0.1	13.2	13.2	3.3	3.3	0	0	-	OK
Wider Site R12	06/04/23	12:45	BH201	S	GL	3.45		4.88	-	-	1007	F	0.11	-	0.1	0.1	0.1	0.9	0.9	19.8	19.8	0	0	-	OK
Wider Site R12	06/04/23	16:16	BH202	S	GL	1.44		5.16	-	-	1008	F	0.09	-	0.1	0.1	0.1	1.1	1.1	19.5	19.2	0	0	-	OK
Wider Site R12	05/04/23	13:37	BH203	S	GL	2.55		5.12	-	-	1015	F	0.07	-	0.1	0.1	0.1	1.0	1.0	19.1	19.0	0	0	-	OK
Wider Site R12	05/04/23	14:35	BH204	S	GL	1.84		5.28	-	-	1015	F	0.04	-	0.1	0.1	0.1	0.7	0.7	20.9	20.7	0	0	-	OK
Wider Site R12	05/04/23	13:58	BH205	S	GL	0.56		4.41	-	-	1015	F	-15.25	-	-6.0	0.1	0.1	0.8	0.8	17.2	17.2	1	0	-	OK
Wider Site R12	06/04/23	15:34	WS201	S	GL	0.56		1.93	-	-	1008	F	-0.07	-	0.1	0.1	0.1	0.8	2.9	19.8	19.4	0	0	-	OK
Wider Site R12	06/04/23	15:25	WS202	S	GL	0.48		2.02	-	-	1008	F	1.07	-	-4.5	0.1	0.1	1.2	1.2	19.7	19.7	1	0	-	OK
Wider Site R12	06/04/23	14:36	WS203	S	GL	Dry	D	2.02	-	-	1008	F	-0.02	-	0.1	0.1	0.1	0.7	0.7	20.3	20.0	1	0	-	DRY
Wider Site R12	06/04/23	14:12	WS204	S	GL	Dry	D	1.04	-	-	1009	F	-0.02	-	0.1	0.1	0.1	1.0	1.0	18.1	17.9	0	0	-	DRY
Wider Site R12	06/04/23	14:44	WS205	S	GL	0.77		2.99	-	-	1008	F	0.02	-	0.1	0.1	0.1	0.8	0.9	20.5	20.2	1	0	-	OK
Wider Site R12	06/04/23	13:59																							

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions	
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Wider Site R12	06/04/23	15:12	WS213	S	GL	Dry	D*	3.65	-	-	1008	F	0.04	-	0.1	0.1	0.1	0.6	0.6	20.5	20.4	0	0	-	OK
Wider Site R12	06/04/23	15:02	WS214	S	GL	Dry	D	1.00	-	-	1008	F	0.02	-	0.1	0.1	0.1	1.2	1.2	19.4	19.4	0	0	-	DRY
Wider Site R12	06/04/23	13:41	WS215	S	GL	0.34		2.54	-	-	1008	F	2.40	-	0.1	0.1	0.1	1.0	1.0	20.2	20.2	2	0	-	OK
Wider Site R12	06/04/23	12:06	WS216	S	GL	3.14		4.07	-	-	1007	F	0.07	-	0.1	0.1	0.1	1.1	1.1	19.5	19.4	0	0	-	OK
Wider Site R12	06/04/23	12:30	WS217	S	GL	Dry	D	2.08	-	-	1007	F	-0.05	-	0.1	0.1	0.1	1.4	1.4	20.2	19.9	0	0	-	DRY
Wider Site R12	06/04/23	14:56	WS218	S	GL	Dry	D	1.81	-	-	1008	F	-0.09	-	0.1	0.1	0.1	1.1	1.1	19.7	19.6	0	0	-	DRY
Wider Site R12	06/04/23	13:06	WS219	S	GL	1.28		4.99	-	-	1008	F	0.02	-	0.1	0.1	0.1	1.0	1.4	20.3	19.7	0	0	-	OK
Wider Site R12	06/04/23	13:11	WS220	S	GL	0.91		3.01	-	-	1008	F	-0.65	-	0.1	0.1	0.1	0.6	0.6	19.5	19.5	1	0	-	OK
Wider Site R12	06/04/23	12:14	WS221	S	GL	Dry	D	2.03	-	-	1007	F	0.04	-	0.1	0.1	0.1	1.5	1.5	18.8	18.5	0	0	-	DRY
Wider Site R12	06/04/23	12:55	WS222	S	GL	Dry	D	2.49	-	-	1007	F	0.14	-	0.1	0.1	0.1	0.8	0.8	20.1	19.8	0	0	-	DRY
Wider Site R12	06/04/23	13:00	WS223	S	GL	Dry	D*	2.01	-	-	1008	F	0.21	-	0.1	0.1	0.1	0.6	0.6	20.0	19.7	0	0	-	OK
Wider Site R12	04/04/23	15:34	WS224	S	GL	0.78		1.39	-	-	1021	F	0.32	-	0.1	0.1	0.1	0.1	0.1	21.1	21.1	1	0	-	OK
Wider Site R12	06/04/23	12:19	WS225	S	GL	Dry	D	2.04	-	-	1007	F	-0.09	-	0.1	0.1	0.1	1.0	1.0	19.9	19.6	0	0	-	DRY
Wider Site R12	06/04/23	12:39	WS226	S	GL	Dry	D	1.18	-	-	1007	F	-0.07	-	0.1	0.1	0.1	0.9	0.9	20.0	20.0	0	0	-	DRY
Wider Site R12	06/04/23	12:52	WS227	S	GL	Dry	D	2.77	-	-	1007	F	10.34	-	0.1	0.1	0.1	0.8	0.8	20.2	20.2	0	0	-	DRY
Wider Site R12	05/04/23	13:30	WS228	S	GL	Dry	D	1.03	-	-	1015	F	0.02	-	0.1	0.1	0.1	1.0	1.0	20.5	20.2	0	0	-	DRY
Wider Site R12	05/04/23	13:25	WS229	S	GL	Dry	D	1.99	-	-	1014	F	-0.09	-	0.1	0.1	0.1	0.5	0.5	20.6	20.6	0	0	-	DRY
Wider Site R12	06/04/23	16:26	WS230	S	GL	Dry	D	1.09	-	-	1008	F	0.02	-	0.1	0.1	0.1	0.8	0.8	19.7	19.7	0	0	-	DRY
Wider Site R12	05/04/23	11:03	WS231	S	GL	2.44		4.94	-	-	1015	F	-0.02	-	0.1	0.1	0.1	4.2	4.2	15.6	15.5	0	0	-	OK
Wider Site R12	06/04/23	16:02	WS232	S	GL	0.40		2.94	-	-	1008	F	-0.05	-	0.1	0.1	0.1	0.7	0.7	19.7	19.5	0	0	-	OK
Wider Site R12	04/04/23	15:24	WS233	S	GL	0.56		2.28	-	-	1021	F	-0.05	-	0.1	0.1	0.1	0.4	0.4	20.9	20.7	1	0	-	OK
Wider Site R12	04/04/23	15:43	WS234	S	GL	0.23		1.67	-	-	1021	F	1.34	-	0.1	0.1	0.1	0.4	0.4	20.3	20.2	3	0	-	OK
Wider Site R12	05/04/23	13:16	WS237	S	GL	Dry	D	1.38	-	-	1014	F	0.00	-	0.1	0.1	0.1	0.5	0.5	21.1	20.9	0	0	-	DRY
Wider Site R12	05/04/23	12:10	WS238	S	GL	1.61		4.98	-	-	1016	F	-0.02	-	0.1	0.1	0.1	1.4	2.1	19.7	15.5	2	0	-	OK
Wider Site R12	04/04/23	15:07	WS239	S	GL	0.46		2.29	-	-	1021	F	-4.30	-	-2.0	0.1	0.1	0.9	0.9	17.7	17.7	1	0	-	OK
Wider Site R12	04/04/23	15:14	WS240	S	GL	0.41		1.50	-	-	1021	F	-1.16	-	0.1	0.1	0.1	1.1	1.1	19.7	19.6	2	0	-	OK
Wider Site R12	04/04/23	13:15	WS241	S	GL	0.61		1.97	-	-	1021	F	-0.05	-	0.1	0.1	0.1	0.2	0.2	20.6	20.5	1	0	-	OK
Wider Site R12	05/04/23	12:38	WS243	S	GL	Dry	D	1.02	-	-	1015	F	0.00	-	0.1	0.1	0.1	0.7	0.7	20.5	20.4	0	0	-	DRY
Wider Site R12	05/04/23	14:50	WS244	S	GL	0.73		0.95	-	-	1015	F	0.32	-	0.1	0.1	0.1	0.4	0.4	21.4	21.1	2	0	-	OK
Wider Site R12	05/04/23	14:15	WS245	S	GL	0.69		2.54	-	-	1015	F	22.51	-	8.2	0.1	0.1	1.8	1.8	15.7	15.5	1	0	-	OK
Wider Site R12	05/04/23	14:21	WS246	S	GL	0.80		4.48	-	-	1015	F	-0.02	-	0.1	0.1	0.1	0.2	0.2	21.4	20.8	1	0	-	OK
Wider Site R12	05/04/23	14:43	WS247	S	GL	0.29		0.96	-	-	1015	F	0.32	-	0.1	0.1	0.1	0.7	0.7	20.8	20.5	1	0	-	ABOVE GL
Wider Site R12	04/04/23	14:30	WS248	S	GL	0.84		1.65	-	-	1021	F	0.86	-	0.1	0.1	0.1	0.3	0.3	20.1	20.0	2	0	-	OK
Wider Site R12	04/04/23	14:04	WS249	S	GL	Dry	D	1.01	-	-	1021	F	0.05	-	0.1	0.1	0.1	0.5	0.5	20.9	20.7	1	0	-	OK
Wider Site R12	04/04/23	14:20	WS250	S	GL	0.60		0.95	-	-	1021	F	-5.57	-	-2.0	0.1	0.1	1.6	1.6	18.1	18.0	2	0	-	OK
Wider Site R12	04/04/23	13:33	WS251	S	GL	0.29		2.00	-	-	1022	F	-3.98	-	-1.9	0.1	0.1	0.4	0.5	20.3	20.2	0	1	-	OK
Wider Site R12	04/04/23	13:52	WS252	S	GL	0.20		5.03	-	-	1021	F	0.88	-	0.1	0.1	0.1	0.7	0.7	20.3	20.3	1	0	-	OK
Water Only R2	04/04/23	-	CP301	S	GL	2.05		4.70	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	CP302	S	GL	1.94		4.09	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	CP303	S	GL	3.43		4.05	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	CP304	S	GL	3.10		4.05	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	CP305	S	GL	3.24		4.72	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO301	S	GL	0.44		9.72	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO302	S	GL	0.40		3.16	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO303	S	GL	0.51		8.31	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO304	S	GL	0.45		3.90	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO305	S	GL	0.49		2.35	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO306	S	GL	0.85		5.54	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO307	S	GL	1.33		5.11	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO307A	S	GL	1.41		2.17	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO309	S	GL	4.94		5.60	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO309A	S	GL	Dry	D*	4.23	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO310	S	GL	3.97		6.07	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO311	S	GL	1.12		5.09	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO312	S	GL	3.61		9.32	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO312A	S	GL	Dry	D*	2.11	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO313	S	GL	3.31		4.47	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO313A	S	GL	Dry	D	0.79	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	DRY
Water Only R2	04/04/23	-	RO314	S	GL	0.68		4.66	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	DAMAGED
Water Only R2	04/04/23	-	RO315	S	GL	0.20		5.03	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO316	S	GL	2.04		4.86	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO316A	S	GL	1.29		1.32	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO317	S	GL	0.37		7.43	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO318	S	GL	0.51		5.90	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO318A	S	GL	0.88		3.56	-	-	-	F	-	-	-	-	-								



Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)								Local conditions		
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)	
Water Only R2	04/04/23	-	RO319	S	GL	0.47		5.56	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO320	S	GL	0.38		4.79	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	RO321	S	GL	0.76		3.91	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	SILT
Water Only R2	04/04/23	-	RO321A	S	GL	0.77		2.03	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R2	04/04/23	-	WS235	S	GL	-		-	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R2	04/04/23	-	WS236	S	GL	-		-	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Only R2	04/04/23	-	WS242	S	GL	-		-	-	-	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-	
Wider Site R13	12/05/23	13:40	BH201	S	GL	3.29		4.87	-	-	1018	R	0.02	0.1	0.1	0.1	0.1	1.3	1.3	19.5	19.3	0	0	-	OK	
Wider Site R13	12/05/23	15:31	BH202	S	GL	1.01		5.15	-	-	1019	R	0.11	0.1	0.1	0.1	0.1	0.1	0.1	22.2	21.9	0	0	-	OK	
Wider Site R13	10/05/23	15:07	BH203	S	GL	2.71		4.99	-	-	1007	R	0.16	0.1	0.1	0.1	0.1	2.1	2.1	17.1	17.1	0	0	-	OK	
Wider Site R13	10/05/23	16:23	BH204	S	GL	1.67		5.15	-	-	1007	R	0.02	0.1	0.1	0.1	0.1	0.9	0.9	21.1	20.9	0	0	-	SILT	
Wider Site R13	10/05/23	15:38	BH205	S	GL	0.21		4.12	-	-	1008	R	-5.04	-2.4	-0.2	0.1	0.1	1.4	1.4	18.5	18.4	1	0	-	OK	
Wider Site R13	15/05/23	11:57	WS201	S	GL	0.64		1.93	-	-	1011	R	0.05	0.1	0.1	0.1	0.1	0.7	0.8	11.6	10.4	0	0	-	OK	
Wider Site R13	15/05/23	12:08	WS202	S	GL	0.24		2.02	-	-	1011	R	1.07	3.0	2.1	0.1	0.1	0.6	0.6	20.4	20.3	0	0	-	OK	
Wider Site R13	15/05/23	13:32	WS203	S	GL	2.02	D	2.02	-	-	1011	R	-0.02	0.1	0.1	0.1	0.1	0.7	0.7	20.3	20.0	1	0	-	DRY	
Wider Site R13	15/05/23	13:12	WS204	S	GL	1.04	D	1.04	-	-	1011	R	-0.02	0.1	0.1	0.1	0.1	1.0	1.0	18.1	17.9	0	0	-	DRY	
Wider Site R13	15/05/23	13:41	WS205	S	GL	0.51		2.99	-	-	1011	R	0.05	0.1	0.1	0.1	0.1	1.9	1.9	19.3	19.2	0	0	-	SILT	
Wider Site R13	15/05/23	12:57	WS206	S	GL	1.25		4.19	-	-	1011	R	-0.05	0.1	0.1	0.1	0.1	1.9	1.9	19.8	19.6	0	0	-	OK	
Wider Site R13	15/05/23	12:50	WS207	S	GL	0.32		2.20	-	-	1011	R	0.07	-4.0	0.1	0.1	0.1	1.3	1.3	20.2	20.1	1	0	-	OK	
Wider Site R13	15/05/23	12:43	WS208	S	GL	0.57		2.20	-	-	1011	R	1.23	0.2	0.2	0.1	0.1	1.6	1.6	19.4	19.4	0	0	-	OK	
Wider Site R13	15/05/23	12:14	WS209	S	GL	0.84		3.01	-	-	1011	R	0.09	0.1	0.1	0.1	0.1	2.0	2.0	18.8	18.6	0	0	-	OK	
Wider Site R13	15/05/23	12:28	WS210	S	GL	0.82		2.57	-	-	1011	R	0.04	0.1	0.1	0.1	0.1	0.1	0.1	21.2	21.1	1	0	-	OK	
Wider Site R13	15/05/23	11:48	WS211	S	GL	1.43		3.56	-	-	1011	R	0.04	0.1	0.1	0.1	0.1	3.3	3.5	17.4	17.3	0	0	-	OK	
Wider Site R13	12/05/23	14:16	WS213	S	GL	3.58		3.66	-	-	1018	R	-0.11	0.1	0.1	0.1	0.1	0.7	0.7	20.9	20.7	0	0	-	OK	
Wider Site R13	12/05/23	14:24	WS214	S	GL	1.00	D	1.00	-	-	1018	R	-0.04	0.1	0.1	0.1	0.1	1.5	1.5	17.8	17.7	0	0	-	DRY	
Wider Site R13	15/05/23	12:36	WS215	S	GL	0.24		2.54	-	-	1011	R	-0.05	0.1	0.1	0.1	0.1	1.0	1.0	20.2	20.2	0	0	-	OK	
Wider Site R13	15/05/23	11:21	WS216	S	GL	2.90		4.07	-	-	1011	R	0.02	0.1	0.1	0.1	0.1	1.1	1.1	19.5	19.4	0	0	-	OK	
Wider Site R13	12/05/23	14:09	WS217	S	GL	2.08	D	2.08	-	-	1018	R	0.04	0.1	0.1	0.1	0.1	1.3	1.3	20.9	20.6	0	0	-	DRY	
Wider Site R13	12/05/23	14:33	WS218	S	GL	1.81	D	1.81	-	-	1018	R	0.14	0.1	0.1	0.1	0.1	1.5	1.5	19.7	19.4	0	0	-	DRY	
Wider Site R13	12/05/23	15:02	WS219	S	GL	1.13		4.99	-	-	1019	R	0.00	0.1	0.1	0.1	0.1	1.7	1.7	19.7	19.7	0	0	-	OK	
Wider Site R13	12/05/23	15:14	WS220	S	GL	0.91		3.02	-	-	1019	R	-0.02	0.1	0.1	0.1	0.1	0.4	0.5	21.4	21.1	0	0	-	OK	
Wider Site R13	15/05/23	11:30	WS221	S	GL	2.03	D	2.03	-	-	1011	R	0.04	0.1	0.1	0.1	0.1	1.5	1.5	18.8	18.5	0	0	-	DRY	
Wider Site R13	12/05/23	13:51	WS222	S	GL	2.49	D	2.49	-	-	1018	R	0.02	0.1	0.1	0.1	0.1	1.4	1.4	19.6	19.4	0	0	-	DRY	
Wider Site R13	12/05/23	14:42	WS223	S	GL	1.82		2.01	-	-	1019	R	0.11	0.1	0.1	0.1	0.1	0.5	0.5	21.2	20.9	0	0	-	OK	
Wider Site R13	11/05/23	11:48	WS224	S	GL	0.40		1.39	-	-	1010	R	0.19	0.1	0.1	0.1	0.1	0.2	0.2	21.1	21.0	1	0	-	OK	
Wider Site R13	15/05/23	11:36	WS225	S	GL	2.04	D	2.04	-	-	1011	R	-0.09	0.1	0.1	0.1	0.1	1.0	1.0	19.9	19.6	0	0	-	DRY	
Wider Site R13	15/05/23		WS226	S	GL	1.18	D	1.18	-	-	1011	R	-0.07	0.1	0.1	0.1	0.1	0.9	0.9	20.0	20.0	0	0	-	DRY	
Wider Site R13	12/05/23	13:44	WS227	S	GL	2.77	D	2.77	-	-	1018	R	-0.25	0.1	0.1	0.1	0.1	1.0	1.0	19.9	19.8	0	0	-	DRY	
Wider Site R13	10/05/23	14:55	WS228	S	GL	1.00		1.00	-	-	1007	R	-0.09	0.1	0.1	0.1	0.1	1.4	1.4	19.4	19.1	0	0	-	DRY	
Wider Site R13	10/05/23	14:44	WS229	S	GL	1.94		1.94	-	-	1007	R	-0.02	0.1	0.1	0.1	0.1	0.7	0.7	20.0	19.7	0	0	-	OK	
Wider Site R13	12/05/23	13:27	WS230	S	GL	1.08	D	1.08	-	-	1018	R	0.16	0.1	0.1	0.1	0.1	1.1	1.1	19.5	19.3	0	0	-	DRY	
Wider Site R13	10/05/23	11:48	WS231	S	GL	2.36		4.96	-	-	1007	R	0.12	0.1	0.1	0.1	0.1	3.8	3.9	16.8	16.8	0	0	-	OK	
Wider Site R13	12/05/23	15:21	WS232	S	GL	0.19		2.93	-	-	1019	R	-0.12	0.1	0.1	0.1	0.1	0.3	0.3	21.8	21.6	0	0	-	OK	
Wider Site R13	11/05/23	11:33	WS233	S	GL	0.18		2.28	-	-	1011	R	-0.04	0.1	0.1	0.1	0.1	0.1	0.1	21.3	20.8	0	0	-	OK	
Wider Site R13	11/05/23	12:04	WS234	S	GL	0.17		1.67	-	-	1011	R	7.21	3.0	0.2	0.1	0.1	0.7	0.7	19.6	19.4	6	0	-	OK	
Wider Site R13	15/05/23	10:45	WS235	S	GL	1.20		5.06	-	-	1011	R	0.02	0.2	0.1	0.1	0.1	1.6	1.7	17.5	17.5	0	0	-	OK	
Wider Site R13	15/05/23	10:30	WS236	S	GL	2.00	D	2.00	-	-	1011	R	-0.02	0.2	0.1	0.1	0.1	0.6	0.6	19.9	19.9	0	0	-	DRY	
Wider Site R13	10/05/23	14:32	WS237	S	GL	1.01	D	1.01	-	-	1007	R	0.12	0.1	0.1	0.1	0.1	0.7	0.7	20.5	20.3	0	0	-	DRY	
Wider Site R13	10/05/23	13:42	WS238	S	GL	1.89		5.06	-	-	1007	R	0.00	0.1	0.1	0.1	0.1	1.2	2.3	20.4	15.8	2	0	-	OK	
Wider Site R13	11/05/23	11:18	WS239	S	GL	0.17		2.28	-	-	1011	R	-4.13	-2.1	-0.8	0.1	0.1	0.6	0.6	19.7	19.7	0	0	-	OK	
Wider Site R13	11/05/23	11:25	WS240	S	GL	0.14		1.19	-	-	1011	R	2.75	0.3	0.8	0.1	0.1	0.9	0.9	20.3	20.1	2	0	-	OK	
Wider Site R13	11/05/23	12:50	WS241	S	GL	0.63		1.97	-	-	1010	R	-0.11	0.1	0.1	0.1	0.1	0.1	0.1	21.5	21.3	1	0	-	OK	
Wider Site R13	15/05/23	10:59	WS242	S	GL	0.45		3.65	-	-	1011	R	7.94	-4.9	0.1	0.1	0.1	2.6	2.7	18.0	17.9	1	0	-	OK	
Wider Site R13	10/05/23	14:06	WS243	S	GL	1.01	D	1.01	-	-	1007	R	0.14	0.1	0.1	0.1	0.1	1.2	1.2	20.4	20.2	0	0	-	DRY	
Wider Site R13	10/05/23	17:02	WS244	S	GL	0.27		0.88	-	-	1008	R	18.85	7.3	0.1	0.1	0.1	0.8	0.8	20.7	20.7	3	0	-	OK	
Wider Site R13	10/05/23	15:51	WS245	S	GL	0.31		2.52	-	-	1007	R	6.98	3.4	0.2	0.1	0.1	1.7	1.7	17.3	17.3	4	0	-	SILT	
Wider Site R13	10/05/23	16:02	WS246	S	GL	0.85		4.55	-	-	1008	R	-0.05	0.1	0.1	0.1	0.1	0.1	0.1	22.1	21.8	0	0	-	SILT	
Wider Site R13	10/05/23	16:45	WS247	S	GL	0.00		0.89	-	-	1008	R	9.84	3.8	0.1	0.1	0.1	1.2	1.2	18.5	18.4	4	0	-	ABOVE GROUND LEVEL	
Wider Site R13	11/05/23	14:08	WS248	S	GL	0.43		1.65	-	-	1010	R	2.15	0.2	0.4	0.1	0.1	0.6	0.6	20.2	20.0	5	0	-	OK	
Wider Site R13	11/05/23	13:43	WS249	S	GL	0.69		1.01	-	-	1010	R	0.02	0												

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)							Local conditions			
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)	
Water Only R3	11/05/23	-	CP303	S	GL	3.16		4.01	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	CP304	S	GL	2.87		4.06	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	CP305	S	GL	2.84		4.72	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO301	S	GL	0.30		7.69	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO302	S	GL	0.17		3.15	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO303	S	GL	0.11		3.53	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO304	S	GL	0.28		8.00	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO305	S	GL	0.35		2.38	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO306	S	GL	0.69		5.54	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO307	S	GL	1.18		5.11	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO307A	S	GL	1.20		2.17	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO309	S	GL	4.77		5.60	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO309A	S	GL	4.13		4.23	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO310	S	GL	3.89		6.27	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO311	S	GL	1.00		5.09	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO312	S	GL	3.56		9.32	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO312A	S	GL	2.04		2.11	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO313	S	GL	2.89		4.47	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO313A	S	GL	0.79	D	0.79	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
Water Only R3	11/05/23	-	RO314	S	GL	0.68		4.66	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	DAMAGED
Water Only R3	11/05/23	-	RO315	S	GL	0.19		5.03	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO316	S	GL	2.09		4.86	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO316A	S	GL	0.99		1.32	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO317	S	GL	0.34		7.43	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO318	S	GL	0.50		5.90	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO318A	S	GL	0.48		3.16	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO319	S	GL	0.46		5.56	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO320	S	GL	0.31		4.79	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Water Only R3	11/05/23	-	RO321	S	GL	0.73		3.91	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	SILT
Water Only R3	11/05/23	-	RO321A	S	GL	0.76		2.03	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	OK
Wider Site R14	07/06/23	16:04	BH201	S	GL	3.12		4.89	-	-	1019	S	-0.05	0.1	0.1	0.1	0.1	1.1	1.1	20.5	20.2	0	0	-	OK	
Wider Site R14	09/06/23	15:31	BH202	S	GL	2.10		5.11	-	-	1019	S	0.11	0.1	0.1	0.1	0.1	0.1	0.1	22.2	21.9	0	0	-	OK	
Wider Site R14	06/06/23	15:07	BH203	S	GL	0.77		5.10	-	-	1019	S	0.16	0.1	0.1	0.1	0.1	2.1	2.1	17.1	17.1	0	0	-	OK	
Wider Site R14	06/06/23	16:23	BH204	S	GL	1.55		5.03	-	-	1019	S	0.02	0.1	0.1	0.1	0.1	0.9	0.9	21.1	20.9	0	0	-	SILT	
Wider Site R14	06/06/23	15:38	BH205	S	GL	0.25		4.16	-	-	1019	S	-5.04	-2.4	-0.2	0.1	0.1	1.4	1.4	18.5	18.4	1	0	-	OK	
Wider Site R14	05/06/23	13:08	WS201	S	GL	1.84		1.95	-	-	1019	S	0.05	0.1	0.1	0.1	0.1	1.1	1.2	12.7	12.3	0	0	-	OK	
Wider Site R14	05/06/23	13:21	WS202	S	GL	0.70		2.03	-	-	1020	S	-2.57	-0.3	0.1	0.1	0.1	0.5	0.5	19.7	19.5	0	0	-	OK	
Wider Site R14	05/06/23	13:52	WS203	S	GL	2.02	D	2.02	-	-	1019	S	0.14	0.1	0.1	0.1	0.1	1.0	1.1	20.2	19.9	0	0	-	DRY	
Wider Site R14	05/06/23	14:12	WS204	S	GL	1.05	D	1.05	-	-	1019	S	0.00	0.1	0.1	0.1	0.1	3.4	3.8	18.2	17.9	0	0	-	DRY	
Wider Site R14	05/06/23	13:40	WS205	S	GL	0.67		3.00	-	-	1020	S	0.14	0.1	0.1	0.1	0.1	0.2	0.2	21.2	21.0	1	0	-	OK	
Wider Site R14	05/06/23	14:21	WS206	S	GL	1.66		4.16	-	-	1019	S	0.12	0.1	0.1	0.1	0.1	2.5	2.5	19.7	19.5	0	0	-	OK	
Wider Site R14	05/06/23	14:35	WS207	S	GL	0.70		-0.24	-	-	1020	S	0.05	0.1	0.1	0.1	0.1	0.3	0.3	21.5	20.7	1	0	-	OK	
Wider Site R14	05/06/23	15:03	WS208	S	GL	0.47		2.22	-	-	1020	S	-19.45	-7.2	-0.2	0.1	0.1	1.6	1.8	19.4	19.2	3	0	-	OK	
Wider Site R14	05/06/23	16:08	WS209	S	GL	1.05		3.00	-	-	1019	S	0.07	0.1	0.1	0.1	0.1	0.0	0.1	21.7	21.1	1	0	-	OK	
Wider Site R14	05/06/23	15:43	WS210	S	GL	0.57		2.58	-	-	1019	S	-14.03	-5.8	-0.1	0.1	0.1	0.6	0.6	20.6	20.4	1	0	-	OK	
Wider Site R14	05/06/23	12:59	WS211	S	GL	2.22		3.56	-	-	1019	S	0.02	0.1	0.1	0.1	0.1	2.9	2.9	17.9	17.9	0	0	-	OK	
Wider Site R14	09/06/23	14:16	WS213	S	GL	3.65	D	3.65	-	-	1018	S	-0.11	0.1	0.1	0.1	0.1	0.7	0.7	20.9	20.7	0	0	-	DRY	
Wider Site R14	09/06/23	14:24	WS214	S	GL	1.01	D	1.01	-	-	1018	S	-0.04	0.1	0.1	0.1	0.1	1.5	1.5	17.8	17.7	0	0	-	DRY	
Wider Site R14	07/06/23	13:42	WS216	S	GL	2.97		4.09	-	-	1019	S	-0.19	0.1	0.1	0.1	0.1	1.5	1.5	18.9	18.6	0	0	-	OK	
Wider Site R14	09/06/23	14:09	WS217	S	GL	2.08	D	2.08	-	-	1018	S	0.04	0.1	0.1	0.1	0.1	1.3	1.3	20.9	20.6	0	0	-	DRY	
Wider Site R14	09/06/23	14:33	WS218	S	GL	1.81	D	1.81	-	-	1018	S	0.14	0.1	0.1	0.1	0.1	1.5	1.5	19.7	19.4	0	0	-	DRY	
Wider Site R14	09/06/23	15:02	WS219	S	GL	1.55		4.99	-	-	1019	S	0.00	0.1	0.1	0.1	0.1	1.7	1.7	19.7	19.7	0	0	-	OK	
Wider Site R14	09/06/23	15:14	WS220	S	GL	1.22		3.00	-	-	1019	S	-0.02	0.1	0.1	0.1	0.1	0.4	0.5	21.4	21.1	0	0	-	OK	
Wider Site R14	07/06/23	13:48	WS221	S	GL	2.03	D	2.03	-	-	1019	S	-0.09	0.1	0.1	0.1	0.1	1.1	1.1	19.9	19.8	0	1	-	DRY	
Wider Site R14	09/06/23	13:51	WS222	S	GL	2.49	D	2.49	-	-	1018	S	0.02	0.1	0.1	0.1	0.1	1.4	1.4	19.6	19.4	0	0	-	DRY	
Wider Site R14	09/06/23	14:42	WS223	S	GL	1.91		2.01	-	-	1019	S	0.11	0.1	0.1	0.1	0.1	0.5	0.5	21.2	20.9	0	0	-	OK	
Wider Site R14	08/06/23	11:48	WS224	S	GL	0.66		1.39	-	-	1019	S	0.19	0.1	0.1	0.1	0.1	0.2	0.2	21.1	21.0	1	0	-	OK	
Wider Site R14	07/06/23	13:55	WS225	S	GL	2.04	D	2.04	-	-	1019	S	0.23	0.1	0.1	0.1	0.1	1.3	1.3	19.6	19.5	0	0	-	DRY	
Wider Site R14	07/06/23	16:15	WS226	S	GL	1.18	D	1.18	-	-	1019	S	-0.07	0.1	0.1	0.1	0.1	0.9	0.9	20.0	20.0	0	0	-	DRY	
Wider Site R14	09/06/23	13:44	WS227	S	GL	2.77	D	2.77	-	-	1018	S	-0.25	0.1	0.1	0.1	0.1	1.0	1.0	19.9	19.8	0	0	-	DRY	
Wider Site R14	06/06/23	14:55	WS228	S	GL	1.95	D	1.95	-	-	1019	S	-0.09	0.1	0.1	0.1	0.1	1.4	1.4	19.4	19.1	0	0	-	DRY	
Wider Site R14	06/06/23	14:44	WS229	S	GL	1.07	D	1.07	-	-	1019	S	-0.02	0.1	0.1	0.1	0.1	0.7	0.7	20.0	19.7	0	0	-	DRY	
Wider Site R14	07/06/23	15:52	WS230	S	GL	1.46	D	1.46	-	-	1018	S	0.05	0.1	0.1	0.1	0.1	0.0	0.0	21.2	21.0	0	0	-	DRY	
Wider Site R14	06/06/23	11:48	WS231	S	GL	3.07		4.98	-	-	1010	S	0.12	0.1	0.1	0.1										

Monitoring round			Well Details			Water/NAPL Monitoring (m below datum)					Pressure and flow (use < for below LoD)					Gas Concentrations (use < for below LoD)							Local conditions		
Round Reference	Date	Time	Well ID	Single or dual gas tap (S/D)	Datum Type (Casing / GL)	Depth to water	"D" denotes dry hole	Depth to Base of Hole	Depth to LNAPL	Depth to DNAPL	Atm. pressure (hPa)	Atm. pressure falling (F) / rising (R) / steady (S)	Relative BH pressure (hPa)	Initial Gas Flow (L/hr)	Steady Gas Flow (L/hr)	CH <sub>4</sub> (%v/v) - (Initial)	CH <sub>4</sub> (%v/v) - (Steady)	CO <sub>2</sub> (%v/v) - (Initial)	CO <sub>2</sub> (%v/v) - (Steady)	O <sub>2</sub> (%v/v) - (Initial)	O <sub>2</sub> (%v/v) - (Steady)	CO (ppm)	H <sub>2</sub> S (ppm)	VOC (as ppm using PID)	Notes on condition of borehole (including any)
Wider Site R14	08/06/23	11:33	WS233	S	GL	0.72		1.95	-	-	1019	S	-0.04	0.1	0.1	0.1	0.1	0.1	0.1	21.3	20.8	0	0	-	OK
Wider Site R14	08/06/23	12:04	WS234	S	GL	0.82		1.67	-	-	1019	S	7.21	3.0	0.2	0.1	0.1	0.7	0.7	19.6	19.4	6	0	-	OK
Wider Site R14	07/06/23	14:22	WS235	S	GL	0.87		4.94	-	-	1019	S	-0.16	0.1	0.1	0.1	0.1	0.7	0.9	19.9	19.0	1	0	-	OK
Wider Site R14	07/06/23	14:14	WS236	S	GL	1.98	D	1.98	-	-	1019	S	-0.07	0.1	0.1	0.1	0.1	3.2	3.5	16.7	16.7	2	0	-	DRY
Wider Site R14	06/06/23	14:32	WS237	S	GL	1.37	D	1.37	-	-	1020	S	0.12	0.1	0.1	0.1	0.1	0.7	0.7	20.5	20.3	0	0	-	DRY
Wider Site R14	06/06/23	13:42	WS238	S	GL	1.98		4.98	-	-	1020	S	0.00	0.1	0.1	0.1	0.1	1.2	2.3	20.4	15.8	2	0	-	OK
Wider Site R14	08/06/23	11:18	WS239	S	GL	0.76		2.29	-	-	1019	S	-4.13	-2.1	-0.8	0.1	0.1	0.6	0.6	19.7	19.7	0	0	-	OK
Wider Site R14	08/06/23	12:50	WS241	S	GL	1.17		1.97	-	-	1019	S	-0.11	0.1	0.1	0.1	0.1	0.1	0.1	21.5	21.3	1	0	-	OK
Wider Site R14	07/06/23	14:40	WS242	S	GL	0.45		3.53	-	-	1020	S	-14.90	-5.6	-0.1	0.1	0.1	0.9	0.9	13.0	13.0	36	0	-	OK
Wider Site R14	06/06/23	14:06	WS243	S	GL	1.02	D	1.02	-	-	1020	S	0.14	0.1	0.1	0.1	0.1	1.2	1.2	20.4	20.2	0	0	-	DRY
Wider Site R14	06/06/23	17:02	WS244	S	GL	0.88		0.95	-	-	1019	S	18.85	7.3	0.1	0.1	0.1	0.8	0.8	20.7	20.7	3	0	-	OK
Wider Site R14	06/06/23	15:51	WS245	S	GL	0.74		2.16	-	-	1019	S	6.98	3.4	0.2	0.1	0.1	1.7	1.7	17.3	17.3	4	0	-	SILT
Wider Site R14	06/06/23	16:02	WS246	S	GL	1.09		4.49	-	-	1019	S	-0.05	0.1	0.1	0.1	0.1	0.1	0.1	22.1	21.8	0	0	-	SILT
Wider Site R14	06/06/23	16:45	WS247	S	GL	0.21		0.96	-	-	1019	S	9.84	3.8	-0.1	0.1	0.1	1.2	1.2	18.5	18.4	4	0	-	OK
Wider Site R14	08/06/23	14:08	WS248	S	GL	0.92		1.66	-	-	1019	S	2.15	0.2	0.4	0.1	0.1	0.6	0.6	20.2	20.0	5	0	-	OK
Wider Site R14	08/06/23	13:43	WS249	S	GL	0.98	D	0.98	-	-	1019	S	0.02	0.1	0.1	0.1	0.1	3.1	3.1	16.8	16.8	1	0	-	DRY
Wider Site R14	08/06/23	13:57	WS250	S	GL	0.90	D	0.90	-	-	1019	S	7.53	2.8	0.5	0.1	0.1	3.3	3.3	15.6	15.5	1	0	-	DRY
Wider Site R14	08/06/23	13:14	WS251	S	GL	0.62		2.00	-	-	1019	S	-3.58	-1.7	0.1	0.1	0.1	0.3	0.4	21.1	20.7	0	0	-	OK
Wider Site R14	08/06/23	13:30	WS252	S	GL	0.70		4.97	-	-	1019	S	-0.12	0.1	0.1	0.1	0.1	0.2	0.2	21.9	21.7	0	0	-	OK
Water Only R4	05/06/23	-	CP301	S	GL	2.16		4.71	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	silt
Water Only R4	07/06/23	-	CP302	S	GL	1.85		4.12	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	09/06/23	-	CP303	S	GL	2.95		4.01	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	09/06/23	-	CP304	S	GL	2.97		4.08	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	09/06/23	-	CP305	S	GL	2.94		4.72	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	09/06/23	-	RO301	S	GL	0.26		7.47	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	09/06/23	-	RO302	S	GL	0.70		3.18	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	08/06/23	-	RO303	S	GL	0.77		3.63	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	08/06/23	-	RO304	S	GL	0.50		7.98	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	09/06/23	-	RO305	S	GL	0.40		2.40	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	05/06/23	-	RO306	S	GL	0.73		5.44	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	05/06/23	-	RO307	S	GL	1.36		5.17	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	05/06/23	-	RO307A	S	GL	1.36		2.20	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	05/06/23	-	RO309A	S	GL	4.24		4.34	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	05/06/23	-	RO309	S	GL	4.96		5.60	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	05/06/23	-	RO310	S	GL	3.93		5.91	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	05/06/23	-	RO311	S	GL	1.09		5.05	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	05/06/23	-	RO312A	S	GL	2.21	D	2.21	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	DRY
Water Only R4	05/06/23	-	RO312	S	GL	3.59		9.39	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	silt
Water Only R4	05/06/23	-	RO313	S	GL	3.44		4.64	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	05/06/23	-	RO313A	S	GL	0.78	D	0.78	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	DRY
Water Only R4	05/06/23	-	RO314	S	GL	0.90		4.60	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	09/06/23	-	RO315	S	GL	0.30		4.61	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	09/06/23	-	RO316A	S	GL	1.22		1.41	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	09/06/23	-	RO316	S	GL	2.24		5.46	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	05/06/23	-	RO317	S	GL	0.63		7.59	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	05/06/23	-	RO318	S	GL	0.68		5.90	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	05/06/23	-	RO318A	S	GL	0.67		4.16	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	ANTS
Water Only R4	05/06/23	-	RO319	S	GL	0.66		5.56	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	09/06/23	-	RO320	S	GL	0.53		5.09	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	09/06/23	-	RO321	S	GL	0.87		3.89	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	silt
Water Only R4	09/06/23	-	RO321A	S	GL	0.79		2.04	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Only R4	08/06/23	-	WS240	S	GL	0.00		0.00	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	Mower damaged - no pipe to test
Water Only R4	05/06/23	-	WS215	S	GL	0.00		0.00	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	Vandalism - pipe damaged

### CIRIA Ground Gas Risk Assessment

Number of Monitoring Rounds	11
Number of Locations	13

Max CH <sub>4</sub>	Worst Case Flow
0.3	0.3

Worst Case Site GSV CH <sub>4</sub>
0.0009

Number of Readings	78
Number of Readings with Flow Rate	78

Max CO <sub>2</sub>	Worst Case Flow
16.3	0.3

Worst Case Site GSV CO <sub>2</sub>
0.0489

	CH <sub>4</sub>	CO <sub>2</sub>
	Visit GSVs	Visit GSVs
CS1	60	60
CS2	0	0
CS3	0	0
CS4	0	0
CS5	0	0
CS6	0	0

Flooded Well - Groundwater level above screen

Negative Flow Converted to positive for calculation purposes

Location	Strata	Date	Pressure Trend	Relative Pressure	Flow Rate (l/hr)	Atmos. Pressure	CH <sub>4</sub> (% vol)		(%LEL)		CO <sub>2</sub> (% vol)		O <sub>2</sub> (% vol)		Visit GSV – CH <sub>4</sub>	Visit GSV – CO <sub>2</sub>
							Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady		
BH01	Oxford Clay Formation / Kellways Sand Member	24/08/21	R	0.14	0.2	1023	0.1	0.1	2.0	2.0	13.0	13.0	8.4	8.4	-	-
		07/09/21	F	0.07	0.2	1014	0.1	0.1	2.0	2.0	11.6	11.6	9.0	9.0	-	-
		14/09/21	F	-0.12	0.1	1004	0.1	0.1	2.0	2.0	11.5	11.5	9.7	9.7	-	-
		21/09/21	R	0.05	0.1	1023	0.1	0.1	2.0	2.0	9.9	9.9	12.3	12.3	-	-
		28/09/21	R	0.04	0.1	1006	0.1	0.1	2.0	2.0	13.6	12.0	11.5	11.5	-	-
BH02	Oxford Clay Formation / Kellways Sand Member	05/10/21	R	0.16	0.1	993	0.1	0.1	2.0	2.0	15.1	15.1	9.7	9.7	-	-
		24/08/21	R	0.00	0.2	1023	0.1	0.1	2.0	2.0	8.8	8.7	12.2	12.3	-	-
		07/09/21	F	0.02	0.1	1015	0.1	0.1	2.0	2.0	9.7	9.7	11.8	11.9	-	-
		14/09/21	F	0.00	0.1	1005	0.1	0.1	2.0	2.0	10.6	10.6	11.8	11.8	-	-
		21/09/21	R	-0.04	0.1	1024	0.1	0.1	2.0	2.0	6.1	6.1	15.6	15.6	-	-
BH03	Oxford Clay Formation / Kellways Sand Member	28/09/21	R	0.09	0.1	1007	0.1	0.1	2.0	2.0	5.6	5.6	16.4	16.5	-	-
		05/10/21	R	-0.07	0.2	994	0.1	0.1	2.0	2.0	3.9	3.9	18.3	18.4	-	-
		24/08/21	R	0.02	0.2	1025	0.1	0.1	2.0	2.0	14.8	14.7	5.9	5.9	-	-
		07/09/21	F	0.05	-0.5	1014	0.1	0.1	2.0	2.0	8.0	8.0	12.7	12.7	-	-
		14/09/21	F	0.07	-1.3	1004	0.1	0.1	2.0	2.0	8.1	8.1	13.3	13.4	-	-
WS01	Landfill	21/09/21	R	0.05	-1	1024	0.1	0.1	2.0	2.0	5.5	5.5	15.7	15.8	-	-
		28/09/21	R	0.04	-0.2	1007	0.1	0.1	2.0	2.0	5.7	5.7	15.6	15.7	-	-
		05/10/21	R	0.09	0.2	993	0.1	0.1	2.0	2.0	5.1	5.1	16.2	16.2	-	-
		24/08/21	R	0.05	0.2	1023	0.1	0.1	2.0	2.0	12.8	12.8	9.6	9.6	0.0002	0.0256
		07/09/21	F	0.02	0.2	1014	0.1	0.1	2.0	2.0	13.3	13.3	10.7	10.7	0.0002	0.0266
WS02	River Terrace Deposits	14/09/21	F	-0.09	0.1	1004	0.1	0.1	2.0	2.0	11.3	11.3	12.8	12.8	0.0001	0.0113
		21/09/21	R	-0.35	0.1	1023	0.1	0.1	2.0	2.0	6.6	6.6	15.3	15.3	0.0001	0.0066
		28/09/21	R	-0.16	0.1	1006	0.1	0.1	2.0	2.0	2.5	2.5	19.4	19.4	0.0001	0.0025
		05/10/21	R	0.09	0.2	992	0.1	0.1	2.0	2.0	3.2	3.2	18.5	18.6	0.0002	0.0064
		24/08/21	R	0.02	0.3	1025	0.1	0.1	2.0	2.0	3.2	3.2	17.4	17.5	0.0003	0.0096
WS03	Landfill	07/09/21	F	0.25	0.2	1015	0.1	0.1	2.0	2.0	3.8	3.8	16.9	16.9	0.0002	0.0076
		14/09/21	F	-0.07	0.2	1005	0.1	0.1	2.0	2.0	3.7	3.7	17.6	17.7	0.0002	0.0074
		21/09/21	R	0.00	0.2	1025	0.1	0.1	2.0	2.0	4.4	4.4	16.6	16.6	0.0002	0.0088
		28/09/21	R	0.04	0.1	1007	0.1	0.1	2.0	2.0	4.8	4.8	17.0	17.1	0.0001	0.0048
		05/10/21	R	0.09	0.1	994	0.1	0.1	2.0	2.0	6.1	5.9	15.4	15.4	0.0001	0.0059
WS03	Landfill	24/08/21	R	0.02	0.3	1024	0.1	0.1	2.0	2.0	8.9	8.9	12.5	12.5	0.0003	0.0267
		07/09/21	F	0.05	0.2	1015	0.1	0.1	2.0	2.0	9.0	9.0	11.6	11.6	0.0002	0.0180
		14/09/21	F	0.14	0.1	1005	0.1	0.1	2.0	2.0	7.3	7.3	14.6	14.6	0.0001	0.0073
		21/09/21	R	0.02	0.2	1024	0.1	0.1	2.0	2.0	8.5	8.5	12.5	12.5	0.0002	0.0170
		28/09/21	R	0.21	0.2	1007	0.1	0.1	2.0	2.0	9.5	9.5	12.9	13.0	0.0002	0.0190
05/10/21	R	0.11	0.2	994	0.1	0.1	2.0	2.0	10.4	10.4	10.5	10.6	0.0002	0.0208		



### CIRIA Ground Gas Risk Assessment

Location	Strata	Date	Pressure Trend	Relative Pressure	Flow Rate (l/hr)	Atmos. Pressure	CH <sub>4</sub> (% vol)		(%LEL)		CO <sub>2</sub> (% vol)		O <sub>2</sub> (% vol)		Visit GSV – CH <sub>4</sub>	Visit GSV – CO <sub>2</sub>
							Initial	Steady	Initial	Steady	Initial	Steady	Initial	Steady		
WS04	Landfill	24/08/21	R	0.00	0.2	1024	0.3	0.3	6.0	6.0	15.5	15.5	1.8	1.8	0.0006	0.0310
		07/09/21	F	0.02	0.2	1015	0.2	0.2	4.0	4.0	16.3	16.3	1.1	1.1	0.0004	0.0326
		14/09/21	F	-0.25	0.1	1005	0.3	0.3	6.0	6.0	14.1	14.1	4.1	4.1	0.0003	0.0141
		21/09/21	R	0.12	0.2	1025	0.1	0.1	2.0	2.0	5.3	5.3	13.1	13.2	0.0002	0.0106
		28/09/21	R	0.07	0.1	1007	0.1	0.1	2.0	2.0	6.4	6.4	12.5	12.5	0.0001	0.0064
		05/10/21	R	0.05	0.2	994	0.1	0.1	2.0	2.0	4.3	4.3	15.9	15.9	0.0002	0.0086
WS05	Landfill	24/08/21	R	0.04	0.3	1023	0.1	0.1	2.0	2.0	8.2	8.2	12.8	12.8	0.0003	0.0246
		07/09/21	F	0.02	0.1	1014	0.1	0.1	2.0	2.0	4.2	4.2	16.3	16.4	0.0001	0.0042
		14/09/21	F	-0.04	0.1	1004	0.1	0.1	2.0	2.0	4.8	4.8	16.5	16.5	0.0001	0.0048
		21/09/21	R	-0.07	0.1	1023	0.1	0.1	2.0	2.0	4.3	4.3	16.7	16.7	0.0001	0.0043
		28/09/21	R	0.02	0.1	1007	0.1	0.1	2.0	2.0	1.1	0.4	17.8	20.3	0.0001	0.0004
		05/10/21	R	0.07	0.2	993	0.1	0.1	2.0	2.0	4.6	1.7	17.5	19.1	0.0002	0.0034
WS06	Landfill	24/08/21	R	0.07	0.1	1024	0.1	0.1	2.0	2.0	8.5	8.4	12.0	12.0	0.0001	0.0084
		07/09/21	F	-0.04	0.1	1014	0.1	0.1	2.0	2.0	7.1	7.1	12.8	12.8	0.0001	0.0071
		14/09/21	F	0.12	0.1	1004	0.1	0.1	2.0	2.0	6.0	6.0	14.9	14.9	0.0001	0.0060
		21/09/21	R	-0.07	0.1	1024	0.1	0.1	2.0	2.0	7.1	7.0	13.5	13.6	0.0001	0.0070
		28/09/21	R	0.04	0.2	1007	0.1	0.1	2.0	2.0	5.2	5.2	15.6	15.6	0.0002	0.0104
		05/10/21	R	-0.05	0.1	993	0.1	0.1	2.0	2.0	7.5	7.4	13.8	13.8	0.0001	0.0074
WS07	Landfill	24/08/21	R	0.12	0.2	1025	0.1	0.1	2.0	2.0	3.1	3.1	16.5	17.5	0.0002	0.0062
		07/09/21	F	0.04	0.2	1015	0.1	0.1	2.0	2.0	3.9	3.9	16.4	16.4	0.0002	0.0078
		14/09/21	F	0.02	0.1	1004	0.1	0.1	2.0	2.0	3.4	3.4	17.5	17.5	0.0001	0.0034
		21/09/21	R	0.02	0.2	1024	0.1	0.1	2.0	2.0	3.1	3.1	17.6	17.6	0.0002	0.0062
		28/09/21	R	0.04	0.2	1007	0.1	0.1	2.0	2.0	2.4	2.4	18.8	18.8	0.0002	0.0048
		05/10/21	R	0.07	0.2	993	0.1	0.1	2.0	2.0	1.8	1.8	19.2	19.4	0.0002	0.0036
WS08	Landfill	24/08/21	R	0.02	0.2	1025	0.1	0.1	2.0	2.0	7.5	7.5	14.8	14.8	0.0002	0.0150
		07/09/21	F	-0.05	0.1	1015	0.1	0.1	2.0	2.0	7.2	7.2	14.4	14.5	0.0001	0.0072
		14/09/21	F	0.02	0.1	1005	0.1	0.1	2.0	2.0	7.2	7.2	15.1	15.1	0.0001	0.0072
		21/09/21	R	-0.05	0.2	1024	0.1	0.1	2.0	2.0	7.0	7.0	14.5	14.5	0.0002	0.0140
		28/09/21	R	-0.07	0.1	1007	0.1	0.1	2.0	2.0	5.8	5.8	16.6	16.7	0.0001	0.0058
		05/10/21	R	0.05	0.2	994	0.1	0.1	2.0	2.0	5.7	5.7	15.8	15.8	0.0002	0.0114
WS09	Landfill	24/08/21	R	0.02	0.1	1025	0.1	0.1	2.0	2.0	3.1	3.1	18.3	18.4	0.0001	0.0031
		07/09/21	F	0.07	0.2	1015	0.1	0.1	2.0	2.0	3.2	3.2	17.5	17.5	0.0002	0.0064
		14/09/21	F	-0.11	0.1	1004	0.1	0.1	2.0	2.0	3.4	3.4	18.5	18.5	0.0001	0.0034
		21/09/21	R	-0.12	0.2	1024	0.1	0.1	2.0	2.0	3.3	3.3	17.9	17.9	0.0002	0.0066
		28/09/21	R	-0.05	0.2	1007	0.1	0.1	2.0	2.0	3.5	3.5	18.2	18.3	0.0002	0.0070
		05/10/21	R	0.14	0.2	994	0.1	0.1	2.0	2.0	3.9	3.9	18.0	18.0	0.0002	0.0078
WS10	Landfill	24/08/21	R	0.04	0.2	1024	0.1	0.1	2.0	2.0	6.1	6.1	12.4	12.4	0.0002	0.0122
		07/09/21	F	0.02	0.2	1015	0.1	0.1	2.0	2.0	3.7	3.6	14.4	15.7	0.0002	0.0072
		14/09/21	F	-0.05	0.1	1005	0.1	0.1	2.0	2.0	9.1	4.0	13.6	15.9	0.0001	0.0040
		21/09/21	R	0.07	0.2	1025	0.1	0.1	2.0	2.0	3.5	3.5	16.3	16.3	0.0002	0.0070
		28/09/21	R	0.05	0.2	1007	0.1	0.1	2.0	2.0	5.4	5.4	14.8	14.9	0.0002	0.0108
		05/10/21	R	0.02	0.2	994	0.1	0.1	2.0	2.0	1.0	1.0	19.4	20.3	0.0002	0.0020

# Hydrock Bulk Gases Ternary Plot Analysis



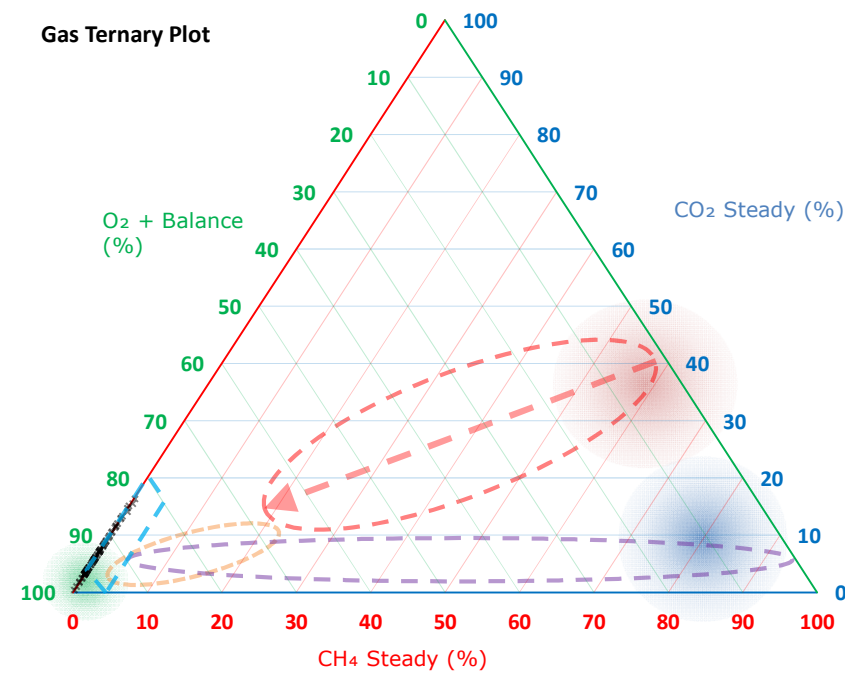
Client:	Oxford University Development Ltd.
Site Name:	Begbroke
Contract Number:	C-19114-C
Assessment Date:	08/10/2021

Screened Strata:	All Data
Site Zone:	

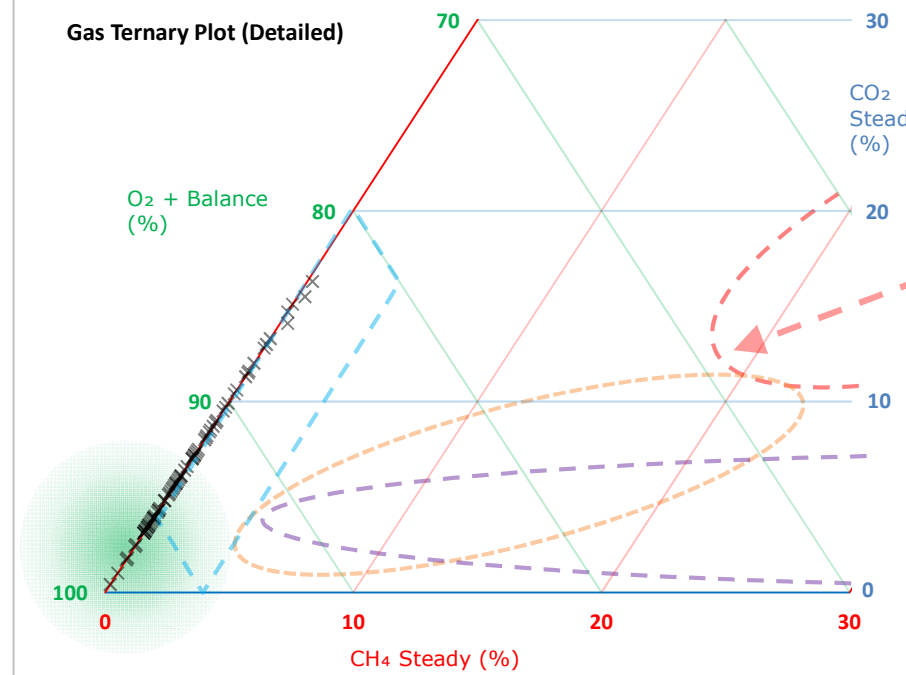
## Locations

BEGBH001	BEGBH002	BEGBH003	BEGWS001	BEGWS002	BEGWS003	BEGWS004	BEGWS005	BEGWS006	BEGWS007	BEGWS008	BEGWS009	BEGWS010
(blank)												

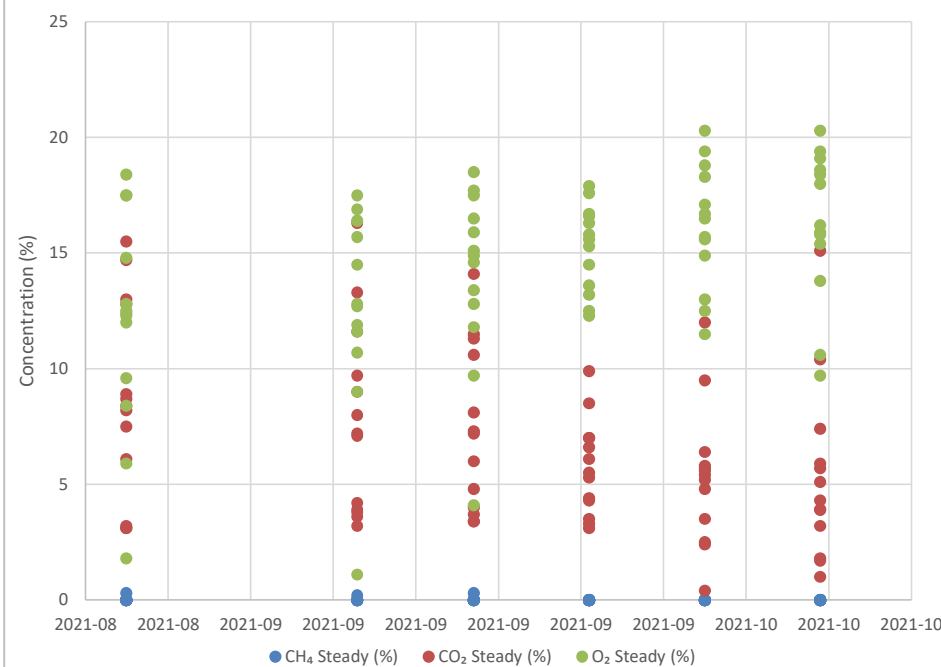
Gas Ternary Plot



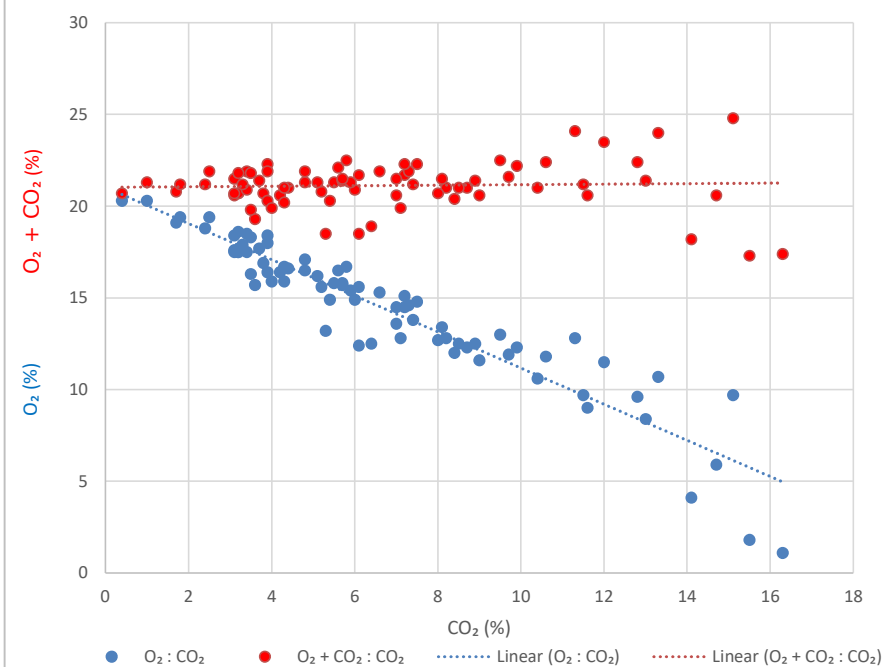
Gas Ternary Plot (Detailed)



Bulk Gases Time-Plot



CO<sub>2</sub> / O<sub>2</sub> relationship



## Key:

	Indicative of landfill gas migration (assuming source composition 60% methane / 40% carbon dioxide) as it displaces air from the ground. Assumes no chemical changes. Below 20% methane and 13% carbon dioxide relationship for landfill gas migration unclear. Arrow shows direction of dilution with fresh air
	Microbial respiration of organic material in soil. Zero methane and low flow. (Direct consumption of oxygen to produce carbon dioxide)
	Potentially indicative of methane outgassing from groundwater to borehole headspace (Hydrock dataset).
	Potentially indicative of microbial degradation of LNAPL vapours in unsaturated zone. (Hydrock dataset)
	Indicative of a landfill gas source (e.g 60% CH <sub>4</sub> / 40% CO <sub>2</sub> )
	Indicative of geogenic gas (e.g mine-workings)
	Fresh air

## Additional Notes

A direct linear downwards relationship between CO<sub>2</sub> and O<sub>2</sub> indicates depletion of oxygen to produce carbon dioxide via microbial respiration using the following equation: CH<sub>2</sub>O + O<sub>2</sub> → CO<sub>2</sub> + H<sub>2</sub>O. In this scenario CO<sub>2</sub> + O<sub>2</sub> should be around 21% (i.e. the O<sub>2</sub> concentration in the atmosphere)

There may also be trace amounts of methane up to about 3% caused by anaerobic decomposition in small anaerobic hotspots or the reduction of carbon dioxide by methanogens. Oxygen concentrations may be depleted but in this scenario oxygen deficient air is not likely to be emitted quickly from the ground and it does not pose a risk.

After: Wilson et al, 2018. Ground Gas Information Sheet No. 1  
Hydrock datasets (methane outgassing / LNAPL vapour degradation)

## Appendix F Contamination Test Results and GQRA

## *Contamination Test Results*





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Croxley Green  
Business Park,  
Watford,  
Herts,  
WD18 8YS

**t:** 01923 225404  
**f:** 01923 237404  
**e:** reception@i2analytical.com

## **Analytical Report Number : 23-17130**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	10/02/2023
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	10/02/2023
<b>Your order number:</b>	PO24069	<b>Analysis completed by:</b>	22/02/2023
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	22/02/2023
<b>Samples Analysed:</b>	8 soil samples		

  
**Signed:** \_\_\_\_\_

Joanna Wawrzeczek  
Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 23-17130  
 Project / Site name: Begbroke  
 Your Order No: PO24069

Lab Sample Number	2582360	2582361	2582362	2582363	2582364			
Sample Reference	TP317	TP315	TP303	TP304	TP309			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10	0.50	0.10	0.80	0.10			
Date Sampled	02/02/2023	02/02/2023	02/02/2023	31/01/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	22	16	15	16	21
Total mass of sample received	kg	0.001	NONE	1	1	1	1	1

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSO	DSO	DSO	DSO	DSO

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.8	8	8	8.1	7
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.011	0.019	0.0031	0.0053	0.0051
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.033	0.0039	0.015	0.0043	0.031

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	-	-	-
Benzo(b)fluoranthene & Benzo(k)fluoranthene	mg/kg	0.1	ISO 17025	-	-	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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Analytical Report Number: 23-17130  
 Project / Site name: Begbroke  
 Your Order No: PO24069

Lab Sample Number	2582360				2582361	2582362	2582363	2582364
Sample Reference	TP317				TP315	TP303	TP304	TP309
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10				0.50	0.10	0.80	0.10
Date Sampled	02/02/2023				02/02/2023	02/02/2023	31/01/2023	06/02/2023
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

**Heavy Metals / Metalloids**

Element	mg/kg	1	MCERTS	15	32	35	62	21
Arsenic (aqua regia extractable)	mg/kg	0.06	MCERTS	0.93	1.1	1.1	1.6	0.95
Beryllium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	0.3	0.8	< 0.2	1
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (hexavalent)	mg/kg	1	NONE	32	40	40	49	34
Chromium (III)	mg/kg	1	MCERTS	33	40	41	50	34
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13	9.4	19	16	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	22	12	160	18	21
Lead (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Mercury (aqua regia extractable)	mg/kg	1	MCERTS	17	31	28	58	19
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	49	70	70	89	51
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	58	41	65	89	55
Zinc (aqua regia extractable)	mg/kg	1	MCERTS					

**Monoaromatics & Oxygenates**

Compound	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	-	< 5.0	-	< 5.0

**Petroleum Hydrocarbons**

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic >EC16 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aliphatic >EC35 - EC44	mg/kg	8.4	NONE	< 8.4	-	< 8.4	-	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	NONE	< 10	-	< 10	-	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	-	< 10	-	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	NONE	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic >EC35 - EC44	mg/kg	8.4	NONE	< 8.4	-	< 8.4	-	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	NONE	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	-	< 10	-	< 10

TPH Total C5 - C44	mg/kg	10	NONE	< 10	-	< 10	-	< 10
TPH Total C5 - C44	mg/kg	10	NONE	< 10	-	< 10	-	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-17130  
 Project / Site name: Begbroke  
 Your Order No: PO24069

Lab Sample Number	2582365	2582366	2582367			
Sample Reference	TP309	TP310	TP312			
Sample Number	None Supplied	None Supplied	None Supplied			
Depth (m)	1.00	0.40	0.10			
Date Sampled	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	30	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.3	17	21
Total mass of sample received	kg	0.001	NONE	1	1	1

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSO	DSO	DSO

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.5	7.7	7.6
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.005	0.0028	0.0067
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.0015	0.0073	0.026

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0

#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-
Benzo(b)fluoranthene & Benzo(k)fluoranthene	mg/kg	0.1	ISO 17025	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80



Analytical Report Number: 23-17130  
 Project / Site name: Begbroke  
 Your Order No: PO24069

Lab Sample Number	2582365	2582366	2582367			
Sample Reference	TP309	TP310	TP312			
Sample Number	None Supplied	None Supplied	None Supplied			
Depth (m)	1.00	0.40	0.10			
Date Sampled	06/02/2023	06/02/2023	06/02/2023			
Time Taken	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
<b>Heavy Metals / Metalloids</b>						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	57	16	17
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.4	1	1
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	0.4	1.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	52	33	34
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	52	33	35
Copper (aqua regia extractable)	mg/kg	1	MCERTS	9	12	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	11	12	22
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	30	20	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	100	51	53
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	62	45	57

**Monoaromatics & Oxygenates**

	µg/kg					
Benzene	µg/kg	5	MCERTS	-	-	< 5.0
Toluene	µg/kg	5	MCERTS	-	-	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	-	-	< 5.0
p & m-xylene	µg/kg	5	MCERTS	-	-	< 5.0
o-xylene	µg/kg	5	MCERTS	-	-	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	< 5.0

**Petroleum Hydrocarbons**

	mg/kg					
TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS_ID_AL</sub>	mg/kg	0.001	NONE	-	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS_ID_AL</sub>	mg/kg	0.001	NONE	-	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS_ID_AL</sub>	mg/kg	0.001	NONE	-	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH_CU_ID_AL</sub>	mg/kg	1	MCERTS	-	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH_CU_ID_AL</sub>	mg/kg	2	MCERTS	-	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH_CU_ID_AL</sub>	mg/kg	8	MCERTS	-	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH_CU_ID_AL</sub>	mg/kg	8	MCERTS	-	-	< 8.0
TPH-CWG - Aliphatic >EC16 - EC35 <sub>EH_CU_ID_AL</sub>	mg/kg	10	MCERTS	-	-	< 10
TPH-CWG - Aliphatic > EC35 - EC44 <sub>EH_CU_ID_AL</sub>	mg/kg	8.4	NONE	-	-	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH_CU+HS_ID_AL</sub>	mg/kg	10	NONE	-	-	< 10
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH_CU+HS_ID_AL</sub>	mg/kg	10	NONE	-	-	< 10

	mg/kg					
TPH-CWG - Aromatic >EC5 - EC7 <sub>HS_ID_AR</sub>	mg/kg	0.001	NONE	-	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS_ID_AR</sub>	mg/kg	0.001	NONE	-	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS_ID_AR</sub>	mg/kg	0.001	NONE	-	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH_CU_ID_AR</sub>	mg/kg	1	MCERTS	-	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH_CU_ID_AR</sub>	mg/kg	2	MCERTS	-	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH_CU_ID_AR</sub>	mg/kg	10	MCERTS	-	-	< 10
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH_CU_ID_AR</sub>	mg/kg	10	MCERTS	-	-	< 10
TPH-CWG - Aromatic > EC35 - EC44 <sub>EH_CU_ID_AR</sub>	mg/kg	8.4	NONE	-	-	< 8.4
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH_CU+HS_ID_AR</sub>	mg/kg	10	NONE	-	-	< 10
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH_CU+HS_ID_AR</sub>	mg/kg	10	NONE	-	-	< 10

TPH Total C5 - C44 <sub>EH_CU+HS_ID_TOTAL</sub>	mg/kg	10	NONE	-	-	< 10
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U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

**Analytical Report Number : 23-17130**

**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2582360	TP317	None Supplied	0.1	Brown clay and sand with gravel and vegetation.
2582361	TP315	None Supplied	0.5	Brown clay and sand with gravel.
2582362	TP303	None Supplied	0.1	Brown clay and sand with gravel and vegetation.
2582363	TP304	None Supplied	0.8	Brown clay and sand with gravel and vegetation.
2582364	TP309	None Supplied	0.1	Brown clay and loam with gravel and vegetation.
2582365	TP309	None Supplied	1	Brown gravelly sand with stones.
2582366	TP310	None Supplied	0.4	Brown clay and sand with gravel and vegetation.
2582367	TP312	None Supplied	0.1	Brown clay and sand with gravel and vegetation.

Analytical Report Number : 23-17130

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH Chromatogram in Soil	TPH Chromatogram in Soil.	In-house method	L064-PL	D	NONE
Cr (III) in soil	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Fraction Organic Carbon FOC Automated	Determination of fraction of organic carbon in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method	L009	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-17130  
 Project / Site name: Begbroke

**Water matrix abbreviations:**

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC  
 Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

**Information in Support of Analytical Results**

**List of HWOL Acronyms and Operators**

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total



## Sample Deviation Report



**Analytical Report Number : 23-17130**

**Project / Site name: Begbroke**

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP303	None Supplied	S	2582362	c	Free cyanide in soil	L080-PL	c
TP304	None Supplied	S	2582363	c	Free cyanide in soil	L080-PL	c
TP315	None Supplied	S	2582361	c	Free cyanide in soil	L080-PL	c
TP317	None Supplied	S	2582360	c	Free cyanide in soil	L080-PL	c



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## **Analytical Report Number : 22-85537**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	21/09/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	21/09/2022
<b>Your order number:</b>	PO19941	<b>Analysis completed by:</b>	28/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	28/09/2022
<b>Samples Analysed:</b>	6 soil samples		

*Izabela Wójcik*  
**Signed:**

Izabela Wójcik  
Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 22-85537  
 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number	2432695	2432696	2432697	2432698	2432699			
Sample Reference	HP201	HP202	HP203	HP204	HP205			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10	0.10	0.10	0.10	0.10			
Date Sampled	14/09/2022	14/09/2022	14/09/2022	14/09/2022	14/09/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	11	13	8.9	13
Total mass of sample received	kg	0.001	NONE	0.8	0.8	0.8	0.8	0.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSA	DSA	DSA	DSA	DSA

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.8	7.1	7.7	7.9	7.5
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.014	0.015	0.0096	0.0053	0.019
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.035	0.05	0.021	0.02	0.042

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	1.3	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.59	2.6	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.2	0.81	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.79	3.2	0.27	0.28	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.68	3.1	0.25	0.25	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.56	2.3	0.18	0.25	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.53	1.7	0.23	0.25	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.67	2	0.27	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.27	1.5	0.14	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.51	1.8	0.24	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.33	1.2	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.38	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.51	1.6	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	5.64	22.1	1.58	1.03	< 0.80
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	25	30	23	18	21
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.1	1.2	1.1	0.98	0.85
Boron (water soluble)	mg/kg	0.2	MCERTS	2	3.9	1.4	2.3	3.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	1.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	2	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	30	39	36	30	26
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32	39	36	30	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	30	23	21	22
Lead (aqua regia extractable)	mg/kg	1	MCERTS	38	50	44	30	47
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	25	27	27	26	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	51	55	54	44	42
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	260	130	110	150

Analytical Report Number: 22-85537  
Project / Site name: Begbroke  
Your Order No: PO19941

Lab Sample Number	2432695		2432696		2432697		2432698		2432699	
Sample Reference	HP201		HP202		HP203		HP204		HP205	
Sample Number	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.10		0.10		0.10		0.10		0.10	
Date Sampled	14/09/2022		14/09/2022		14/09/2022		14/09/2022		14/09/2022	
Time Taken	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status							

#### Monoaromatics & Oxygenates

Compound	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

#### Petroleum Hydrocarbons

Compound	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS_ID_AL</sub>	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS_ID_AL</sub>	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS_ID_AL</sub>	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH_CU_ID_AL</sub>	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH_CU_ID_AL</sub>	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	2.5	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH_CU_ID_AL</sub>	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH_CU_ID_AL</sub>	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC16 - EC35 <sub>EH_CU_ID_AL</sub>	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic > EC35 - EC44 <sub>EH_CU_ID_AL</sub>	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH_CU+HS_ID_AL</sub>	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH_CU+HS_ID_AL</sub>	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10

Compound	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC5 - EC7 <sub>HS_ID_AR</sub>	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS_ID_AR</sub>	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS_ID_AR</sub>	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH_CU_ID_AR</sub>	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH_CU_ID_AR</sub>	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH_CU_ID_AR</sub>	mg/kg	10	MCERTS	< 10	18	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH_CU_ID_AR</sub>	mg/kg	10	MCERTS	< 10	44	< 10	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44 <sub>EH_CU_ID_AR</sub>	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH_CU+HS_ID_AR</sub>	mg/kg	10	MCERTS	< 10	63	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH_CU+HS_ID_AR</sub>	mg/kg	10	NONE	< 10	63	< 10	< 10	< 10

TPH Total C5 - C44 <sub>EH_CU+HS_ID_TOTAL</sub>	mg/kg	10	NONE	< 10	63	< 10	< 10	< 10

#### VOCs

Compound	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Chloromethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Chloroethane	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
Bromomethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Vinyl Chloride	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Trichloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0



Analytical Report Number: 22-85537  
 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number				2432695	2432696	2432697	2432698	2432699
Sample Reference				HP201	HP202	HP203	HP204	HP205
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.10	0.10
Date Sampled				14/09/2022	14/09/2022	14/09/2022	14/09/2022	14/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Tetrachloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Styrene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Tribromomethane	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0

**SVOCs**

Analytical Parameter	Units	Limit of detection	Accreditation Status					
Aniline	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2	-	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2	-	-	< 0.2

Analytical Report Number: 22-85537  
 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number				2432695	2432696	2432697	2432698	2432699
Sample Reference				HP201	HP202	HP203	HP204	HP205
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.10	0.10
Date Sampled				14/09/2022	14/09/2022	14/09/2022	14/09/2022	14/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3	-	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	2.6	-	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	0.81	-	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	3.2	-	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	3.1	-	-	< 0.05
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3	-	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	2.3	-	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	1.7	-	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	2	-	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	1.5	-	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	1.8	-	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	1.2	-	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	0.38	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	1.6	-	-	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-85537  
 Project / Site name: Begbroke  
 Your Order No: PO19941

<b>Lab Sample Number</b>				2432700
<b>Sample Reference</b>				HP206
<b>Sample Number</b>				None Supplied
<b>Depth (m)</b>				0.10
<b>Date Sampled</b>				14/09/2022
<b>Time Taken</b>				None Supplied
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	11
Total mass of sample received	kg	0.001	NONE	0.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSA

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.5
Free Cyanide	mg/kg	1	MCERTS	< 1.0
Water Soluble SO <sub>4</sub> <sup>2-</sup> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0066
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.022

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.28
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.51
Pyrene	mg/kg	0.05	MCERTS	0.46
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.38
Chrysene	mg/kg	0.05	MCERTS	0.33
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.48
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.16
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.37
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.23
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.33

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	3.53
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	32
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.1
Boron (water soluble)	mg/kg	0.2	MCERTS	2.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (III)	mg/kg	1	NONE	31
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32
Copper (aqua regia extractable)	mg/kg	1	MCERTS	25
Lead (aqua regia extractable)	mg/kg	1	MCERTS	44
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	51
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130

Analytical Report Number: 22-85537  
 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number	2432700			
Sample Reference	HP206			
Sample Number	None Supplied			
Depth (m)	0.10			
Date Sampled	14/09/2022			
Time Taken	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	

#### Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0

#### Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 HS_ID_AL	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 HS_ID_AL	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 HS_ID_AL	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_ID_AL	mg/kg	1	MCERTS	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_ID_AL	mg/kg	2	MCERTS	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_ID_AL	mg/kg	8	MCERTS	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_ID_AL	mg/kg	8	MCERTS	< 8.0
TPH-CWG - Aliphatic >EC16 - EC35 EH_CU_ID_AL	mg/kg	10	MCERTS	< 10
TPH-CWG - Aliphatic > EC35 - EC44 EH_CU_ID_AL	mg/kg	8.4	NONE	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_ID_AL	mg/kg	10	MCERTS	< 10
TPH-CWG - Aliphatic (EC5 - EC44) EH_CU+HS_ID_AL	mg/kg	10	NONE	< 10

TPH-CWG - Aromatic >EC5 - EC7 HS_ID_AR	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 HS_ID_AR	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 HS_ID_AR	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_ID_AR	mg/kg	1	MCERTS	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_ID_AR	mg/kg	2	MCERTS	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_ID_AR	mg/kg	10	MCERTS	< 10
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_ID_AR	mg/kg	10	MCERTS	< 10
TPH-CWG - Aromatic > EC35 - EC44 EH_CU_ID_AR	mg/kg	8.4	NONE	< 8.4
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_ID_AR	mg/kg	10	MCERTS	< 10
TPH-CWG - Aromatic (EC5 - EC44) EH_CU+HS_ID_AR	mg/kg	10	NONE	< 10

TPH Total C5 - C44 EH_CU+HS_ID_TOTAL	mg/kg	10	NONE	< 10
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#### VOCs

Chloromethane	µg/kg	1	ISO 17025	-
Chloroethane	µg/kg	1	NONE	-
Bromomethane	µg/kg	1	ISO 17025	-
Vinyl Chloride	µg/kg	1	NONE	-
Trichlorofluoromethane	µg/kg	1	NONE	-
1,1-Dichloroethene	µg/kg	1	NONE	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-
Trichloromethane	µg/kg	1	MCERTS	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-
Benzene	µg/kg	1	MCERTS	-



Analytical Report Number: 22-85537  
 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number				2432700
Sample Reference				HP206
Sample Number				None Supplied
Depth (m)				0.10
Date Sampled				14/09/2022
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Tetrachloromethane	µg/kg	1	MCERTS	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-
Trichloroethene	µg/kg	1	MCERTS	-
Dibromomethane	µg/kg	1	MCERTS	-
Bromodichloromethane	µg/kg	1	MCERTS	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-
Toluene	µg/kg	1	MCERTS	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-
Dibromochloromethane	µg/kg	1	ISO 17025	-
Tetrachloroethene	µg/kg	1	NONE	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-
Chlorobenzene	µg/kg	1	MCERTS	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-
Ethylbenzene	µg/kg	1	MCERTS	-
p & m-Xylene	µg/kg	1	MCERTS	-
Styrene	µg/kg	1	MCERTS	-
Tribromomethane	µg/kg	1	NONE	-
o-Xylene	µg/kg	1	MCERTS	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-
Isopropylbenzene	µg/kg	1	MCERTS	-
Bromobenzene	µg/kg	1	MCERTS	-
n-Propylbenzene	µg/kg	1	ISO 17025	-
2-Chlorotoluene	µg/kg	1	MCERTS	-
4-Chlorotoluene	µg/kg	1	MCERTS	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-
tert-Butylbenzene	µg/kg	1	MCERTS	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-
sec-Butylbenzene	µg/kg	1	MCERTS	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-
Butylbenzene	µg/kg	1	MCERTS	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-

#### SVOCs

Analytical Parameter	Units	Limit of detection	Accreditation Status	
Aniline	mg/kg	0.1	NONE	-
Phenol	mg/kg	0.2	ISO 17025	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-
2-Methylphenol	mg/kg	0.3	MCERTS	-
Hexachloroethane	mg/kg	0.05	MCERTS	-
Nitrobenzene	mg/kg	0.3	MCERTS	-
4-Methylphenol	mg/kg	0.2	NONE	-

Analytical Report Number: 22-85537  
 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number		2432700		
Sample Reference		HP206		
Sample Number		None Supplied		
Depth (m)		0.10		
Date Sampled		14/09/2022		
Time Taken		None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Isophorone	mg/kg	0.2	MCERTS	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-
Naphthalene	mg/kg	0.05	MCERTS	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-
4-Chloroaniline	mg/kg	0.1	NONE	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-
Acenaphthylene	mg/kg	0.05	MCERTS	-
Acenaphthene	mg/kg	0.05	MCERTS	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-
Dibenzofuran	mg/kg	0.2	MCERTS	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-
Fluorene	mg/kg	0.05	MCERTS	-
Azobenzene	mg/kg	0.3	MCERTS	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-
Phenanthrene	mg/kg	0.05	MCERTS	-
Anthracene	mg/kg	0.05	MCERTS	-
Carbazole	mg/kg	0.3	MCERTS	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-
Anthraquinone	mg/kg	0.3	MCERTS	-
Fluoranthene	mg/kg	0.05	MCERTS	-
Pyrene	mg/kg	0.05	MCERTS	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-
Chrysene	mg/kg	0.05	MCERTS	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-

U/S = Unsuitable Sample I/S = Insufficient Sample

**Analytical Report Number : 22-85537**

**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2432695	HP201	None Supplied	0.1	Brown loam and sand with gravel and vegetation.
2432696	HP202	None Supplied	0.1	Brown loam and sand with gravel and vegetation.
2432697	HP203	None Supplied	0.1	Brown loam and sand with gravel and vegetation.
2432698	HP204	None Supplied	0.1	Brown loam and sand with gravel and vegetation.
2432699	HP205	None Supplied	0.1	Brown loam and sand with gravel and vegetation.
2432700	HP206	None Supplied	0.1	Brown loam and sand with gravel and vegetation.

Analytical Report Number : 22-85537

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH Chromatogram in Soil	TPH Chromatogram in Soil.	In-house method	L064-PL	D	NONE
Cr (III) in soil	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS



Analytical Report Number : 22-85537

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Fraction Organic Carbon FOC Automated	Determination of fraction of organic carbon in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method	L009	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

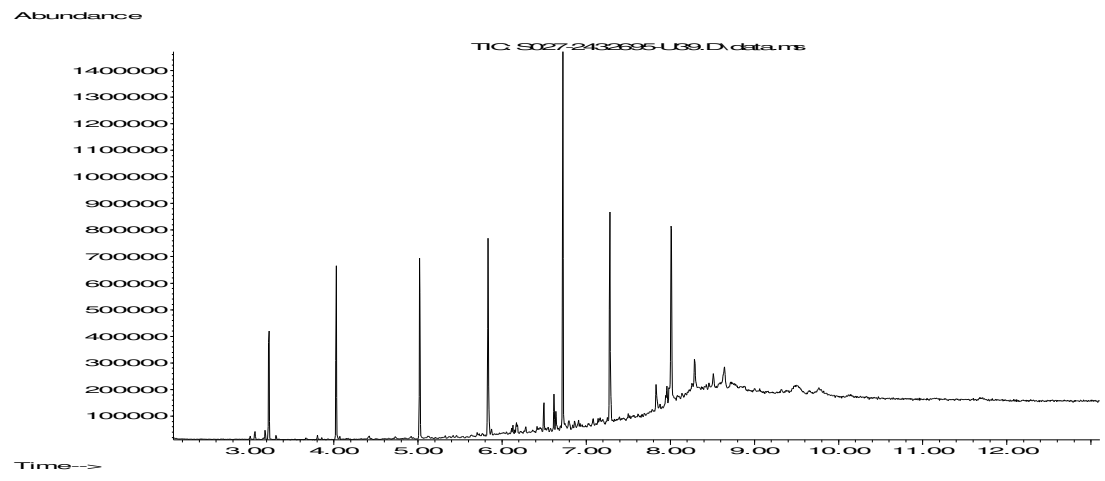
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

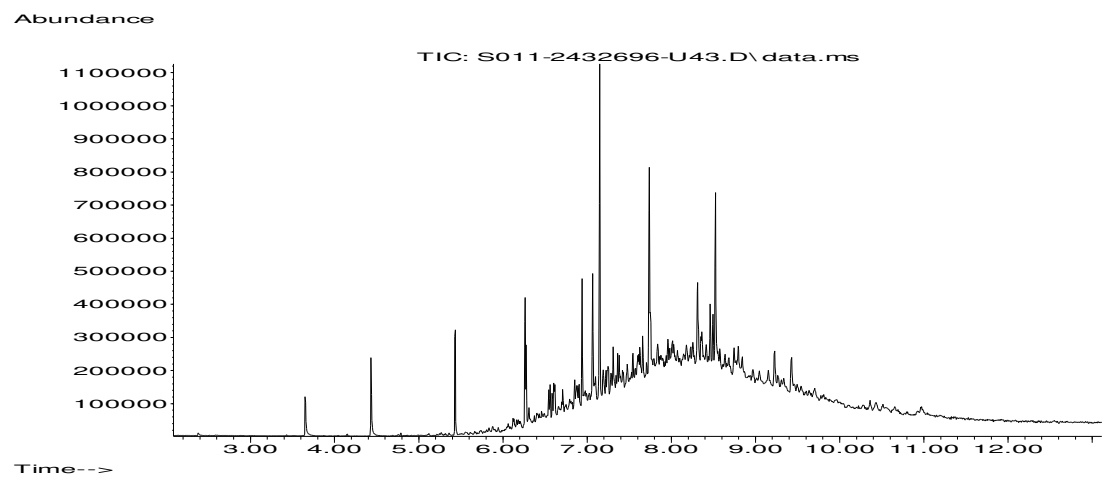
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

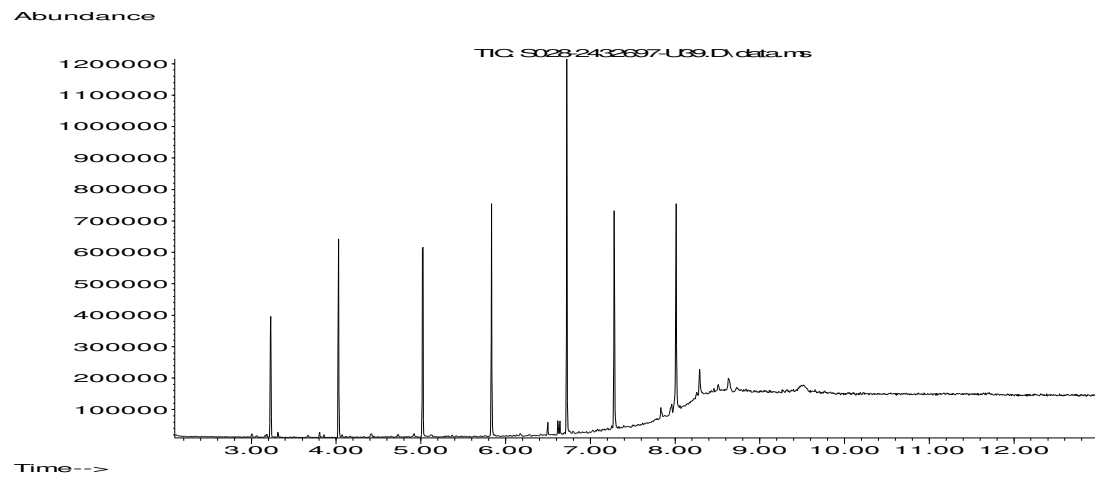
## Information in Support of Analytical Results

### List of HWOL Acronyms and Operators

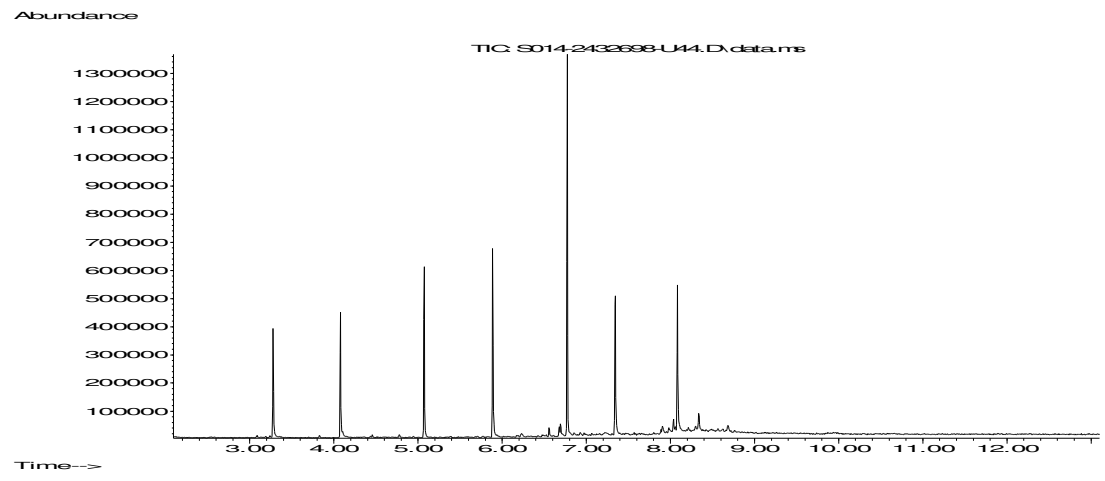
Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

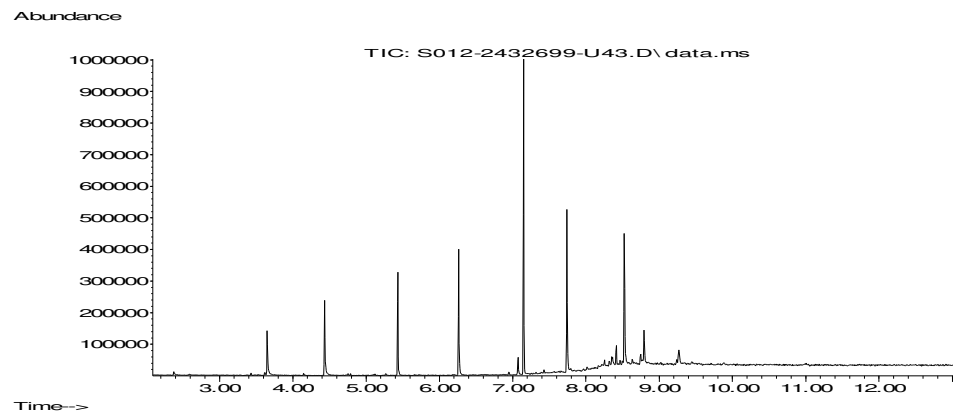


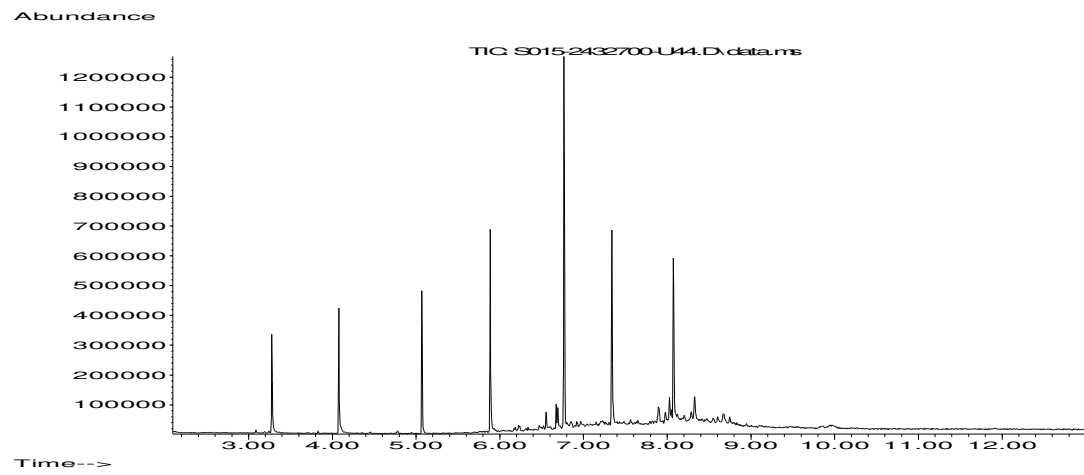












## Sample Deviation Report



**Analytical Report Number : 22-85537**

**Project / Site name: Begbroke**

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
HP201	None Supplied	S	2432695	c	Free cyanide in soil	L080-PL	c
HP202	None Supplied	S	2432696	c	Free cyanide in soil	L080-PL	c
HP203	None Supplied	S	2432697	c	Free cyanide in soil	L080-PL	c
HP204	None Supplied	S	2432698	c	Free cyanide in soil	L080-PL	c
HP205	None Supplied	S	2432699	c	Free cyanide in soil	L080-PL	c
HP206	None Supplied	S	2432700	c	Free cyanide in soil	L080-PL	c





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## **Analytical Report Number : 22-82372**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	06/09/2022
<b>Your job number:</b>	19174	<b>Samples instructed on/ Analysis started on:</b>	06/09/2022
<b>Your order number:</b>	PO19941	<b>Analysis completed by:</b>	14/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	14/09/2022
<b>Samples Analysed:</b>	15 soil samples		

**Signed:**

Claire Brown-Crociquia  
Group Customer Services Manager  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting  
leachates - 2 weeks from reporting  
waters - 2 weeks from reporting  
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.  
Application of uncertainty of measurement would provide a range within which the true result lies.  
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 22-82372

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2414894	2414895	2414896	2414897	2414898
Sample Reference				WS213	WS213	WS205	WS205	WS209
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.50	0.20	0.60	0.30
Date Sampled				28/08/2022	22/08/2022	22/08/2022	22/08/2022	22/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	2.1	4.1	11	15	7.4
Total mass of sample received	kg	0.001	NONE	1.1	1.1	1.1	1.1	1.1

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SFS	SFS	SFS	SFS	SFS

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	7.9	7.9	8.0	7.4
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0061	0.0052	0.0095	0.0077	0.011
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.017	0.0057	0.023	0.0095	0.031

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.25	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.28	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.2	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.18	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	0.91	< 0.80	< 0.80
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Analytical Report Number: 22-82372

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number	2414894				2414895		2414896		2414897		2414898	
Sample Reference	WS213				WS213		WS205		WS205		WS209	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.10				0.50		0.20		0.60		0.30	
Date Sampled	28/08/2022				22/08/2022		22/08/2022		22/08/2022		22/08/2022	
Time Taken	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status									

**Heavy Metals / Metalloids**

Element	Unit	Limit	Accreditation	2414894	2414895	2414896	2414897	2414898
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	67	64	35	34	36
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.6	1.6	1.6	2	1.1
Boron (water soluble)	mg/kg	0.2	MCERTS	0.4	0.7	0.9	1.3	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	69	58	49	64	38
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	70	58	50	64	38
Copper (aqua regia extractable)	mg/kg	1	MCERTS	15	14	19	19	17
Lead (aqua regia extractable)	mg/kg	1	MCERTS	30	20	40	25	31
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	40	38	35	45	25
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	250	110	83	100	68
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	100	100	120	120	95

**Monoaromatics & Oxygenates**

Compound	Unit	Limit	Accreditation	2414894	2414895	2414896	2414897	2414898
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-	-
o-xylene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-

**Petroleum Hydrocarbons**

Parameter	Unit	Limit	Accreditation	2414894	2414895	2414896	2414897	2414898
TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS_1D_AL</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS_1D_AL</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS_1D_AL</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH_CU_1D_AL</sub>	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH_CU_1D_AL</sub>	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH_CU_1D_AL</sub>	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH_CU_1D_AL</sub>	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC35 <sub>EH_CU_1D_AL</sub>	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC35 - EC44 <sub>EH_CU_1D_AL</sub>	mg/kg	8.4	NONE	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH_CU+HS_1D_AL</sub>	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH_CU+HS_1D_AL</sub>	mg/kg	10	NONE	-	-	-	-	-

Parameter	Unit	Limit	Accreditation	2414894	2414895	2414896	2414897	2414898
TPH-CWG - Aromatic >EC5 - EC7 <sub>HS_1D_AR</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS_1D_AR</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS_1D_AR</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH_CU_1D_AR</sub>	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH_CU_1D_AR</sub>	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH_CU_1D_AR</sub>	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH_CU_1D_AR</sub>	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC35 - EC44 <sub>EH_CU_1D_AR</sub>	mg/kg	8.4	NONE	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH_CU+HS_1D_AR</sub>	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH_CU+HS_1D_AR</sub>	mg/kg	10	NONE	-	-	-	-	-

TPH Total C5 - C44 <sub>EH_CU+HS_1D_TOTAL</sub>	mg/kg	10	NONE	-	-	-	-	-
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Analytical Report Number: 22-82372

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number	2414894				2414895	2414896	2414897	2414898
Sample Reference	WS213				WS213	WS205	WS205	WS209
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10				0.50	0.20	0.60	0.30
Date Sampled	28/08/2022				22/08/2022	22/08/2022	22/08/2022	22/08/2022
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

**VOCs**

Compound	Units	Limit of detection	Accreditation Status	2414894	2414895	2414896	2414897	2414898
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-



Analytical Report Number: 22-82372

Project / Site name: Begbroke

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Lab Sample Number				2414894	2414895	2414896	2414897	2414898
Sample Reference				WS213	WS213	WS205	WS205	WS209
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.50	0.20	0.60	0.30
Date Sampled				28/08/2022	22/08/2022	22/08/2022	22/08/2022	22/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
				1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-

Analytical Report Number: 22-82372

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number	2414894				2414895	2414896	2414897	2414898
Sample Reference	WS213				WS213	WS205	WS205	WS209
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10				0.50	0.20	0.60	0.30
Date Sampled	28/08/2022				22/08/2022	22/08/2022	22/08/2022	22/08/2022
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

### SVOCs

Compound	Units	Limit of detection	Accreditation Status	2414894	2414895	2414896	2414897	2414898
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-

Analytical Report Number: 22-82372

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number	2414894				2414895				2414896				2414897				2414898			
Sample Reference	WS213				WS213				WS205				WS205				WS209			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	0.10				0.50				0.20				0.60				0.30			
Date Sampled	28/08/2022				22/08/2022				22/08/2022				22/08/2022				22/08/2022			
Time Taken	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status																	
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

**Pesticide and Herbicide Screen**

GCMS Pesticide Screen		N/A	NONE	-	-	None Detected	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-82372

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2414899	2414900	2414901	2414902	2414903
Sample Reference				WS214	WS203	WS204	WS204	WS217
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.20	0.60	0.10
Date Sampled				22/08/2022	23/08/2022	23/08/2022	23/08/2022	23/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	2.8	2.8	5.2	6.5	2.4
Total mass of sample received	kg	0.001	NONE	1.1	1.1	1.1	1.1	1.1

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SFS	SFS	SFS	SFS	SFS

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	7.7	7.9	8.1	7.6
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.007	0.006	0.01	0.0072	0.012
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.018	0.02	0.027	0.014	0.019

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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Analytical Report Number: 22-82372

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number					2414899	2414900	2414901	2414902	2414903	
Sample Reference					WS214	WS203	WS204	WS204	WS217	
Sample Number					None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)					0.10	0.10	0.20	0.60	0.10	
Date Sampled					22/08/2022	23/08/2022	23/08/2022	23/08/2022	23/08/2022	
Time Taken					None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status							
<b>Heavy Metals / Metalloids</b>										
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	63	52	67	79	47		
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.4	1.4	1.6	1.6	1.3		
Boron (water soluble)	mg/kg	0.2	MCERTS	1.1	0.9	2.4	1.7	1.1		
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2		
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8		
Chromium (III)	mg/kg	1	NONE	50	48	56	60	47		
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	52	49	57	61	48		
Copper (aqua regia extractable)	mg/kg	1	MCERTS	15	14	19	16	15		
Lead (aqua regia extractable)	mg/kg	1	MCERTS	28	35	55	34	30		
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3		
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	33	31	39	44	32		
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	91	90	100	110	90		
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	96	86	96	92	110		

**Monoaromatics & Oxygenates**

Compound	Units	Limit of detection	Accreditation Status							
Benzene	µg/kg	1	MCERTS	-	-	-	-	-		
Toluene	µg/kg	1	MCERTS	-	-	-	-	-		
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-		
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-	-		
o-xylene	µg/kg	1	MCERTS	-	-	-	-	-		
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-		

**Petroleum Hydrocarbons**

Parameter	Units	Limit of detection	Accreditation Status							
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	-	-	-		
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	-		
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	-		
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-		
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-		
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	-		
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	-		
TPH-CWG - Aliphatic >EC16 - EC35	mg/kg	10	MCERTS	-	-	-	-	-		
TPH-CWG - Aliphatic >EC35 - EC44	mg/kg	8.4	NONE	-	-	-	-	-		
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-		
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	-	-	-	-	-		

Parameter	Units	Limit of detection	Accreditation Status							
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	-	-	-		
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	-		
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	-		
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-		
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-		
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	-		
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	-		
TPH-CWG - Aromatic >EC35 - EC44	mg/kg	8.4	NONE	-	-	-	-	-		
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-		
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	-	-	-	-	-		

TPH Total C5 - C44	mg/kg	10	NONE	-	-	-	-	-	
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Analytical Report Number: 22-82372

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2414899	2414900	2414901	2414902	2414903
Sample Reference				WS214	WS203	WS204	WS204	WS217
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.20	0.60	0.10
Date Sampled				22/08/2022	23/08/2022	23/08/2022	23/08/2022	23/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
<b>VOCs</b>								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-

Analytical Report Number: 22-82372

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2414899	2414900	2414901	2414902	2414903
Sample Reference				WS214	WS203	WS204	WS204	WS217
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.20	0.60	0.10
Date Sampled				22/08/2022	23/08/2022	23/08/2022	23/08/2022	23/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-

Analytical Report Number: 22-82372

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2414899	2414900	2414901	2414902	2414903
Sample Reference				WS214	WS203	WS204	WS204	WS217
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.20	0.60	0.10
Date Sampled				22/08/2022	23/08/2022	23/08/2022	23/08/2022	23/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

**SVOCs**

Parameter	Units	Limit of detection	Accreditation Status	2414899	2414900	2414901	2414902	2414903
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-



Analytical Report Number: 22-82372

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number	2414899	2414900	2414901	2414902	2414903			
Sample Reference	WS214	WS203	WS204	WS204	WS217			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10	0.10	0.20	0.60	0.10			
Date Sampled	22/08/2022	23/08/2022	23/08/2022	23/08/2022	23/08/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-

**Pesticide and Herbicide Screen**

GCMS Pesticide Screen		N/A	NONE	-	-	None Detected	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-82372

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number	2414904				2414905		2414906		2414907		2414908	
Sample Reference	WS226				WS227		HP210		HP208		HP208	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.20				0.30		0.20		0.30		0.80	
Date Sampled	23/08/2022				25/08/2022		25/08/2022		25/08/2022		25/08/2022	
Time Taken	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status									
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	
Moisture Content	%	0.01	NONE	2.6	2.8	6	14	17				
Total mass of sample received	kg	0.001	NONE	1.1	1.1	1.1	1.1	0.3				

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	GFI	GFI	GFI	GFI	GFI

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	7.3	7.9	8.3	7.8
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.028	0.032	0.037	0.2	0.9
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.018	0.017	0.022	0.013	0.029

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.35	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.42	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.21	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.18	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.39	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.18	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.29	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.24	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.29	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	2.55	< 0.80	< 0.80
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Analytical Report Number: 22-82372

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2414904	2414905	2414906	2414907	2414908
Sample Reference				WS226	WS227	HP210	HP208	HP208
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.30	0.20	0.30	0.80
Date Sampled				23/08/2022	25/08/2022	25/08/2022	25/08/2022	25/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
<b>Heavy Metals / Metalloids</b>								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	57	43	35	34	27
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.5	1.1	0.98	0.96	0.81
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	0.7	0.8	1.1	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	5.5
Chromium (III)	mg/kg	1	NONE	55	40	36	29	20
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	56	41	36	30	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	11	14	14	22
Lead (aqua regia extractable)	mg/kg	1	MCERTS	32	31	34	40	65
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	36	27	24	21	24
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	96	81	61	56	46
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	92	76	100	93	120

**Monoaromatics & Oxygenates**

Compound	Units	Limit of detection	Accreditation Status					
Benzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0

**Petroleum Hydrocarbons**

Compound	Units	Limit of detection	Accreditation Status					
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC16 - EC35	mg/kg	10	MCERTS	-	-	< 10	< 10	< 10
TPH-CWG - Aliphatic >EC35 - EC44	mg/kg	8.4	NONE	-	-	< 8.4	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	-	-	< 10	< 10	< 10

Compound	Units	Limit of detection	Accreditation Status					
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	< 10	< 10	< 10
TPH-CWG - Aromatic >EC35 - EC44	mg/kg	8.4	NONE	-	-	< 8.4	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	-	-	< 10	< 10	< 10

TPH Total C5 - C44	mg/kg	10	NONE	-	-	< 10	< 10	< 10
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Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2414904	2414905	2414906	2414907	2414908
Sample Reference				WS226	WS227	HP210	HP208	HP208
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.30	0.20	0.30	0.80
Date Sampled				23/08/2022	25/08/2022	25/08/2022	25/08/2022	25/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
<b>VOCs</b>								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
Chloroethane	µg/kg	1	NONE	-	-	-	-	< 1.0
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	< 1.0
Benzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Styrene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Tribromomethane	µg/kg	1	NONE	-	-	-	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0



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Project / Site name: Begbroke

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Lab Sample Number				2414904	2414905	2414906	2414907	2414908
Sample Reference				WS226	WS227	HP210	HP208	HP208
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.30	0.20	0.30	0.80
Date Sampled				23/08/2022	25/08/2022	25/08/2022	25/08/2022	25/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
				1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0

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Your Order No: PO19941

Lab Sample Number				2414904	2414905	2414906	2414907	2414908
Sample Reference				WS226	WS227	HP210	HP208	HP208
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.30	0.20	0.30	0.80
Date Sampled				23/08/2022	25/08/2022	25/08/2022	25/08/2022	25/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

**SVOCs**

Parameter	Units	Limit of detection	Accreditation Status	2414904	2414905	2414906	2414907	2414908
Aniline	mg/kg	0.1	NONE	-	-	-	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05

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Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number	2414904	2414905	2414906	2414907	2414908			
Sample Reference	WS226	WS227	HP210	HP208	HP208			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.20	0.30	0.20	0.30	0.80			
Date Sampled	23/08/2022	25/08/2022	25/08/2022	25/08/2022	25/08/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05

**Pesticide and Herbicide Screen**

GCMS Pesticide Screen		N/A	NONE	-	-	-	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample

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\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2414894	WS213	None Supplied	0.1	Brown loam and sand with gravel and vegetation.
2414895	WS213	None Supplied	0.5	Brown loam and sand with gravel and vegetation.
2414896	WS205	None Supplied	0.2	Brown loam and clay with gravel and vegetation.
2414897	WS205	None Supplied	0.6	Brown clay and loam with gravel.
2414898	WS209	None Supplied	0.3	Brown loam and sand with gravel and plastic.
2414899	WS214	None Supplied	0.1	Brown loam and sand with gravel and vegetation.
2414900	WS203	None Supplied	0.1	Brown loam and sand with gravel and vegetation.
2414901	WS204	None Supplied	0.2	Brown loam and sand with gravel and vegetation.
2414902	WS204	None Supplied	0.6	Brown loam and sand with gravel and vegetation.
2414903	WS217	None Supplied	0.1	Brown loam and sand with gravel and vegetation.
2414904	WS226	None Supplied	0.2	Brown loam and sand with gravel and vegetation.
2414905	WS227	None Supplied	0.3	Brown loam and sand with gravel and vegetation.
2414906	HP210	None Supplied	0.2	Brown loam and sand with gravel and chalk.
2414907	HP208	None Supplied	0.3	Brown loam and sand with gravel and brick.
2414908	HP208	None Supplied	0.8	Brown loam and clay with gravel and vegetation.



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**Project / Site name: Begbroke**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH Chromatogram in Soil	TPH Chromatogram in Soil.	In-house method	L064-PL	D	NONE
Cr (III) in soil	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS

**Analytical Report Number : 22-82372**

**Project / Site name: Begbroke**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
GC Pesticide Screen (TIC)	Analysis of unknown pesticides by GCMS	GC Pesticide Screen (TIC)	L064B	D	NONE
Fraction Organic Carbon FOC Automated	Determination of fraction of organic carbon in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method	L009	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

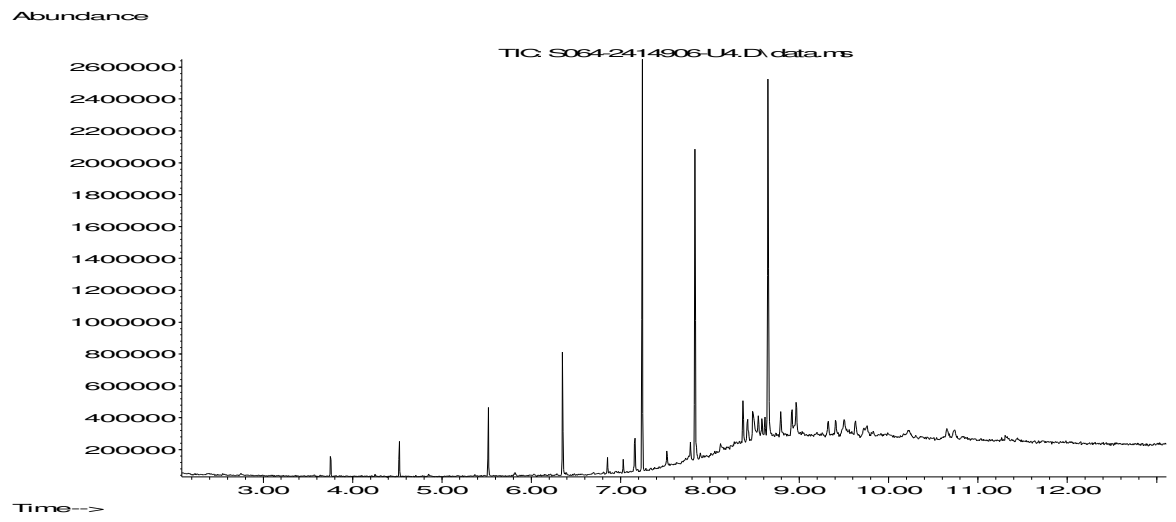
**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

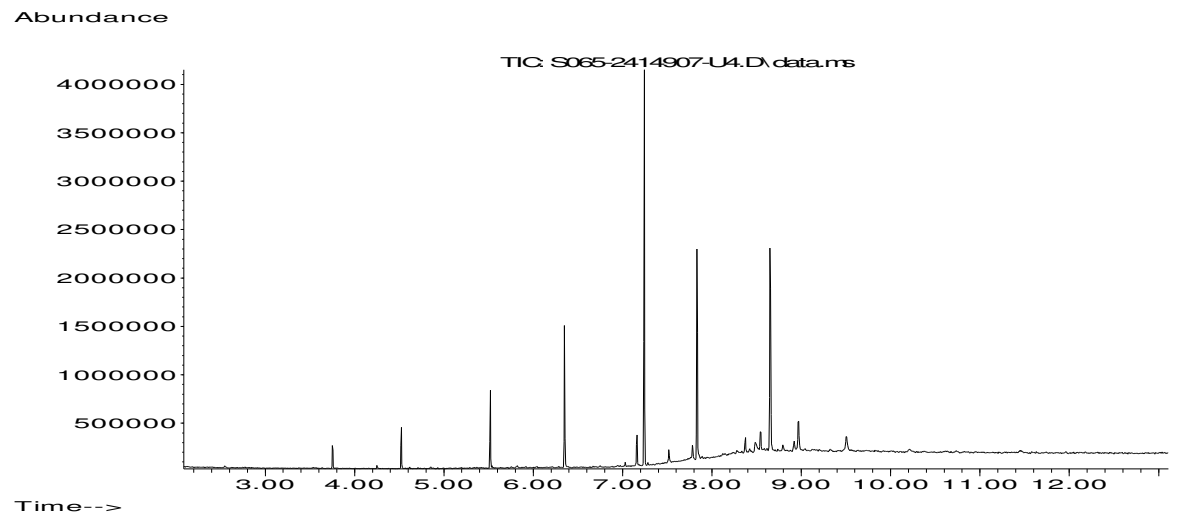
**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**

## Information in Support of Analytical Results

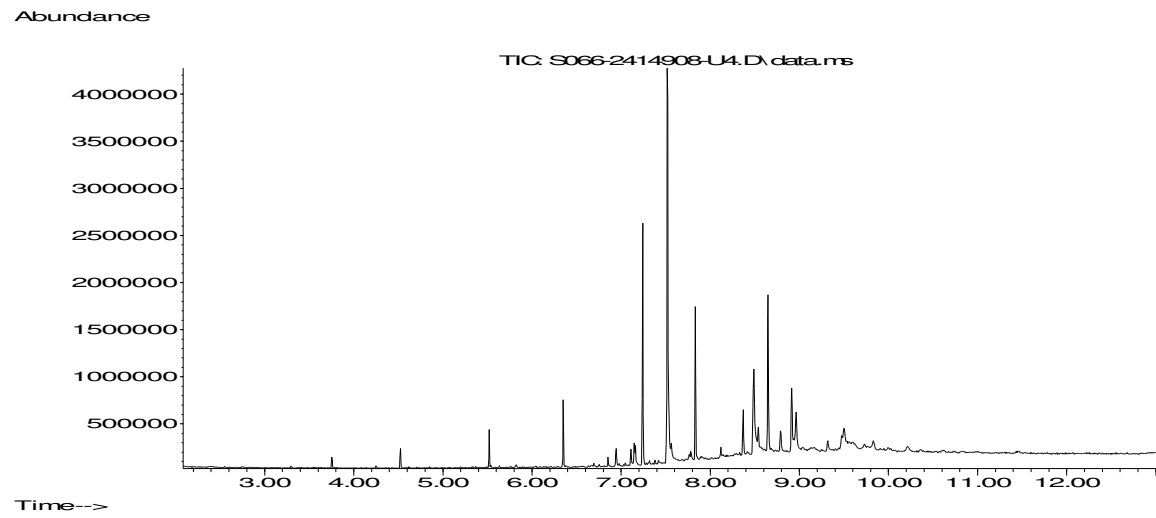
### List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total









## Sample Deviation Report



**Analytical Report Number : 22-82372**

**Project / Site name: Begbroke**

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
HP208	None Supplied	S	2414907	c	Free cyanide in soil	L080-PL	c
HP208	None Supplied	S	2414908	c	Free cyanide in soil	L080-PL	c
HP210	None Supplied	S	2414906	c	Free cyanide in soil	L080-PL	c
WS203	None Supplied	S	2414900	c	Free cyanide in soil	L080-PL	c
WS204	None Supplied	S	2414901	c	Free cyanide in soil	L080-PL	c
WS204	None Supplied	S	2414902	c	Free cyanide in soil	L080-PL	c
WS205	None Supplied	S	2414896	c	Free cyanide in soil	L080-PL	c
WS205	None Supplied	S	2414897	c	Free cyanide in soil	L080-PL	c
WS209	None Supplied	S	2414898	c	Free cyanide in soil	L080-PL	c
WS213	None Supplied	S	2414894	c	Free cyanide in soil	L080-PL	c
WS213	None Supplied	S	2414895	c	Free cyanide in soil	L080-PL	c
WS214	None Supplied	S	2414899	c	Free cyanide in soil	L080-PL	c
WS217	None Supplied	S	2414903	c	Free cyanide in soil	L080-PL	c
WS226	None Supplied	S	2414904	c	Free cyanide in soil	L080-PL	c
WS227	None Supplied	S	2414905	c	Free cyanide in soil	L080-PL	c



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## **Analytical Report Number : 22-82408**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	06/09/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	06/09/2022
<b>Your order number:</b>	PO19941	<b>Analysis completed by:</b>	13/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	13/09/2022
<b>Samples Analysed:</b>	15 soil samples		

**Signed:** \_\_\_\_\_

Anna Goc  
Junior Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 22-82408

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2415132	2415133	2415134	2415135	2415136
Sample Reference				HP207	HP209	WS232	WS230	WS211
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.30	0.20	0.20	0.10
Date Sampled				25/08/2022	25/08/2022	26/08/2022	26/08/2022	26/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	27
Moisture Content	%	0.01	NONE	9.1	4.5	6.8	4.1	3.6
Total mass of sample received	kg	0.001	NONE	0.4	0.3	0.8	0.8	0.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SZS	SZS	SZS	SZS	SZS

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.5	8	7.6	8.1
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0022	0.0093	0.0058	0.0037	0.02
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.0021	0.0053	0.011	0.017	0.012

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	73	49	20	44	45
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.6	1.5	0.87	1.3	1.1
Boron (water soluble)	mg/kg	0.2	MCERTS	0.4	0.9	0.9	1.3	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	58	52	32	44	39
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	59	52	33	46	40
Copper (aqua regia extractable)	mg/kg	1	MCERTS	7.5	14	13	14	13
Lead (aqua regia extractable)	mg/kg	1	MCERTS	17	16	25	26	28
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	36	37	19	30	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	120	98	52	83	71
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	89	99	59	89	95



Analytical Report Number: 22-82408

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number	2415132			2415133			2415134			2415135			2415136		
Sample Reference	HP207			HP209			WS232			WS230			WS211		
Sample Number	None Supplied			None Supplied			None Supplied			None Supplied			None Supplied		
Depth (m)	0.70			0.30			0.20			0.20			0.10		
Date Sampled	25/08/2022			25/08/2022			26/08/2022			26/08/2022			26/08/2022		
Time Taken	None Supplied			None Supplied			None Supplied			None Supplied			None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status												

#### Monoaromatics & Oxygenates

Compound	Units	Limit of detection	Accreditation Status	2415132	2415133	2415134	2415135	2415136
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-	-

#### Petroleum Hydrocarbons

Compound	Units	Limit of detection	Accreditation Status	2415132	2415133	2415134	2415135	2415136
TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS_1D_AL</sub>	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS_1D_AL</sub>	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS_1D_AL</sub>	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH_CU_1D_AL</sub>	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH_CU_1D_AL</sub>	mg/kg	2	MCERTS	-	< 2.0	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH_CU_1D_AL</sub>	mg/kg	8	MCERTS	-	< 8.0	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH_CU_1D_AL</sub>	mg/kg	8	MCERTS	-	< 8.0	-	-	-
TPH-CWG - Aliphatic >EC16 - EC35 <sub>EH_CU_1D_AL</sub>	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aliphatic > EC35 - EC44 <sub>EH_CU_1D_AL</sub>	mg/kg	8.4	NONE	-	< 8.4	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH_CU+HS_1D_AL</sub>	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH_CU+HS_1D_AL</sub>	mg/kg	10	NONE	-	< 10	-	-	-

Compound	Units	Limit of detection	Accreditation Status	2415132	2415133	2415134	2415135	2415136
TPH-CWG - Aromatic >EC5 - EC7 <sub>HS_1D_AR</sub>	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS_1D_AR</sub>	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS_1D_AR</sub>	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH_CU_1D_AR</sub>	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH_CU_1D_AR</sub>	mg/kg	2	MCERTS	-	< 2.0	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH_CU_1D_AR</sub>	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH_CU_1D_AR</sub>	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aromatic > EC35 - EC44 <sub>EH_CU_1D_AR</sub>	mg/kg	8.4	NONE	-	< 8.4	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH_CU+HS_1D_AR</sub>	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH_CU+HS_1D_AR</sub>	mg/kg	10	NONE	-	< 10	-	-	-

TPH Total C5 - C44 <sub>EH_CU+HS_1D_TOTAL</sub>	mg/kg	10	NONE	-	< 10	-	-	-
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Analytical Report Number: 22-82408

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number	2415132			2415133			2415134			2415135			2415136		
Sample Reference	HP207			HP209			WS232			WS230			WS211		
Sample Number	None Supplied			None Supplied			None Supplied			None Supplied			None Supplied		
Depth (m)	0.70			0.30			0.20			0.20			0.10		
Date Sampled	25/08/2022			25/08/2022			26/08/2022			26/08/2022			26/08/2022		
Time Taken	None Supplied			None Supplied			None Supplied			None Supplied			None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status												

**VOCs**

Compound	Units	Limit of detection	Accreditation Status	2415132	2415133	2415134	2415135	2415136
Chloromethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	-
Chloroethane	µg/kg	1	NONE	-	< 1.0	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	< 1.0	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	< 1.0	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	< 1.0	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	< 1.0	-	-	-
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	-	-	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	< 1.0	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	< 1.0	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Styrene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Tribromomethane	µg/kg	1	NONE	-	< 1.0	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	< 1.0	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-

Analytical Report Number: 22-82408

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2415132	2415133	2415134	2415135	2415136
Sample Reference				HP207	HP209	WS232	WS230	WS211
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.30	0.20	0.20	0.10
Date Sampled				25/08/2022	25/08/2022	26/08/2022	26/08/2022	26/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	< 1.0	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	-

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Your Order No: PO19941

Lab Sample Number				2415132	2415133	2415134	2415135	2415136
Sample Reference				HP207	HP209	WS232	WS230	WS211
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.30	0.20	0.20	0.10
Date Sampled				25/08/2022	25/08/2022	26/08/2022	26/08/2022	26/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

**SVOCs**

Analytical Parameter	Units	Limit of detection	Accreditation Status	2415132	2415133	2415134	2415135	2415136
Aniline	mg/kg	0.1	NONE	-	< 0.1	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	< 0.1	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-



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Lab Sample Number				2415132	2415133	2415134	2415135	2415136
Sample Reference				HP207	HP209	WS232	WS230	WS211
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.30	0.20	0.20	0.10
Date Sampled				25/08/2022	25/08/2022	26/08/2022	26/08/2022	26/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
				Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-

**Pesticide and Herbicide Screen**

GCMS Pesticide Screen		N/A	NONE	-	-	None Detected	None Detected	None Detected

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-82408

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2415137	2415138	2415139	2415140	2415141
Sample Reference				BH201	BH202	BH204	BH205	BH205
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.10	0.20	0.10	0.40
Date Sampled				30/08/2022	31/08/2022	31/08/2022	01/09/2022	01/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	3.5	4.4	4.8	8.2	8.8
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4	0.4

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SZS	SZS	SZS	SZS	SZS

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.6	8	8	7.6	8.5
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0035	0.0041	0.0025	0.011	0.0037
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.011	0.0057	0.0033	0.017	0.0019

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	45	29	24	24	49
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.2	1	0.85	1.2	1.4
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	0.4	0.4	2	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	43	34	31	42	49
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	43	34	31	42	50
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13	11	12	15	15
Lead (aqua regia extractable)	mg/kg	1	MCERTS	29	20	14	32	16
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	29	23	21	29	42
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	80	64	53	64	85
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	76	71	66	88	73

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Project / Site name: Begbroke

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Lab Sample Number	2415137	2415138	2415139	2415140	2415141
Sample Reference	BH201	BH202	BH204	BH205	BH205
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.20	0.10	0.20	0.10	0.40
Date Sampled	30/08/2022	31/08/2022	31/08/2022	01/09/2022	01/09/2022
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

**Monoaromatics & Oxygenates**

Compound	µg/kg	Limit of detection	Accreditation Status					
Benzene	1	MCERTS	-	-	-	-	-	-
Toluene	1	MCERTS	-	-	-	-	-	-
Ethylbenzene	1	MCERTS	-	-	-	-	-	-
p & m-xylene	1	MCERTS	-	-	-	-	-	-
o-xylene	1	MCERTS	-	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	1	MCERTS	-	-	-	-	-	-

**Petroleum Hydrocarbons**

TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	Limit of detection	Accreditation Status					
TPH-CWG - Aliphatic > EC5 - EC6 <sub>HS_1D_AL</sub>	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC6 - EC8 <sub>HS_1D_AL</sub>	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC8 - EC10 <sub>HS_1D_AL</sub>	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC10 - EC12 <sub>EH_CU_1D_AL</sub>	1	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC12 - EC16 <sub>EH_CU_1D_AL</sub>	2	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC16 - EC21 <sub>EH_CU_1D_AL</sub>	8	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC21 - EC35 <sub>EH_CU_1D_AL</sub>	8	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC16 - EC35 <sub>EH_CU_1D_AL</sub>	10	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC35 - EC44 <sub>EH_CU_1D_AL</sub>	8.4	NONE	-	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH_CU+HS_1D_AL</sub>	10	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH_CU+HS_1D_AL</sub>	10	NONE	-	-	-	-	-	-

TPH-CWG - Aromatic > EC5 - EC7	mg/kg	Limit of detection	Accreditation Status					
TPH-CWG - Aromatic > EC5 - EC7 <sub>HS_1D_AR</sub>	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic > EC7 - EC8 <sub>HS_1D_AR</sub>	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic > EC8 - EC10 <sub>HS_1D_AR</sub>	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic > EC10 - EC12 <sub>EH_CU_1D_AR</sub>	1	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic > EC12 - EC16 <sub>EH_CU_1D_AR</sub>	2	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic > EC16 - EC21 <sub>EH_CU_1D_AR</sub>	10	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic > EC21 - EC35 <sub>EH_CU_1D_AR</sub>	10	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic > EC35 - EC44 <sub>EH_CU_1D_AR</sub>	8.4	NONE	-	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH_CU+HS_1D_AR</sub>	10	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH_CU+HS_1D_AR</sub>	10	NONE	-	-	-	-	-	-

TPH Total C5 - C44 <sub>EH_CU+HS_1D_TOTAL</sub>	mg/kg	10	NONE	-	-	-	-	-
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Analytical Report Number: 22-82408

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2415137	2415138	2415139	2415140	2415141
Sample Reference				BH201	BH202	BH204	BH205	BH205
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.10	0.20	0.10	0.40
Date Sampled				30/08/2022	31/08/2022	31/08/2022	01/09/2022	01/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
<b>VOCS</b>								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-



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Lab Sample Number				2415137	2415138	2415139	2415140	2415141
Sample Reference				BH201	BH202	BH204	BH205	BH205
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.10	0.20	0.10	0.40
Date Sampled				30/08/2022	31/08/2022	31/08/2022	01/09/2022	01/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-

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Your Order No: PO19941

Lab Sample Number				2415137	2415138	2415139	2415140	2415141
Sample Reference				BH201	BH202	BH204	BH205	BH205
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.10	0.20	0.10	0.40
Date Sampled				30/08/2022	31/08/2022	31/08/2022	01/09/2022	01/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
<b>SVOCs</b>								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-

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Project / Site name: Begbroke

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Lab Sample Number				2415137	2415138	2415139	2415140	2415141
Sample Reference				BH201	BH202	BH204	BH205	BH205
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.10	0.20	0.10	0.40
Date Sampled				30/08/2022	31/08/2022	31/08/2022	01/09/2022	01/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
				Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-

**Pesticide and Herbicide Screen**

GCMS Pesticide Screen		N/A	NONE	-	-	-	None Detected	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2415142	2415143	2415144	2415145	2415146
Sample Reference				BH203	BH203	WS244	WS241	WS251
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.50	0.20	0.20	0.20
Date Sampled				01/09/2022	01/09/2022	01/09/2022	01/09/2022	01/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	3.8	4.2	4.7	18	18
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.8	0.8	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SZS	SZS	SZS	SZS	SZS

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.1	7.5	7.6	7.8	8.1
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0045	0.0041	0.0064	0.011	0.012
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.012	0.0078	0.012	0.026	0.016

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80

#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	29	31	20	18	16
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.98	1.1	0.93	1	1.3
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	1.1	0.4	3.5	1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	33	38	34	36	45
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	34	38	35	37	45
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13	10	16	21	11
Lead (aqua regia extractable)	mg/kg	1	MCERTS	27	18	23	33	20
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23	25	21	24	25
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	59	71	52	55	64
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	73	74	64	91	64



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Project / Site name: Begbroke

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Lab Sample Number	2415142	2415143	2415144	2415145	2415146
Sample Reference	BH203	BH203	WS244	WS241	WS251
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10	0.50	0.20	0.20	0.20
Date Sampled	01/09/2022	01/09/2022	01/09/2022	01/09/2022	01/09/2022
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

**Monoaromatics & Oxygenates**

Compound	µg/kg	Limit of detection	Accreditation Status					
Benzene	1	MCERTS	-	-	-	-	-	-
Toluene	1	MCERTS	-	-	-	-	-	-
Ethylbenzene	1	MCERTS	-	-	-	-	-	-
p & m-xylene	1	MCERTS	-	-	-	-	-	-
o-xylene	1	MCERTS	-	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	1	MCERTS	-	-	-	-	-	-

**Petroleum Hydrocarbons**

TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	Limit of detection	Accreditation Status					
TPH-CWG - Aliphatic > EC5 - EC6 <sub>HS_1D_AL</sub>	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC6 - EC8 <sub>HS_1D_AL</sub>	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC8 - EC10 <sub>HS_1D_AL</sub>	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC10 - EC12 <sub>EH_CU_1D_AL</sub>	1	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC12 - EC16 <sub>EH_CU_1D_AL</sub>	2	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC16 - EC21 <sub>EH_CU_1D_AL</sub>	8	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC21 - EC35 <sub>EH_CU_1D_AL</sub>	8	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC16 - EC35 <sub>EH_CU_1D_AL</sub>	10	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC35 - EC44 <sub>EH_CU_1D_AL</sub>	8.4	NONE	-	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH_CU+HS_1D_AL</sub>	10	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH_CU+HS_1D_AL</sub>	10	NONE	-	-	-	-	-	-

TPH-CWG - Aromatic > EC5 - EC7	mg/kg	Limit of detection	Accreditation Status					
TPH-CWG - Aromatic > EC5 - EC7 <sub>HS_1D_AR</sub>	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic > EC7 - EC8 <sub>HS_1D_AR</sub>	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic > EC8 - EC10 <sub>HS_1D_AR</sub>	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic > EC10 - EC12 <sub>EH_CU_1D_AR</sub>	1	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic > EC12 - EC16 <sub>EH_CU_1D_AR</sub>	2	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic > EC16 - EC21 <sub>EH_CU_1D_AR</sub>	10	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic > EC21 - EC35 <sub>EH_CU_1D_AR</sub>	10	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic > EC35 - EC44 <sub>EH_CU_1D_AR</sub>	8.4	NONE	-	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH_CU+HS_1D_AR</sub>	10	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH_CU+HS_1D_AR</sub>	10	NONE	-	-	-	-	-	-

TPH Total C5 - C44 <sub>EH_CU+HS_1D_TOTAL</sub>	mg/kg	10	NONE	-	-	-	-	-
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Analytical Report Number: 22-82408

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2415142	2415143	2415144	2415145	2415146
Sample Reference				BH203	BH203	WS244	WS241	WS251
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.50	0.20	0.20	0.20
Date Sampled				01/09/2022	01/09/2022	01/09/2022	01/09/2022	01/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
<b>VOCS</b>								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-

Analytical Report Number: 22-82408

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2415142	2415143	2415144	2415145	2415146
Sample Reference				BH203	BH203	WS244	WS241	WS251
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.50	0.20	0.20	0.20
Date Sampled				01/09/2022	01/09/2022	01/09/2022	01/09/2022	01/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-

Analytical Report Number: 22-82408

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2415142	2415143	2415144	2415145	2415146
Sample Reference				BH203	BH203	WS244	WS241	WS251
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.50	0.20	0.20	0.20
Date Sampled				01/09/2022	01/09/2022	01/09/2022	01/09/2022	01/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
<b>SVOCs</b>								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-



Analytical Report Number: 22-82408

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2415142	2415143	2415144	2415145	2415146
Sample Reference				BH203	BH203	WS244	WS241	WS251
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.50	0.20	0.20	0.20
Date Sampled				01/09/2022	01/09/2022	01/09/2022	01/09/2022	01/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-

**Pesticide and Herbicide Screen**

GCMS Pesticide Screen		N/A	NONE	-	-	-	None Detected	-
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U/S = Unsuitable Sample I/S = Insufficient Sample

**Analytical Report Number : 22-82408**

**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2415132	HP207	None Supplied	0.7	Brown clay and sand with gravel.
2415133	HP209	None Supplied	0.3	Brown sand with gravel and fibrous material.
2415134	WS232	None Supplied	0.2	Brown sand with fibrous material and gravel
2415135	WS230	None Supplied	0.2	Brown sand with gravel and fibrous material.
2415136	WS211	None Supplied	0.1	Brown gravelly sand with stones and fibrous material.
2415137	BH201	None Supplied	0.2	Brown sand with fibrous material and gravel
2415138	BH202	None Supplied	0.1	Brown sand with gravel.
2415139	BH204	None Supplied	0.2	Brown sand with gravel.
2415140	BH205	None Supplied	0.1	Brown sand with fibrous material and gravel
2415141	BH205	None Supplied	0.4	Brown clay and sand with gravel.
2415142	BH203	None Supplied	0.1	Brown loam and clay with gravel.
2415143	BH203	None Supplied	0.5	Brown clay and sand with gravel.
2415144	WS244	None Supplied	0.2	Brown loam and clay with gravel and vegetation.
2415145	WS241	None Supplied	0.2	Brown clay and loam with gravel.
2415146	WS251	None Supplied	0.2	Brown loam and clay with gravel.

**Analytical Report Number : 22-82408**

**Project / Site name: Begbroke**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH Chromatogram in Soil	TPH Chromatogram in Soil.	In-house method	L064-PL	D	NONE
Cr (III) in soil	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS

Analytical Report Number : 22-82408

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
GC Pesticide Screen (TIC)	Analysis of unknown pesticides by GCMS	GC Pesticide Screen (TIC)	L064B	D	NONE
Fraction Organic Carbon FOC Automated	Determination of fraction of organic carbon in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method	L009	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

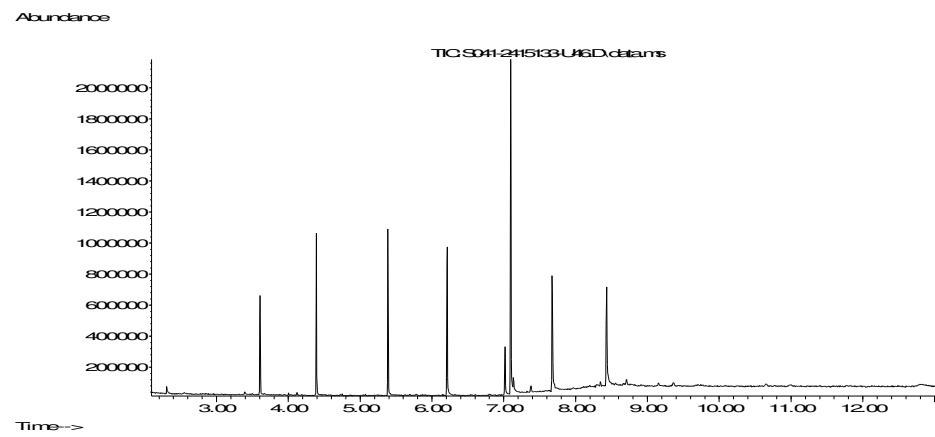
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

## Information in Support of Analytical Results

### List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total





## Sample Deviation Report



**Analytical Report Number : 22-82408**

**Project / Site name: Begbroke**

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BH201	None Supplied	S	2415137	c	Free cyanide in soil	L080-PL	c
HP207	None Supplied	S	2415132	c	Free cyanide in soil	L080-PL	c
HP209	None Supplied	S	2415133	c	Free cyanide in soil	L080-PL	c
WS211	None Supplied	S	2415136	c	Free cyanide in soil	L080-PL	c
WS230	None Supplied	S	2415135	c	Free cyanide in soil	L080-PL	c
WS232	None Supplied	S	2415134	c	Free cyanide in soil	L080-PL	c



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## **Analytical Report Number : 22-82414**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	06/09/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	06/09/2022
<b>Your order number:</b>	PO19941	<b>Analysis completed by:</b>	13/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	13/09/2022
<b>Samples Analysed:</b>	15 soil samples		

**Signed:** \_\_\_\_\_

Anna Goc  
Junior Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 22-82414

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2415194	2415195	2415196	2415197	2415198
Sample Reference				WS215	WS208	WS208	WS210	WS222
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.10	0.50	0.10	0.20
Date Sampled				25/08/2022	25/08/2022	25/08/2022	25/08/2022	25/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	22	12	23	9.3	3.2
Total mass of sample received	kg	0.001	NONE	0.9	0.9	0.9	0.9	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SCA	SCA	SCA	SCA	SCA

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	7.3	8.2	7.3	7.9
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.017	0.016	0.15	0.014	0.003
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.033	0.04	0.009	0.03	0.014

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	25	36	27	26	41
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.5	1.8	2.1	1.7	1.1
Boron (water soluble)	mg/kg	0.2	MCERTS	4.2	1	0.3	2.9	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	47	54	55	55	39
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	48	55	56	56	40
Copper (aqua regia extractable)	mg/kg	1	MCERTS	19	23	25	18	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	32	36	21	31	27
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	30	37	52	33	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	72	86	57	81	73
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	85	93	65	94	77





Analytical Report Number: 22-82414

Project / Site name: Begbroke

Your Order No: PO19941

<b>Lab Sample Number</b>				2415194	2415195	2415196	2415197	2415198
<b>Sample Reference</b>				WS215	WS208	WS208	WS210	WS222
<b>Sample Number</b>				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
<b>Depth (m)</b>				0.20	0.10	0.50	0.10	0.20
<b>Date Sampled</b>				25/08/2022	25/08/2022	25/08/2022	25/08/2022	25/08/2022
<b>Time Taken</b>				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>					

**Pesticide and Herbicide Screen**

GCMS Pesticide Screen		N/A	NONE	-	-	-	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-82414

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2415199	2415200	2415201	2415202	2415203
Sample Reference				WS207	WS201	WS202	WS216	WS216
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.20	0.20	0.20	0.50
Date Sampled				25/08/2022	30/08/2022	30/08/2022	30/08/2022	30/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	13	7.4	3.9	8.2
Total mass of sample received	kg	0.001	NONE	0.4	0.9	0.9	0.9	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SCA	SCA	SCA	SCA	SCA

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	8.4	7.9	7.9	8.2
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.01	0.0056	0.0075	0.0029	0.0013
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.03	0.0057	0.011	0.006	< 0.0010

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80

#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	29	19	28	65	93
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.5	1.6	1.3	1.9	2.5
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	1.3	1.6	0.9	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	47	43	46	65	100
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	48	44	46	66	100
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	21	15	18	20
Lead (aqua regia extractable)	mg/kg	1	MCERTS	28	20	21	26	22
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	31	32	29	49	57
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	78	65	73	120	190
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	82	88	81	110	130



Analytical Report Number: 22-82414

Project / Site name: Begbroke

Your Order No: PO19941

<b>Lab Sample Number</b>				2415199	2415200	2415201	2415202	2415203
<b>Sample Reference</b>				WS207	WS201	WS202	WS216	WS216
<b>Sample Number</b>				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
<b>Depth (m)</b>				0.10	0.20	0.20	0.20	0.50
<b>Date Sampled</b>				25/08/2022	30/08/2022	30/08/2022	30/08/2022	30/08/2022
<b>Time Taken</b>				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>					

**Pesticide and Herbicide Screen**

GCMS Pesticide Screen		N/A	NONE	-	None Detected	-	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-82414

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2415204	2415205	2415206	2415207	2415208
Sample Reference				WS212	WS202	WS231	WS238	WS238
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	1.10	0.20	0.20	0.60
Date Sampled				30/08/2022	30/08/2022	31/08/2022	31/08/2022	31/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	57	26	< 0.1
Moisture Content	%	0.01	NONE	4.1	11	2.3	5.2	6.2
Total mass of sample received	kg	0.001	NONE	0.9	0.9	0.9	0.9	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	LFT	LFT	LFT	LFT	LFT

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	8.2	7.9	7.8	8
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0058	0.01	0.0022	0.028	0.0031
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.014	0.0027	0.0066	0.019	0.0077

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	62	48	30	48	44
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.5	1.5	0.88	1.3	1.1
Boron (water soluble)	mg/kg	0.2	MCERTS	2.2	0.7	0.7	2	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	54	48	29	47	40
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	54	49	30	48	40
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	18	14	16	15
Lead (aqua regia extractable)	mg/kg	1	MCERTS	26	21	21	22	19
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	37	49	27	34	28
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	96	92	51	94	79
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	94	87	65	94	83





Analytical Report Number: 22-82414  
 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number				2415204	2415205	2415206	2415207	2415208		
Sample Reference				WS212	WS202	WS231	WS238	WS238		
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied		
Depth (m)				0.20	1.10	0.20	0.20	0.60		
Date Sampled				30/08/2022	30/08/2022	31/08/2022	31/08/2022	31/08/2022		
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status							
<b>Pesticide and Herbicide Screen</b>										
GCMS Pesticide Screen				N/A	NONE	-	-	None Detected	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

**Analytical Report Number : 22-82414**

**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2415194	WS215	None Supplied	0.2	Brown loam and clay with gravel.
2415195	WS208	None Supplied	0.1	Brown loam and clay with gravel and vegetation.
2415196	WS208	None Supplied	0.5	Brown loam and clay with gravel.
2415197	WS210	None Supplied	0.1	Brown loam and clay with gravel and vegetation.
2415198	WS222	None Supplied	0.2	Brown loam and clay with gravel and vegetation.
2415199	WS207	None Supplied	0.1	Brown loam and clay with gravel.
2415200	WS201	None Supplied	0.2	Brown clay and loam with gravel.
2415201	WS202	None Supplied	0.2	Brown clay and loam with gravel and vegetation.
2415202	WS216	None Supplied	0.2	Brown clay and sand with gravel and vegetation.
2415203	WS216	None Supplied	0.5	Brown clay and loam with gravel.
2415204	WS212	None Supplied	0.2	Brown clay and loam with gravel and vegetation.
2415205	WS202	None Supplied	1.1	Brown clay and sand with gravel and vegetation.
2415206	WS231	None Supplied	0.2	Brown sand with stones and gravel
2415207	WS238	None Supplied	0.2	Brown sand with stones and fibrous material.
2415208	WS238	None Supplied	0.6	Brown sand with gravel.

**Analytical Report Number : 22-82414**

**Project / Site name: Begbroke**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Cr (III) in soil	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
GC Pesticide Screen (TIC)	Analysis of unknown pesticides by GCMS	GC Pesticide Screen (TIC)	L064B	D	NONE
Fraction Organic Carbon FOC Automated	Determination of fraction of organic carbon in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method	L009	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**

## Sample Deviation Report



**Analytical Report Number : 22-82414**

**Project / Site name: Begbroke**

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS201	None Supplied	S	2415200	c	Free cyanide in soil	L080-PL	c
WS202	None Supplied	S	2415201	c	Free cyanide in soil	L080-PL	c
WS202	None Supplied	S	2415205	c	Free cyanide in soil	L080-PL	c
WS207	None Supplied	S	2415199	c	Free cyanide in soil	L080-PL	c
WS208	None Supplied	S	2415195	c	Free cyanide in soil	L080-PL	c
WS208	None Supplied	S	2415196	c	Free cyanide in soil	L080-PL	c
WS210	None Supplied	S	2415197	c	Free cyanide in soil	L080-PL	c
WS212	None Supplied	S	2415204	c	Free cyanide in soil	L080-PL	c
WS215	None Supplied	S	2415194	c	Free cyanide in soil	L080-PL	c
WS216	None Supplied	S	2415202	c	Free cyanide in soil	L080-PL	c
WS216	None Supplied	S	2415203	c	Free cyanide in soil	L080-PL	c
WS222	None Supplied	S	2415198	c	Free cyanide in soil	L080-PL	c





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## **Analytical Report Number : 22-82420**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	06/09/2022
<b>Your job number:</b>	19113	<b>Samples instructed on/ Analysis started on:</b>	06/09/2022
<b>Your order number:</b>	PO19941	<b>Analysis completed by:</b>	13/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	13/09/2022
<b>Samples Analysed:</b>	15 soil samples		

**Signed:** \_\_\_\_\_

Anna Goc  
Junior Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 22-82420

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number	2415222				2415223		2415224		2415225		2415226	
Sample Reference	WS250				WS227		WS243		WS245		WS246	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.20				0.70		0.40		0.50		0.20	
Date Sampled	01/09/2022				23/08/2022		02/09/2022		02/09/2022		02/09/2022	
Time Taken	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status									
Stone Content	%	0.1	NONE	< 0.1	< 0.1	54	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	
Moisture Content	%	0.01	NONE	6.2	3.4	6.2	9.9	7.2	7.2	7.2	7.2	
Total mass of sample received	kg	0.001	NONE	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	NTK	NTK	NTK	NTK	NTK

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	7.8	7.9	7.9	7.6
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0095	< 0.0013	0.0029	0.005	0.0038
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.019	0.0059	0.0057	0.0014	0.011

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80

#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	37	58	31	23
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.99	1.1	1.6	1.2	1.2
Boron (water soluble)	mg/kg	0.2	MCERTS	1.7	0.3	2	0.3	1.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	1.9	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	38	39	63	42	44
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	40	40	64	42	44
Copper (aqua regia extractable)	mg/kg	1	MCERTS	11	11	17	11	17
Lead (aqua regia extractable)	mg/kg	1	MCERTS	22	18	18	14	20
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	21	26	39	42	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	57	72	110	71	64
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	66	68	98	54	97

Analytical Report Number: 22-82420

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number	2415222	2415223	2415224	2415225	2415226
Sample Reference	WS250	WS227	WS243	WS245	WS246
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.20	0.70	0.40	0.50	0.20
Date Sampled	01/09/2022	23/08/2022	02/09/2022	02/09/2022	02/09/2022
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

#### Monoaromatics & Oxygenates

Compound	Units	Limit of detection	Accreditation Status					
Benzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
o-xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	-	-

#### Petroleum Hydrocarbons

Compound	Units	Limit of detection	Accreditation Status					
TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS_1D_AL</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS_1D_AL</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS_1D_AL</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH_CU_1D_AL</sub>	mg/kg	1	MCERTS	-	-	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH_CU_1D_AL</sub>	mg/kg	2	MCERTS	-	-	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH_CU_1D_AL</sub>	mg/kg	8	MCERTS	-	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH_CU_1D_AL</sub>	mg/kg	8	MCERTS	-	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC16 - EC35 <sub>EH_CU_1D_AL</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aliphatic > EC35 - EC44 <sub>EH_CU_1D_AL</sub>	mg/kg	8.4	NONE	-	-	< 8.4	-	-
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH_CU+HS_1D_AL</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH_CU+HS_1D_AL</sub>	mg/kg	10	NONE	-	-	< 10	-	-

Compound	Units	Limit of detection	Accreditation Status					
TPH-CWG - Aromatic >EC5 - EC7 <sub>HS_1D_AR</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS_1D_AR</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS_1D_AR</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH_CU_1D_AR</sub>	mg/kg	1	MCERTS	-	-	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH_CU_1D_AR</sub>	mg/kg	2	MCERTS	-	-	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH_CU_1D_AR</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH_CU_1D_AR</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic > EC35 - EC44 <sub>EH_CU_1D_AR</sub>	mg/kg	8.4	NONE	-	-	< 8.4	-	-
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH_CU+HS_1D_AR</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH_CU+HS_1D_AR</sub>	mg/kg	10	NONE	-	-	< 10	-	-

TPH Total C5 - C44 <sub>EH_CU+HS_1D_TOTAL</sub>	mg/kg	10	NONE	-	-	< 10	-	-
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#### Pesticide and Herbicide Screen

GCMS Pesticide Screen		N/A	NONE	-	-	-	-	None Detected
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U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-82420

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number	2415227				2415228		2415229		2415230		2415231	
Sample Reference	WS237				WS229		WS243		WS245		WS206	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.20				0.10		0.20		0.20		0.20	
Date Sampled	02/09/2022				02/09/2022		02/09/2022		02/09/2022		24/08/2022	
Time Taken	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status									
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	19	< 0.1				
Moisture Content	%	0.01	NONE	2.5	3.2	3.4	8.2	4.2				
Total mass of sample received	kg	0.001	NONE	0.8	0.8	0.8	0.8	0.8				

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	NTK	NTK	NTK	NTK	NTK

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	7.5	7.9	7.9	7.7
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0044	0.0035	0.0045	0.0044	0.0043
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.011	0.0095	0.024	0.014	0.023

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80

#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	48	48	52	18	64
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.3	1.4	1.3	1.1	1.4
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	0.7	1.4	1.4	2.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	45	48	46	37	52
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	46	49	47	37	53
Copper (aqua regia extractable)	mg/kg	1	MCERTS	15	15	21	11	16
Lead (aqua regia extractable)	mg/kg	1	MCERTS	31	28	29	19	36
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	29	33	34	24	34
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	83	120	84	55	110
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	86	90	120	71	110



Analytical Report Number: 22-82420

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number	2415227	2415228	2415229	2415230	2415231
Sample Reference	WS237	WS229	WS243	WS245	WS206
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.20	0.10	0.20	0.20	0.20
Date Sampled	02/09/2022	02/09/2022	02/09/2022	02/09/2022	24/08/2022
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

**Monoaromatics & Oxygenates**

Compound	µg/kg	1	MCERTS	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-	-
o-xylene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-

**Petroleum Hydrocarbons**

TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC16 - EC35	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	-	-	-	-	-

TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	-	-	-	-	-

TPH Total C5 - C44	mg/kg	10	NONE	-	-	-	-	-
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**Pesticide and Herbicide Screen**

GCMS Pesticide Screen		N/A	NONE	-	-	-	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-82420

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number				2415232	2415233	2415234	2415235	2415236
Sample Reference				WS218	WS218	WS223	WS219	WS220
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.60	0.10	0.20	0.10
Date Sampled				24/08/2022	24/08/2022	24/08/2022	24/08/2022	24/08/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	1.9	3.6	3.6	4.7	4.6
Total mass of sample received	kg	0.001	NONE	0.4	0.8	0.8	0.8	0.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SSZ	SSZ	SSZ	SSZ	SSZ

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	7.8	7.5	7.9	7.9
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0045	0.0024	0.0083	0.0056	0.0047
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.014	0.0092	0.02	0.018	0.013

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	48	51	59	27	22
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.3	1.2	1.5	0.81	0.91
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	0.6	1.8	0.6	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	47	43	53	30	32
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	48	44	54	31	33
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	11	17	14	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	31	23	28	23	25
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	30	29	35	20	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	83	79	97	49	53
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	84	87	120	73	65

Analytical Report Number: 22-82420

Project / Site name: Begbroke

Your Order No: PO19941

Lab Sample Number	2415232	2415233	2415234	2415235	2415236
Sample Reference	WS218	WS218	WS223	WS219	WS220
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10	0.60	0.10	0.20	0.10
Date Sampled	24/08/2022	24/08/2022	24/08/2022	24/08/2022	24/08/2022
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

#### Monoaromatics & Oxygenates

Compound	Units	Limit of detection	Accreditation Status					
Benzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
o-xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	-	-

#### Petroleum Hydrocarbons

Compound	Units	Limit of detection	Accreditation Status					
TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS_1D_AL</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS_1D_AL</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS_1D_AL</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH_CU_1D_AL</sub>	mg/kg	1	MCERTS	-	-	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH_CU_1D_AL</sub>	mg/kg	2	MCERTS	-	-	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH_CU_1D_AL</sub>	mg/kg	8	MCERTS	-	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH_CU_1D_AL</sub>	mg/kg	8	MCERTS	-	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC16 - EC35 <sub>EH_CU_1D_AL</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aliphatic > EC35 - EC44 <sub>EH_CU_1D_AL</sub>	mg/kg	8.4	NONE	-	-	< 8.4	-	-
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH_CU+HS_1D_AL</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH_CU+HS_1D_AL</sub>	mg/kg	10	NONE	-	-	< 10	-	-

Compound	Units	Limit of detection	Accreditation Status					
TPH-CWG - Aromatic >EC5 - EC7 <sub>HS_1D_AR</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS_1D_AR</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS_1D_AR</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH_CU_1D_AR</sub>	mg/kg	1	MCERTS	-	-	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH_CU_1D_AR</sub>	mg/kg	2	MCERTS	-	-	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH_CU_1D_AR</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH_CU_1D_AR</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic > EC35 - EC44 <sub>EH_CU_1D_AR</sub>	mg/kg	8.4	NONE	-	-	< 8.4	-	-
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH_CU+HS_1D_AR</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH_CU+HS_1D_AR</sub>	mg/kg	10	NONE	-	-	< 10	-	-

TPH Total C5 - C44 <sub>EH_CU+HS_1D_TOTAL</sub>	mg/kg	10	NONE	-	-	< 10	-	-
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#### Pesticide and Herbicide Screen

GCMS Pesticide Screen		N/A	NONE	-	-	-	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample

**Analytical Report Number : 22-82420**
**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2415222	WS250	None Supplied	0.2	Brown sand with fibrous material and gravel
2415223	WS227	None Supplied	0.7	Brown sand with gravel.
2415224	WS243	None Supplied	0.4	Brown clay and sand with fibrous material and stones.
2415225	WS245	None Supplied	0.5	Brown clay and loam with gravel.
2415226	WS246	None Supplied	0.2	Brown clay and loam with gravel.
2415227	WS237	None Supplied	0.2	Brown clay and loam with gravel and vegetation.
2415228	WS229	None Supplied	0.1	Brown clay and loam with gravel and vegetation.
2415229	WS243	None Supplied	0.2	Brown clay and loam with gravel and vegetation.
2415230	WS245	None Supplied	0.2	Brown sand with fibrous material and stones.
2415231	WS206	None Supplied	0.2	Brown sand with gravel and fibrous material.
2415232	WS218	None Supplied	0.1	Brown sand with fibrous material and gravel
2415233	WS218	None Supplied	0.6	Brown sand with gravel.
2415234	WS223	None Supplied	0.1	Brown sand with gravel and fibrous material.
2415235	WS219	None Supplied	0.2	Brown sand with fibrous material and gravel
2415236	WS220	None Supplied	0.1	Brown sand with fibrous material and gravel



**Analytical Report Number : 22-82420**

**Project / Site name: Begbroke**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH Chromatogram in Soil	TPH Chromatogram in Soil.	In-house method	L064-PL	D	NONE
Cr (III) in soil	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
GC Pesticide Screen (TIC)	Analysis of unknown pesticides by GCMS	GC Pesticide Screen (TIC)	L064B	D	NONE
Fraction Organic Carbon FOC Automated	Determination of fraction of organic carbon in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method	L009	D	MCERTS

Analytical Report Number : 22-82420

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

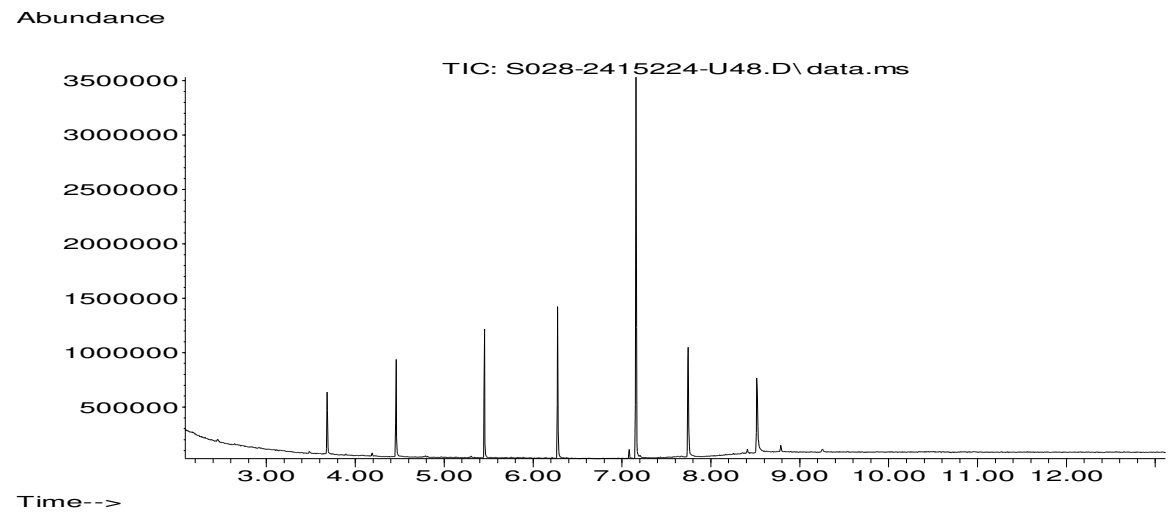
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

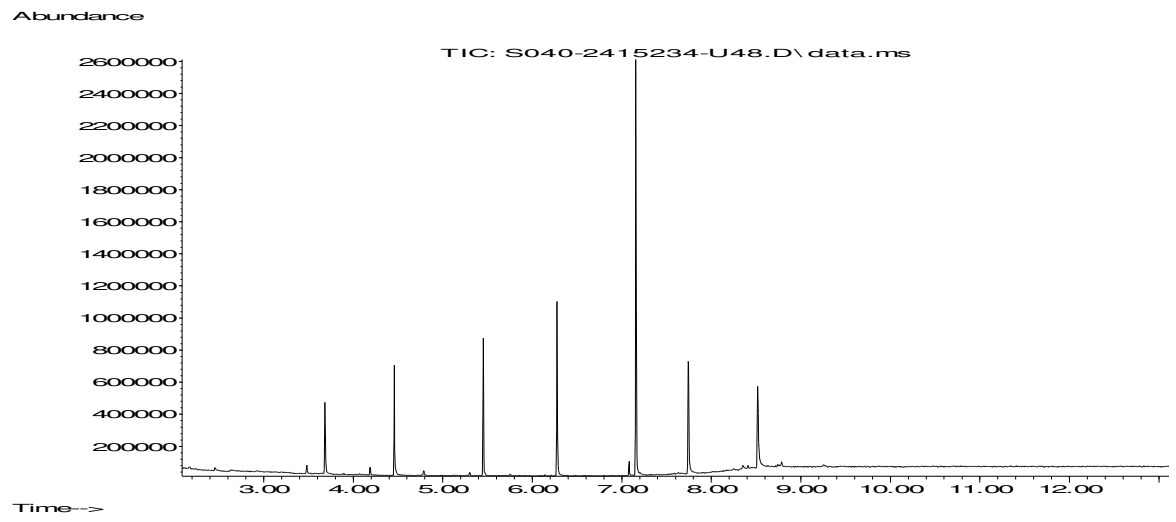
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

## Information in Support of Analytical Results

### List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total







## Sample Deviation Report



**Analytical Report Number : 22-82420**

**Project / Site name: Begbroke**

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS206	None Supplied	S	2415231	c	Free cyanide in soil	L080-PL	c
WS218	None Supplied	S	2415232	c	Free cyanide in soil	L080-PL	c
WS218	None Supplied	S	2415233	c	Free cyanide in soil	L080-PL	c
WS219	None Supplied	S	2415235	c	Free cyanide in soil	L080-PL	c
WS220	None Supplied	S	2415236	c	Free cyanide in soil	L080-PL	c
WS223	None Supplied	S	2415234	c	Free cyanide in soil	L080-PL	c
WS227	None Supplied	S	2415223	c	Free cyanide in soil	L080-PL	c



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## **Analytical Report Number : 22-83964**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	13/09/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	13/09/2022
<b>Your order number:</b>	PO19941	<b>Analysis completed by:</b>	21/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	21/09/2022
<b>Samples Analysed:</b>	15 soil samples		

*Izabela Wójcik*  
**Signed:** \_\_\_\_\_

Izabela Wójcik  
Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 22-83964  
Project / Site name: Begbroke

Lab Sample Number	2423858	2423859	2423860	2423861	2423862			
Sample Reference	TP224	TP232	TP234	TP230	TP231			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.50	0.20	0.20	0.20	0.20			
Date Sampled	08/09/2022	07/09/2022	07/09/2022	07/09/2022	07/09/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.1	13	12	8.6	8.2
Total mass of sample received	kg	0.001	NONE	0.9	0.9	0.9	0.9	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO	MLO	MLO	MLO

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	7.6	7.3	7.7	7.9
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0072	0.026	0.023	0.017	0.022
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.0087	0.029	0.022	0.022	0.028

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	29	20	15	14	15
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.1	1.3	0.96	0.8	0.88
Boron (water soluble)	mg/kg	0.2	MCERTS	0.8	2	1.1	0.3	1.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	45	42	38	31	36
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	45	44	39	32	36
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16	19	12	11	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	19	33	22	19	22
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23	25	18	17	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	69	61	53	46	49
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	62	92	58	53	61

Analytical Report Number: 22-83964  
Project / Site name: Begbroke

Lab Sample Number	2423858				2423859				2423860				2423861				2423862			
Sample Reference	TP224				TP232				TP234				TP230				TP231			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	0.50				0.20				0.20				0.20				0.20			
Date Sampled	08/09/2022				07/09/2022				07/09/2022				07/09/2022				07/09/2022			
Time Taken	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status																	

#### Monoaromatics & Oxygenates

Parameter	Units	Limit of detection	Accreditation Status	2423858	2423859	2423860	2423861	2423862
Benzene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
Toluene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
o-xylene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	< 1.0	-

#### Petroleum Hydrocarbons

Parameter	Units	Limit of detection	Accreditation Status	2423858	2423859	2423860	2423861	2423862
TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS_ID_AL</sub>	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS_ID_AL</sub>	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS_ID_AL</sub>	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH_CU_ID_AL</sub>	mg/kg	1	MCERTS	-	-	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH_CU_ID_AL</sub>	mg/kg	2	MCERTS	-	-	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH_CU_ID_AL</sub>	mg/kg	8	MCERTS	-	-	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH_CU_ID_AL</sub>	mg/kg	8	MCERTS	-	-	-	< 8.0	-
TPH-CWG - Aliphatic >EC16 - EC35 <sub>EH_CU_ID_AL</sub>	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH-CWG - Aliphatic > EC35 - EC44 <sub>EH_CU_ID_AL</sub>	mg/kg	8.4	NONE	-	-	-	< 8.4	-
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH_CU+HS_ID_AL</sub>	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH_CU+HS_ID_AL</sub>	mg/kg	10	NONE	-	-	-	< 10	-

Parameter	Units	Limit of detection	Accreditation Status	2423858	2423859	2423860	2423861	2423862
TPH-CWG - Aromatic >EC5 - EC7 <sub>HS_ID_AR</sub>	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS_ID_AR</sub>	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS_ID_AR</sub>	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH_CU_ID_AR</sub>	mg/kg	1	MCERTS	-	-	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH_CU_ID_AR</sub>	mg/kg	2	MCERTS	-	-	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH_CU_ID_AR</sub>	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH_CU_ID_AR</sub>	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH-CWG - Aromatic > EC35 - EC44 <sub>EH_CU_ID_AR</sub>	mg/kg	8.4	NONE	-	-	-	< 8.4	-
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH_CU+HS_ID_AR</sub>	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH_CU+HS_ID_AR</sub>	mg/kg	10	NONE	-	-	-	< 10	-

TPH Total C5 - C44 <sub>EH_CU+HS_ID_TOTAL</sub>	mg/kg	10	NONE	-	-	-	< 10	-
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U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number: 22-83964  
Project / Site name: Begbroke

Lab Sample Number	2423863	2423864	2423865	2423866	2423867			
Sample Reference	TP201	TP205	TP211	WS249	WS252			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.70	0.15	0.15	0.10	0.10			
Date Sampled	09/09/2022	09/09/2022	09/09/2022	06/09/2022	06/09/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	5.8	5.3	4.5	4.4	9.3
Total mass of sample received	kg	0.001	NONE	0.9	0.9	0.9	0.9	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KSZ	KSZ	KSZ	GFI	GFI

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.4	7.8	7.9	6.9	7.9
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0026	0.0042	0.003	0.0096	0.026
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.0027	0.02	0.012	0.015	0.025

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	83	54	39	18	24
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.8	1.5	1.1	0.81	1.2
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	0.5	0.7	0.5	1.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	66	53	40	32	44
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	66	54	41	32	45
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	22	16	8.9	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	18	31	32	15	23
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	48	35	25	16	26
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	130	97	75	51	68
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	100	70	40	76

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Lab Sample Number	2423863				2423864				2423865				2423866				2423867			
Sample Reference	TP201				TP205				TP211				WS249				WS252			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	0.70				0.15				0.15				0.10				0.10			
Date Sampled	09/09/2022				09/09/2022				09/09/2022				06/09/2022				06/09/2022			
Time Taken	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status																	

**Monoaromatics & Oxygenates**

Parameter	Units	Limit of detection	Accreditation Status	2423863	2423864	2423865	2423866	2423867
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-	-
o-xylene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-

**Petroleum Hydrocarbons**

Parameter	Units	Limit of detection	Accreditation Status	2423863	2423864	2423865	2423866	2423867
TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS_ID_AL</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS_ID_AL</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS_ID_AL</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH_CU_ID_AL</sub>	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH_CU_ID_AL</sub>	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH_CU_ID_AL</sub>	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH_CU_ID_AL</sub>	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC35 <sub>EH_CU_ID_AL</sub>	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC35 - EC44 <sub>EH_CU_ID_AL</sub>	mg/kg	8.4	NONE	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH_CU+HS_ID_AL</sub>	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH_CU+HS_ID_AL</sub>	mg/kg	10	NONE	-	-	-	-	-

Parameter	Units	Limit of detection	Accreditation Status	2423863	2423864	2423865	2423866	2423867
TPH-CWG - Aromatic >EC5 - EC7 <sub>HS_ID_AR</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS_ID_AR</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS_ID_AR</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH_CU_ID_AR</sub>	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH_CU_ID_AR</sub>	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH_CU_ID_AR</sub>	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH_CU_ID_AR</sub>	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC35 - EC44 <sub>EH_CU_ID_AR</sub>	mg/kg	8.4	NONE	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH_CU+HS_ID_AR</sub>	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH_CU+HS_ID_AR</sub>	mg/kg	10	NONE	-	-	-	-	-

TPH Total C5 - C44 <sub>EH_CU+HS_ID_TOTAL</sub>	mg/kg	10	NONE	-	-	-	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-83964  
Project / Site name: Begbroke

Lab Sample Number	2423868	2423869	2423870	2423871	2423872			
Sample Reference	WS252	WS239	WS248	TP227	TP221			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.40	0.10	0.10	0.20	0.20			
Date Sampled	06/09/2022	06/09/2022	06/09/2022	05/09/2022	05/09/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	7.7	9.1	4.5	3.9
Total mass of sample received	kg	0.001	NONE	0.9	0.8	0.9	0.4	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KSZ	KSZ	KSZ	KSZ	KSZ

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	8	6.8	8.1	7.5
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.014	0.0043	0.011	0.0027	0.005
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.0053	0.021	0.026	0.013	0.012

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	38	13	14	36	41
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.2	0.64	0.86	1	1.2
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	1	0.5	1.1	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	45	23	33	38	43
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	46	25	34	39	43
Copper (aqua regia extractable)	mg/kg	1	MCERTS	8.5	11	13	16	20
Lead (aqua regia extractable)	mg/kg	1	MCERTS	13	23	55	20	34
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26	15	17	25	28
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	74	41	49	72	74
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	45	48	52	89	91

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Lab Sample Number	2423868				2423869				2423870				2423871				2423872			
Sample Reference	WS252				WS239				WS248				TP227				TP221			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	0.40				0.10				0.10				0.20				0.20			
Date Sampled	06/09/2022				06/09/2022				06/09/2022				05/09/2022				05/09/2022			
Time Taken	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status																	

**Monoaromatics & Oxygenates**

Compound	Units	Limit of detection	Accreditation Status	2423868	2423869	2423870	2423871	2423872
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-	-
o-xylene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-

**Petroleum Hydrocarbons**

Parameter	Units	Limit of detection	Accreditation Status	2423868	2423869	2423870	2423871	2423872
TPH-CWG - Aliphatic >EC5 - EC6 HS_ID_AL	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_ID_AL	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_ID_AL	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_ID_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_ID_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_ID_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_ID_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC35 EH_CU_ID_AL	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC35 - EC44 EH_CU_ID_AL	mg/kg	8.4	NONE	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_ID_AL	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC44) EH_CU+HS_ID_AL	mg/kg	10	NONE	-	-	-	-	-

Parameter	Units	Limit of detection	Accreditation Status	2423868	2423869	2423870	2423871	2423872
TPH-CWG - Aromatic >EC5 - EC7 HS_ID_AR	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_ID_AR	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_ID_AR	mg/kg	0.001	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_ID_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_ID_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_ID_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_ID_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC35 - EC44 EH_CU_ID_AR	mg/kg	8.4	NONE	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_ID_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC44) EH_CU+HS_ID_AR	mg/kg	10	NONE	-	-	-	-	-

TPH Total C5 - C44 EH_CU+HS_ID_TOTAL	mg/kg	10	NONE	-	-	-	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample



**Analytical Report Number : 22-83964**

**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2423858	TP224	None Supplied	0.5	Brown clay and sand.
2423859	TP232	None Supplied	0.2	Brown loam and clay with vegetation.
2423860	TP234	None Supplied	0.2	Brown loam and clay with vegetation and gravel
2423861	TP230	None Supplied	0.2	Brown loam and clay with vegetation and gravel
2423862	TP231	None Supplied	0.2	Brown loam and clay with vegetation and gravel
2423863	TP201	None Supplied	0.7	Brown sandy clay with gravel.
2423864	TP205	None Supplied	0.15	Brown loam and clay with vegetation and gravel
2423865	TP211	None Supplied	0.15	Brown loam and clay with vegetation and gravel
2423866	WS249	None Supplied	0.1	Brown loam and clay with vegetation and gravel
2423867	WS252	None Supplied	0.1	Brown loam and clay with vegetation and gravel
2423868	WS252	None Supplied	0.4	Brown clay and sand with vegetation.
2423869	WS239	None Supplied	0.1	Brown loam and clay with vegetation and gravel
2423870	WS248	None Supplied	0.1	Brown loam with gravel and vegetation.
2423871	TP227	None Supplied	0.2	Brown loam with gravel and vegetation.
2423872	TP221	None Supplied	0.2	Brown loam with gravel and vegetation.

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Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH Chromatogram in Soil	TPH Chromatogram in Soil.	In-house method	L064-PL	D	NONE
Cr (III) in soil	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Fraction Organic Carbon FOC Automated	Determination of fraction of organic carbon in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method	L009	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 22-83964  
 Project / Site name: Begbroke

**Water matrix abbreviations:**

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

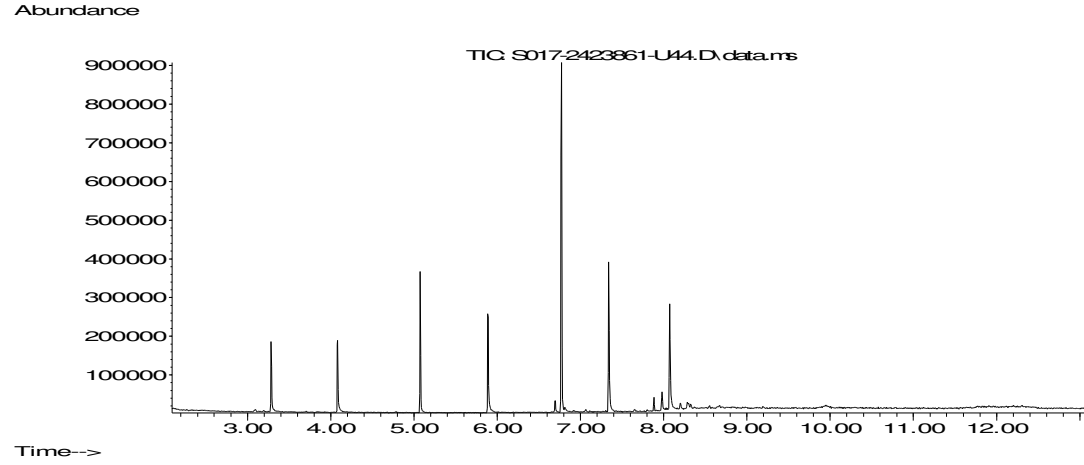
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

### Information in Support of Analytical Results

#### List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total





## Sample Deviation Report



**Analytical Report Number : 22-83964**

**Project / Site name: Begbroke**

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP221	None Supplied	S	2423872	c	Free cyanide in soil	L080-PL	c
TP227	None Supplied	S	2423871	c	Free cyanide in soil	L080-PL	c
WS239	None Supplied	S	2423869	c	Free cyanide in soil	L080-PL	c
WS248	None Supplied	S	2423870	c	Free cyanide in soil	L080-PL	c
WS249	None Supplied	S	2423866	c	Free cyanide in soil	L080-PL	c
WS252	None Supplied	S	2423867	c	Free cyanide in soil	L080-PL	c
WS252	None Supplied	S	2423868	c	Free cyanide in soil	L080-PL	c



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## **Analytical Report Number : 22-83965**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	13/09/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	13/09/2022
<b>Your order number:</b>	PO19941	<b>Analysis completed by:</b>	22/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	22/09/2022
<b>Samples Analysed:</b>	14 soil samples		

**Signed:**

Dominika Warjan  
Junior Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 22-83965  
 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number	2423844	2423845	2423846	2423847	2423848			
Sample Reference	WS225	WS225	WS221	WS247	WS236			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.60	0.20	0.20	0.20	0.20			
Date Sampled	31/08/2022	31/08/2022	31/08/2022	31/08/2022	05/09/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	3.7	4.9	4.3	9.2	2
Total mass of sample received	kg	0.001	NONE	0.9	0.9	0.4	0.9	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SPU	SPU	SPU	SPU	SPU

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.8	8	7.9	7.7	8.1
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0021	0.0069	0.031	0.03	0.011
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.015	0.013	0.023	0.018	0.042

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.22
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.34
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.39
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.24
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.42
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.52
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.21
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.41
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.32
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.49

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	3.56
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	51	27	31	30	25
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.5	0.89	1.2	1.2	0.47
Boron (water soluble)	mg/kg	0.2	MCERTS	1.8	1.1	2.4	0.8	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	52	31	41	44	18
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	52	32	41	44	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	19	13	14	9.5	29
Lead (aqua regia extractable)	mg/kg	1	MCERTS	33	94	21	22	13
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	37	24	24	24	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	94	63	69	74	59
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	100	67	75	77	67

Analytical Report Number: 22-83965  
 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number	2423844				2423845	2423846	2423847	2423848
Sample Reference	WS225				WS225	WS221	WS247	WS236
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.60				0.20	0.20	0.20	0.20
Date Sampled	31/08/2022				31/08/2022	31/08/2022	31/08/2022	05/09/2022
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

#### Monoaromatics & Oxygenates

Compound	µg/kg	Limit of detection	Accreditation Status	2423844	2423845	2423846	2423847	2423848
Benzene	1	1	MCERTS	-	-	-	-	< 1.0
Toluene	1	1	MCERTS	-	-	-	-	< 1.0
Ethylbenzene	1	1	MCERTS	-	-	-	-	< 1.0
p & m-xylene	1	1	MCERTS	-	-	-	-	< 1.0
o-xylene	1	1	MCERTS	-	-	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	1	1	MCERTS	-	-	-	-	< 1.0

#### Petroleum Hydrocarbons

Compound	mg/kg	Limit of detection	Accreditation Status	2423844	2423845	2423846	2423847	2423848
TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS,1D,AL</sub>	0.001	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS,1D,AL</sub>	0.001	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS,1D,AL</sub>	0.001	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH,CU,1D,AL</sub>	1	1	MCERTS	-	-	-	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH,CU,1D,AL</sub>	2	2	MCERTS	-	-	-	-	12
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH,CU,1D,AL</sub>	8	8	MCERTS	-	-	-	-	14
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH,CU,1D,AL</sub>	8	8	MCERTS	-	-	-	-	250
TPH-CWG - Aliphatic >EC16 - EC35 <sub>EH,CU,1D,AL</sub>	10	10	MCERTS	-	-	-	-	270
TPH-CWG - Aliphatic >EC35 - EC44 <sub>EH,CU,1D,AL</sub>	8.4	8.4	NONE	-	-	-	-	470
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH,CU+HS,1D,AL</sub>	10	10	MCERTS	-	-	-	-	280
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH,CU+HS,1D,AL</sub>	10	10	NONE	-	-	-	-	750

Compound	mg/kg	Limit of detection	Accreditation Status	2423844	2423845	2423846	2423847	2423848
TPH-CWG - Aromatic >EC5 - EC7 <sub>HS,1D,AR</sub>	0.001	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS,1D,AR</sub>	0.001	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS,1D,AR</sub>	0.001	0.001	MCERTS	-	-	-	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH,CU,1D,AR</sub>	1	1	MCERTS	-	-	-	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH,CU,1D,AR</sub>	2	2	MCERTS	-	-	-	-	9.7
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH,CU,1D,AR</sub>	10	10	MCERTS	-	-	-	-	13
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH,CU,1D,AR</sub>	10	10	MCERTS	-	-	-	-	440
TPH-CWG - Aromatic >EC35 - EC44 <sub>EH,CU,1D,AR</sub>	8.4	8.4	NONE	-	-	-	-	990
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH,CU+HS,1D,AR</sub>	10	10	MCERTS	-	-	-	-	470
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH,CU+HS,1D,AR</sub>	10	10	NONE	-	-	-	-	1500

TPH Total C5 - C44 <sub>EH,CU+HS,1D,TOTAL</sub>	mg/kg	10	NONE	-	-	-	-	2200
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#### VOCs

Compound	µg/kg	Limit of detection	Accreditation Status	2423844	2423845	2423846	2423847	2423848
Chloromethane	1	1	ISO 17025	-	-	-	-	< 1.0
Chloroethane	1	1	NONE	-	-	-	-	< 1.0
Bromomethane	1	1	ISO 17025	-	-	-	-	< 1.0
Vinyl Chloride	1	1	NONE	-	-	-	-	< 1.0
Trichlorofluoromethane	1	1	NONE	-	-	-	-	< 1.0
1,1-Dichloroethane	1	1	NONE	-	-	-	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	1	1	ISO 17025	-	-	-	-	< 1.0
Cis-1,2-dichloroethane	1	1	MCERTS	-	-	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	1	1	MCERTS	-	-	-	-	< 1.0
1,1-Dichloroethane	1	1	MCERTS	-	-	-	-	< 1.0
2,2-Dichloropropane	1	1	MCERTS	-	-	-	-	< 1.0
Trichloromethane	1	1	MCERTS	-	-	-	-	< 1.0
1,1,1-Trichloroethane	1	1	MCERTS	-	-	-	-	< 1.0
1,2-Dichloroethane	1	1	MCERTS	-	-	-	-	< 1.0
1,1-Dichloropropene	1	1	MCERTS	-	-	-	-	< 1.0
Trans-1,2-dichloroethane	1	1	NONE	-	-	-	-	< 1.0
Benzene	1	1	MCERTS	-	-	-	-	< 1.0

Analytical Report Number: 22-83965  
 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number				2423844	2423845	2423846	2423847	2423848
Sample Reference				WS225	WS225	WS221	WS247	WS236
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.20	0.20	0.20	0.20
Date Sampled				31/08/2022	31/08/2022	31/08/2022	31/08/2022	05/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Styrene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Tribromomethane	µg/kg	1	NONE	-	-	-	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	< 1.0

**SVOCs**

Aniline	mg/kg	0.1	NONE	-	-	-	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	< 0.2



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Lab Sample Number				2423844	2423845	2423846	2423847	2423848
Sample Reference				WS225	WS225	WS221	WS247	WS236
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.20	0.20	0.20	0.20
Date Sampled				31/08/2022	31/08/2022	31/08/2022	31/08/2022	05/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	0.22
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	0.34
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	0.39
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	0.24
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	0.42
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	0.52
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	0.21
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	0.41
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	0.32
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	0.49

U/S = Unsuitable Sample I/S = Insufficient Sample

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Lab Sample Number	2423849	2423850	2423851	2423852	2423853			
Sample Reference	WS228	WS235	WS242	TP206	TP217			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.20	0.20	0.20	0.20	0.40			
Date Sampled	05/09/2022	05/09/2022	05/09/2022	08/09/2022	08/09/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	5.1	5.7	8.2	7.1	2.5
Total mass of sample received	kg	0.001	NONE	0.9	0.9	0.9	0.9	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SPU	SPU	SPU	SPU	SPU

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.5	7.8	7.7	7.8	8.3
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0044	0.0022	0.024	0.0038	0.0029
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.0073	0.011	0.014	0.016	0.0037

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	48	45	24	59	78
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.3	1.2	1.1	1.5	1.5
Boron (water soluble)	mg/kg	0.2	MCERTS	0.4	1	0.6	0.4	0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	49	45	34	55	55
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	50	46	35	56	56
Copper (aqua regia extractable)	mg/kg	1	MCERTS	18	14	18	18	12
Lead (aqua regia extractable)	mg/kg	1	MCERTS	20	18	26	26	15
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	35	28	34	34	30
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	91	80	56	100	110
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	77	96	89	99	80

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Lab Sample Number	2423849				2423850				2423851				2423852				2423853			
Sample Reference	WS228				WS235				WS242				TP206				TP217			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	0.20				0.20				0.20				0.20				0.40			
Date Sampled	05/09/2022				05/09/2022				05/09/2022				08/09/2022				08/09/2022			
Time Taken	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status																	

#### Monoaromatics & Oxygenates

Compound	Units	Limit of detection	Accreditation Status	2423849	2423850	2423851	2423852	2423853
Benzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
o-xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	-	-

#### Petroleum Hydrocarbons

Compound	Units	Limit of detection	Accreditation Status	2423849	2423850	2423851	2423852	2423853
TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS,1D,AL</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS,1D,AL</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS,1D,AL</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH,CU,1D,AL</sub>	mg/kg	1	MCERTS	-	-	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH,CU,1D,AL</sub>	mg/kg	2	MCERTS	-	-	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH,CU,1D,AL</sub>	mg/kg	8	MCERTS	-	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH,CU,1D,AL</sub>	mg/kg	8	MCERTS	-	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC16 - EC35 <sub>EH,CU,1D,AL</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aliphatic > EC35 - EC44 <sub>EH,CU,1D,AL</sub>	mg/kg	8.4	NONE	-	-	< 8.4	-	-
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH,CU+HS,1D,AL</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH,CU+HS,1D,AL</sub>	mg/kg	10	NONE	-	-	< 10	-	-

Compound	Units	Limit of detection	Accreditation Status	2423849	2423850	2423851	2423852	2423853
TPH-CWG - Aromatic >EC5 - EC7 <sub>HS,1D,AR</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS,1D,AR</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS,1D,AR</sub>	mg/kg	0.001	MCERTS	-	-	< 0.001	-	-
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH,CU,1D,AR</sub>	mg/kg	1	MCERTS	-	-	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH,CU,1D,AR</sub>	mg/kg	2	MCERTS	-	-	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH,CU,1D,AR</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH,CU,1D,AR</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic > EC35 - EC44 <sub>EH,CU,1D,AR</sub>	mg/kg	8.4	NONE	-	-	< 8.4	-	-
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH,CU+HS,1D,AR</sub>	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH,CU+HS,1D,AR</sub>	mg/kg	10	NONE	-	-	< 10	-	-

TPH Total C5 - C44 <sub>EH,CU+HS,1D,TOTAL</sub>	mg/kg	10	NONE	-	-	< 10	-	-
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#### VOCs

Compound	Units	Limit of detection	Accreditation Status	2423849	2423850	2423851	2423852	2423853
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-

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 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number				2423849	2423850	2423851	2423852	2423853
Sample Reference				WS228	WS235	WS242	TP206	TP217
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.20	0.20	0.20	0.40
Date Sampled				05/09/2022	05/09/2022	05/09/2022	08/09/2022	08/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-

**SVOCs**

Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-

Analytical Report Number: 22-83965  
 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number				2423849	2423850	2423851	2423852	2423853
Sample Reference				WS228	WS235	WS242	TP206	TP217
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.20	0.20	0.20	0.40
Date Sampled				05/09/2022	05/09/2022	05/09/2022	08/09/2022	08/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number: 22-83965  
 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number	2423854	2423855	2423856	2423857			
Sample Reference	TP218	TP219	TP214	TP223			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.15	0.25	0.50	0.15			
Date Sampled	08/09/2022	08/09/2022	08/09/2022	08/09/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	6.6	5.3	6.8	5.8
Total mass of sample received	kg	0.001	NONE	0.9	0.9	0.5	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO	MLO	MLO

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7	7.7	7.9	7.7
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0078	0.0041	0.0021	0.0056
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.016	0.022	0.0018	0.013

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80

#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	41	51	64	18
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.1	1.4	1.7	0.79
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	0.4	0.3	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	38	50	64	28
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	39	50	64	29
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	20	21	16
Lead (aqua regia extractable)	mg/kg	1	MCERTS	27	27	17	25
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	25	34	41	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	68	97	120	45
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	83	110	94	56

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 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number	2423854			2423855			2423856			2423857		
Sample Reference	TP218			TP219			TP214			TP223		
Sample Number	None Supplied			None Supplied			None Supplied			None Supplied		
Depth (m)	0.15			0.25			0.50			0.15		
Date Sampled	08/09/2022			08/09/2022			08/09/2022			08/09/2022		
Time Taken	None Supplied			None Supplied			None Supplied			None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status									

**Monoaromatics & Oxygenates**

Compound	µg/kg	Limit of detection	Accreditation Status								
Benzene	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-
o-xylene	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-

**Petroleum Hydrocarbons**

Compound	mg/kg	Limit of detection	Accreditation Status								
TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS,1D,AL</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS,1D,AL</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS,1D,AL</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH,CU,1D,AL</sub>	mg/kg	1	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH,CU,1D,AL</sub>	mg/kg	2	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH,CU,1D,AL</sub>	mg/kg	8	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH,CU,1D,AL</sub>	mg/kg	8	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC35 <sub>EH,CU,1D,AL</sub>	mg/kg	10	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aliphatic > EC35 - EC44 <sub>EH,CU,1D,AL</sub>	mg/kg	8.4	NONE	-	-	-	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH,CU+HS,1D,AL</sub>	mg/kg	10	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH,CU+HS,1D,AL</sub>	mg/kg	10	NONE	-	-	-	-	-	-	-	-

Compound	mg/kg	Limit of detection	Accreditation Status								
TPH-CWG - Aromatic >EC5 - EC7 <sub>HS,1D,AR</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS,1D,AR</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS,1D,AR</sub>	mg/kg	0.001	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH,CU,1D,AR</sub>	mg/kg	1	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH,CU,1D,AR</sub>	mg/kg	2	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH,CU,1D,AR</sub>	mg/kg	10	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH,CU,1D,AR</sub>	mg/kg	10	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aromatic > EC35 - EC44 <sub>EH,CU,1D,AR</sub>	mg/kg	8.4	NONE	-	-	-	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH,CU+HS,1D,AR</sub>	mg/kg	10	MCERTS	-	-	-	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH,CU+HS,1D,AR</sub>	mg/kg	10	NONE	-	-	-	-	-	-	-	-

TPH Total C5 - C44 <sub>EH,CU+HS,1D,TOTAL</sub>	mg/kg	10	NONE	-	-	-	-	-	-	-	-
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**VOCs**

Compound	µg/kg	Limit of detection	Accreditation Status								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-	-	-	-

Analytical Report Number: 22-83965  
 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number				2423854	2423855	2423856	2423857
Sample Reference				TP218	TP219	TP214	TP223
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.25	0.50	0.15
Date Sampled				08/09/2022	08/09/2022	08/09/2022	08/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-

**SVOCs**

	mg/kg						
Aniline	mg/kg	0.1	NONE	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-

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 Project / Site name: Begbroke  
 Your Order No: PO19941

Lab Sample Number				2423854	2423855	2423856	2423857
Sample Reference				TP218	TP219	TP214	TP223
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.25	0.50	0.15
Date Sampled				08/09/2022	08/09/2022	08/09/2022	08/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

**Analytical Report Number : 22-83965**

**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2423844	WS225	None Supplied	0.6	Brown sand with gravel.
2423845	WS225	None Supplied	0.2	Brown loam and clay with vegetation and gravel
2423846	WS221	None Supplied	0.2	Brown loam and clay with vegetation and gravel
2423847	WS247	None Supplied	0.2	Brown loam and clay with vegetation and plastic.
2423848	WS236	None Supplied	0.2	Brown loam and sand with vegetation and clinker
2423849	WS228	None Supplied	0.2	Brown loam and clay with vegetation and gravel
2423850	WS235	None Supplied	0.2	Brown loam and clay with vegetation and gravel
2423851	WS242	None Supplied	0.2	Brown loam and clay with vegetation and gravel
2423852	TP206	None Supplied	0.2	Brown loam and clay with vegetation and gravel
2423853	TP217	None Supplied	0.4	Brown loam and sand with vegetation and gravel.
2423854	TP218	None Supplied	0.15	Brown loam and clay with vegetation.
2423855	TP219	None Supplied	0.25	Brown loam and clay with vegetation and gravel
2423856	TP214	None Supplied	0.5	Brown sandy clay with gravel.
2423857	TP223	None Supplied	0.15	Brown loam and clay with vegetation and gravel



Analytical Report Number : 22-83965

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH Chromatogram in Soil	TPH Chromatogram in Soil.	In-house method	L064-PL	D	NONE
Cr (III) in soil	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS

Analytical Report Number : 22-83965

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Fraction Organic Carbon FOC Automated	Determination of fraction of organic carbon in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method	L009	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

## Information in Support of Analytical Results

### List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

## Sample Deviation Report

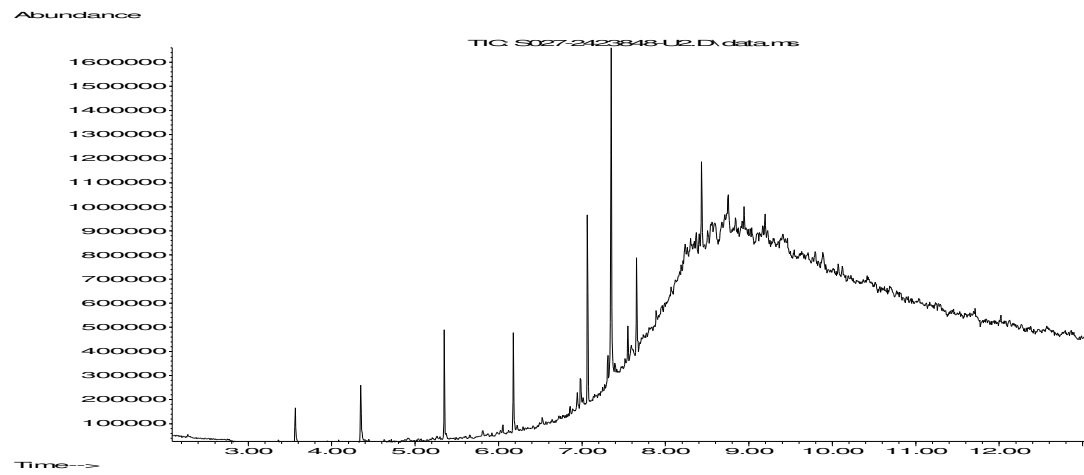


**Analytical Report Number : 22-83965**

**Project / Site name: Begbroke**

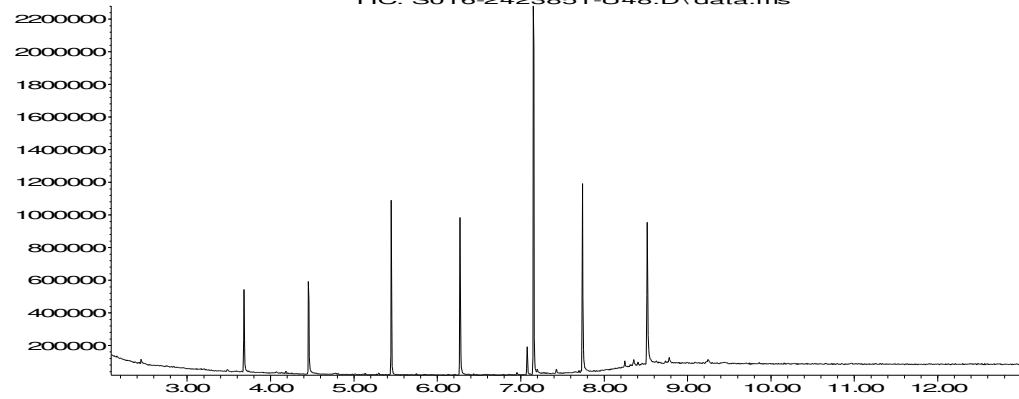
This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS221	None Supplied	S	2423846	c	Free cyanide in soil	L080-PL	c
WS225	None Supplied	S	2423844	c	Free cyanide in soil	L080-PL	c
WS225	None Supplied	S	2423845	c	Free cyanide in soil	L080-PL	c
WS228	None Supplied	S	2423849	c	Free cyanide in soil	L080-PL	c
WS235	None Supplied	S	2423850	c	Free cyanide in soil	L080-PL	c
WS236	None Supplied	S	2423848	c	Free cyanide in soil	L080-PL	c
WS242	None Supplied	S	2423851	c	Free cyanide in soil	L080-PL	c
WS247	None Supplied	S	2423847	c	Free cyanide in soil	L080-PL	c



Abundance

TIC: S016-2423851-U48.D\data.ms



Time-->





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## **Analytical Report Number : 22-83966**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	13/09/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	13/09/2022
<b>Your order number:</b>	PO19941	<b>Analysis completed by:</b>	21/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	21/09/2022
<b>Samples Analysed:</b>	6 soil samples		

*Izabela Wójcik*  
**Signed:** \_\_\_\_\_

Izabela Wójcik  
Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 22-83966  
Project / Site name: Begbroke

Lab Sample Number	2423873	2423874	2423875	2423876	2423877			
Sample Reference	WS224	WS234	WS233	TP226	TP213			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10	0.10	0.50	0.20	0.20			
Date Sampled	08/09/2022	08/09/2022	08/09/2022	06/09/2022	06/09/2022			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.8	12	8.1	6	4.3
Total mass of sample received	kg	0.001	NONE	0.9	0.9	0.9	0.9	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	ASE	ASE	ASE	ASE	ASE

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.6	8.3	7.9	8	7.9
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0061	0.017	0.016	0.017	0.016
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.026	0.021	0.0044	0.019	0.013

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.81
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.32
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.2
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.36	0.49	0.41	0.87
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.21	0.27	0.23	0.44
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.27	0.32	0.3	0.46
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	0.84	1.08	0.94	3.1
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	25	16	24	39	31
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.88	0.99	0.93	1.2	0.94
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	1.9	< 0.2	1	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	32	37	38	43	37
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32	38	38	45	38
Copper (aqua regia extractable)	mg/kg	1	MCERTS	15	16	9.1	21	18
Lead (aqua regia extractable)	mg/kg	1	MCERTS	23	22	10	30	28
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	23	23	31	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	52	51	61	78	62
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	64	72	48	110	70

Analytical Report Number: 22-83966  
Project / Site name: Begbroke

Lab Sample Number	2423873				2423874				2423875				2423876				2423877			
Sample Reference	WS224				WS234				WS233				TP226				TP213			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	0.10				0.10				0.50				0.20				0.20			
Date Sampled	08/09/2022				08/09/2022				08/09/2022				06/09/2022				06/09/2022			
Time Taken	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status																	

#### Monoaromatics & Oxygenates

Compound	Units	Limit of detection	Accreditation Status	2423873	2423874	2423875	2423876	2423877
Benzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
o-xylene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	-	-	-

#### Petroleum Hydrocarbons

Compound	Units	Limit of detection	Accreditation Status	2423873	2423874	2423875	2423876	2423877
TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS,1D,AL</sub>	mg/kg	0.001	MCERTS	< 0.001	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS,1D,AL</sub>	mg/kg	0.001	MCERTS	< 0.001	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS,1D,AL</sub>	mg/kg	0.001	MCERTS	< 0.001	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH,CU,1D,AL</sub>	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH,CU,1D,AL</sub>	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH,CU,1D,AL</sub>	mg/kg	8	MCERTS	< 8.0	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH,CU,1D,AL</sub>	mg/kg	8	MCERTS	< 8.0	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC35 <sub>EH,CU,1D,AL</sub>	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH-CWG - Aliphatic > EC35 - EC44 <sub>EH,CU,1D,AL</sub>	mg/kg	8.4	NONE	< 8.4	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH,CU+HS,1D,AL</sub>	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH,CU+HS,1D,AL</sub>	mg/kg	10	NONE	< 10	-	-	-	-

Compound	Units	Limit of detection	Accreditation Status	2423873	2423874	2423875	2423876	2423877
TPH-CWG - Aromatic >EC5 - EC7 <sub>HS,1D,AR</sub>	mg/kg	0.001	MCERTS	< 0.001	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS,1D,AR</sub>	mg/kg	0.001	MCERTS	< 0.001	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS,1D,AR</sub>	mg/kg	0.001	MCERTS	< 0.001	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH,CU,1D,AR</sub>	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH,CU,1D,AR</sub>	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH,CU,1D,AR</sub>	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH,CU,1D,AR</sub>	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH-CWG - Aromatic > EC35 - EC44 <sub>EH,CU,1D,AR</sub>	mg/kg	8.4	NONE	< 8.4	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH,CU+HS,1D,AR</sub>	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH,CU+HS,1D,AR</sub>	mg/kg	10	NONE	< 10	-	-	-	-

TPH Total C5 - C44 <sub>EH,CU+HS,1D,TOTAL</sub>	mg/kg	10	NONE	< 10	-	-	-	-
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#### Pesticide and Herbicide Screen

GCMS Pesticide Screen		N/A	NONE	-	None Detected	-	-	-
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U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-83966  
Project / Site name: Begbroke

<b>Lab Sample Number</b>				2423878
<b>Sample Reference</b>				TP204
<b>Sample Number</b>				None Supplied
<b>Depth (m)</b>				0.20
<b>Date Sampled</b>				06/09/2022
<b>Time Taken</b>				None Supplied
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	5.4
Total mass of sample received	kg	0.001	NONE	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	ASE

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8
Free Cyanide	mg/kg	1	MCERTS	< 1.0
Water Soluble SO <sub>4</sub> <sup>2-</sup> 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.061
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.018

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	1.6
Acenaphthylene	mg/kg	0.05	MCERTS	2.5
Acenaphthene	mg/kg	0.05	MCERTS	0.66
Fluorene	mg/kg	0.05	MCERTS	2
Phenanthrene	mg/kg	0.05	MCERTS	7.4
Anthracene	mg/kg	0.05	MCERTS	1.7
Fluoranthene	mg/kg	0.05	MCERTS	4.8
Pyrene	mg/kg	0.05	MCERTS	4.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.8
Chrysene	mg/kg	0.05	MCERTS	1.3
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.1
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.75
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.98
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.51
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.82

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	32.3
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	71
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.5
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (III)	mg/kg	1	NONE	69
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	69
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24
Lead (aqua regia extractable)	mg/kg	1	MCERTS	46
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	44
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	100
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110

Analytical Report Number: 22-83966  
Project / Site name: Begbroke

<b>Lab Sample Number</b>				2423878
<b>Sample Reference</b>				TP204
<b>Sample Number</b>				None Supplied
<b>Depth (m)</b>				0.20
<b>Date Sampled</b>				06/09/2022
<b>Time Taken</b>				None Supplied
<b>Analytical Parameter (Soil Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>	

#### Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	-
Toluene	µg/kg	1	MCERTS	-
Ethylbenzene	µg/kg	1	MCERTS	-
p & m-xylene	µg/kg	1	MCERTS	-
o-xylene	µg/kg	1	MCERTS	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-

#### Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS_ID_AL</sub>	mg/kg	0.001	MCERTS	-
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS_ID_AL</sub>	mg/kg	0.001	MCERTS	-
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS_ID_AL</sub>	mg/kg	0.001	MCERTS	-
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH_CU_ID_AL</sub>	mg/kg	1	MCERTS	-
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH_CU_ID_AL</sub>	mg/kg	2	MCERTS	-
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH_CU_ID_AL</sub>	mg/kg	8	MCERTS	-
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH_CU_ID_AL</sub>	mg/kg	8	MCERTS	-
TPH-CWG - Aliphatic >EC16 - EC35 <sub>EH_CU_ID_AL</sub>	mg/kg	10	MCERTS	-
TPH-CWG - Aliphatic > EC35 - EC44 <sub>EH_CU_ID_AL</sub>	mg/kg	8.4	NONE	-
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH_CU+HS_ID_AL</sub>	mg/kg	10	MCERTS	-
TPH-CWG - Aliphatic (EC5 - EC44) <sub>EH_CU+HS_ID_AL</sub>	mg/kg	10	NONE	-

TPH-CWG - Aromatic >EC5 - EC7 <sub>HS_ID_AR</sub>	mg/kg	0.001	MCERTS	-
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS_ID_AR</sub>	mg/kg	0.001	MCERTS	-
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS_ID_AR</sub>	mg/kg	0.001	MCERTS	-
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH_CU_ID_AR</sub>	mg/kg	1	MCERTS	-
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH_CU_ID_AR</sub>	mg/kg	2	MCERTS	-
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH_CU_ID_AR</sub>	mg/kg	10	MCERTS	-
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH_CU_ID_AR</sub>	mg/kg	10	MCERTS	-
TPH-CWG - Aromatic > EC35 - EC44 <sub>EH_CU_ID_AR</sub>	mg/kg	8.4	NONE	-
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH_CU+HS_ID_AR</sub>	mg/kg	10	MCERTS	-
TPH-CWG - Aromatic (EC5 - EC44) <sub>EH_CU+HS_ID_AR</sub>	mg/kg	10	NONE	-

TPH Total C5 - C44 <sub>EH_CU+HS_ID_TOTAL</sub>	mg/kg	10	NONE	-
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#### Pesticide and Herbicide Screen

GCMS Pesticide Screen		N/A	NONE	-
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U/S = Unsuitable Sample I/S = Insufficient Sample



**Analytical Report Number : 22-83966**

**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2423873	WS224	None Supplied	0.1	Brown loam and sand with gravel and vegetation.
2423874	WS234	None Supplied	0.1	Brown loam with gravel and vegetation.
2423875	WS233	None Supplied	0.5	Brown sand with gravel.
2423876	TP226	None Supplied	0.2	Brown loam with gravel and vegetation.
2423877	TP213	None Supplied	0.2	Brown loam with gravel and vegetation.
2423878	TP204	None Supplied	0.2	Brown loam with gravel and vegetation.

Analytical Report Number : 22-83966

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH Chromatogram in Soil	TPH Chromatogram in Soil.	In-house method	L064-PL	D	NONE
Cr (III) in soil	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
GC Pesticide Screen (TIC)	Analysis of unknown pesticides by GCMS	GC Pesticide Screen (TIC)	L064B	D	NONE
Fraction Organic Carbon FOC Automated	Determination of fraction of organic carbon in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method	L009	D	MCERTS

Analytical Report Number : 22-83966  
 Project / Site name: Begbroke

**Water matrix abbreviations:**

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

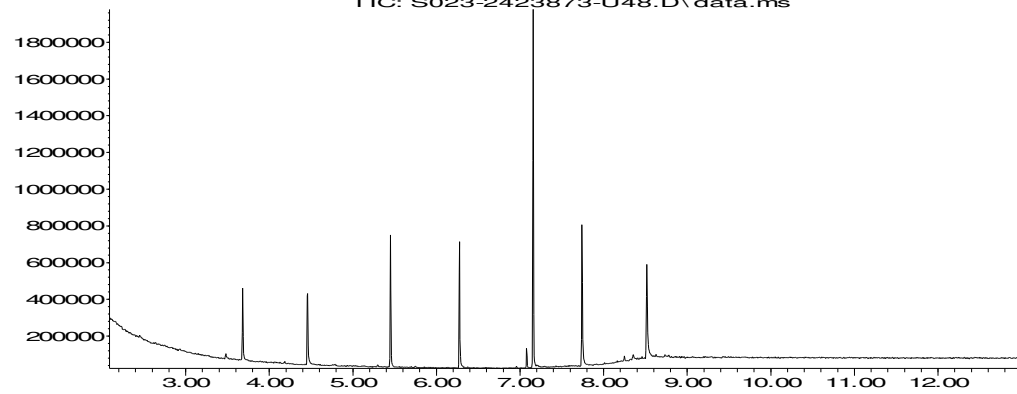
### Information in Support of Analytical Results

#### List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Abundance

TIC: S023-2423873-U48.D\data.ms



Time-->

## Sample Deviation Report



**Analytical Report Number : 22-83966**

**Project / Site name: Begbroke**

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP204	None Supplied	S	2423878	c	Free cyanide in soil	L080-PL	c
TP213	None Supplied	S	2423877	c	Free cyanide in soil	L080-PL	c
TP226	None Supplied	S	2423876	c	Free cyanide in soil	L080-PL	c





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**Nathan Thompson**  
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## **Analytical Report Number : 22-93041**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	27/10/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	27/10/2022
<b>Your order number:</b>	PO21285	<b>Analysis completed by:</b>	02/11/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	02/11/2022
<b>Samples Analysed:</b>	4 water samples		

**Signed:**  
\_\_\_\_\_  
Adam Fenwick  
Technical Reviewer  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :	soils	- 4 weeks from reporting
	leachates	- 2 weeks from reporting
	waters	- 2 weeks from reporting
	asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.



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Analytical Report Number: 22-93041  
Project / Site name: Begbroke

Your Order No: PO21285

Lab Sample Number	2478623			2478624			2478625			2478626		
Sample Reference	BH202			BH203			BH204			WS246		
Sample Number	None Supplied			None Supplied			None Supplied			None Supplied		
Depth (m)	None Supplied			None Supplied			None Supplied			None Supplied		
Date Sampled	27/10/2022			27/10/2022			27/10/2022			27/10/2022		
Time Taken	None Supplied			None Supplied			None Supplied			None Supplied		
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status									

**General Inorganics**

Parameter	Units	N/A	ISO 17025	7.5	7.3	7.1	7.0
pH	pH Units	N/A	ISO 17025	7.5	7.3	7.1	7.0
Electrical Conductivity at 20 °C	µS/cm	10	ISO 17025	540	730	1200	860
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
Sulphate as SO4	µg/l	45	ISO 17025	31300	34800	253000	88800
Chloride	mg/l	0.15	ISO 17025	14	29	29	26
Fluoride	µg/l	50	ISO 17025	250	370	250	340
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	< 15	< 15	< 15	28
Ammoniacal Nitrogen as NH3	µg/l	15	ISO 17025	18	17	15	33
Ammoniacal Nitrogen as NH4	µg/l	15	ISO 17025	19	18	16	35
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	1.03	1.06	2.23	2.14
Nitrate as N	mg/l	0.01	ISO 17025	17.1	12.7	6.19	2.35
Nitrate as NO3	mg/l	0.05	ISO 17025	75.9	56.1	27.4	10.4
Nitrite as N	µg/l	1	ISO 17025	5	6.3	19	21
Nitrite as NO2	µg/l	5	ISO 17025	16	21	62	69

Parameter	Units	1	ISO 17025	327	413	728	523
Hardness - Total	mgCaCO3/l	1	ISO 17025	327	413	728	523
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002	< 0.002	< 0.002	< 0.002

**Total Phenols**

Parameter	Units	1	ISO 17025	< 1.0	< 1.0	1.1	< 1.0
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	1.1	< 1.0

**Speciated PAHs**

Parameter	Units	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001
Dibenzo(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001

**PAH Sums**

Parameter	Units	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene & Benzo(k)fluoranthene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene	µg/l	0.04	NONE	< 0.040	< 0.040	< 0.040	< 0.040

**Total PAH**

Parameter	Units	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16



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Analytical Report Number: 22-93041  
Project / Site name: Begbroke

Your Order No: PO21285

Lab Sample Number	2478623			2478624	2478625	2478626
Sample Reference	BH202			BH203	BH204	WS246
Sample Number	None Supplied			None Supplied	None Supplied	None Supplied
Depth (m)	None Supplied			None Supplied	None Supplied	None Supplied
Date Sampled	27/10/2022			27/10/2022	27/10/2022	27/10/2022
Time Taken	None Supplied			None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status			

**Heavy Metals / Metalloids**

	µg/l	10	ISO 17025	26	60	740	230
Boron (dissolved)	µg/l	0.012	ISO 17025	120	160	260	200
Calcium (dissolved)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (hexavalent)	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (III)	µg/l	0.004	ISO 17025	0.015	0.021	0.021	0.034
Iron (dissolved)	µg/l	4	ISO 17025	15	21	21	34
Magnesium (dissolved)	µg/l	0.005	ISO 17025	4.1	5.3	18	4.6
Sodium (dissolved)	µg/l	0.01	ISO 17025	6.4	14	27	16

Aluminium (dissolved)	µg/l	1	ISO 17025	28	5.8	32	7.1
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.6	0.5	0.8	0.6
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.24	0.17	0.55	0.91
Barium (dissolved)	µg/l	0.06	ISO 17025	12	24	63	39
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03	< 0.02	0.02	0.05
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	< 0.2	< 0.2	< 0.2
Cobalt (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	0.8	0.4
Copper (dissolved)	µg/l	0.5	ISO 17025	1	0.8	1.1	1.5
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	0.7	1.2	430	120
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	0.7	1.2	9.7	11
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.6	< 0.6	< 0.6	0.8
Silver (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Tin (dissolved)	µg/l	0.2	ISO 17025	< 0.20	< 0.20	< 0.20	< 0.20
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.3	< 0.2	0.3	0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	1.4	3.2	2.2	2.6

U/S = Unsuitable Sample I/S = Insufficient Sample



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Analytical Report Number : 22-93041

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 *for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Electrical conductivity at 20oC of water	Determination of electrical conductivity in water by electrometric measurement. Accredited Matrices SW, GW, PW	In-house method	L031-PL	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by Ion Selective Electrode. Accredited matrices: SW, PW, GW.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Total Hardness of water	Determination of hardness in waters by calculation from calcium and magnesium. Accredited Matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry).Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
Speciated EPA-16 PAHs in water (LOW LEVEL Dets)	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270 (low level)	L102B-PL	W	NONE
Ammonia as NH3 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammoniacal Nitrogen as N in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammonium as NH4 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025

Analytical Report Number : 22-93041

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Nitrite as N in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry). Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Cr (III) in water	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
Free cyanide (low level) in water	Determination of free cyanide by distillation followed by colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Bromate in Water	Determination of bromate in waters based on ion chromatography. Accredited matrices GW, PW, SW.	In house method based on Standard Methods for the Analysis of Water and Waste Water, method 4500	L008-PL	W	ISO 17025
Specific PAH sums in water	Determination of PAH compounds in water by extraction in hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L070-PL	W	NONE
Chloride in water	Determination of Chloride (diissolved) colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260. Accredited matrices: SW, PW, GW.	L082-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC. Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.





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## **Analytical Report Number : 22-85131**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	16/09/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	20/09/2022
<b>Your order number:</b>	PO20129	<b>Analysis completed by:</b>	27/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	27/09/2022
<b>Samples Analysed:</b>	22 water samples		

**Signed:**

*Izabela Wójcik*

Izabela Wójcik  
Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :	soils	- 4 weeks from reporting
	leachates	- 2 weeks from reporting
	waters	- 2 weeks from reporting
	asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.



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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number	2430411				2430412				2430413				2430414				2430415			
Sample Reference	BH205				WS201				WS202				WS203				WS205			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Date Sampled	15/09/2022				14/09/2022				14/09/2022				14/09/2022				14/09/2022			
Time Taken	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status																	

**General Inorganics**

Parameter	Units	N/A	ISO 17025	2430411	2430412	2430413	2430414	2430415
pH	pH Units	N/A	ISO 17025	7.2	7.6	7.4	7.4	7.3
Electrical Conductivity at 20 °C	µS/cm	10	ISO 17025	800	660	710	730	870
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sulphate as SO4	µg/l	45	ISO 17025	96900	80000	54500	76200	44400
Chloride	mg/l	0.15	ISO 17025	43	41	58	29	55
Fluoride	µg/l	50	ISO 17025	260	320	420	340	250
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	< 15	< 15	< 15	< 15	18
Ammoniacal Nitrogen as NH3	µg/l	15	ISO 17025	< 15	< 15	< 15	< 15	22
Ammoniacal Nitrogen as NH4	µg/l	15	ISO 17025	15	< 15	< 15	< 15	24
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	2.07	1.54	3.22	1.33	2.28
Nitrate as N	mg/l	0.01	ISO 17025	0.8	8.85	0.25	11.8	11.2
Nitrate as NO3	mg/l	0.05	ISO 17025	3.54	39.2	1.11	52.2	49.6
Nitrite as N	µg/l	1	ISO 17025	24	32	13	58	92
Nitrite as NO2	µg/l	5	ISO 17025	79	110	41	190	300

Parameter	Units	N/A	ISO 17025	2430411	2430412	2430413	2430414	2430415
Hardness - Total	mgCaCO3/l	1	ISO 17025	455	357	355	441	492
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002

**Total Phenols**

Parameter	Units	N/A	ISO 17025	2430411	2430412	2430413	2430414	2430415
Total Phenols (monohydric)	µg/l	1	ISO 17025	2.5	3.1	2.3	1.7	2.5

**Speciated PAHs**

Parameter	Units	N/A	ISO 17025	2430411	2430412	2430413	2430414	2430415
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Dibenzo(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

**PAH Sums**

Parameter	Units	N/A	ISO 17025	2430411	2430412	2430413	2430414	2430415
Sum of Benzo(b)fluoranthene & Benzo(k)fluoranthene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.04	NONE	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040

**Total PAH**

Parameter	Units	N/A	ISO 17025	2430411	2430412	2430413	2430414	2430415
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16



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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number	2430411		2430412		2430413		2430414		2430415	
Sample Reference	BH205		WS201		WS202		WS203		WS205	
Sample Number	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Date Sampled	15/09/2022		14/09/2022		14/09/2022		14/09/2022		14/09/2022	
Time Taken	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status							

**Heavy Metals / Metalloids**

Parameter	Units	Limit of detection	Accreditation Status	2430411	2430412	2430413	2430414	2430415
Boron (dissolved)	µg/l	10	ISO 17025	110	35	56	67	56
Calcium (dissolved)	mg/l	0.012	ISO 17025	170	140	130	170	190
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (III)	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Iron (dissolved)	mg/l	0.004	ISO 17025	0.014	< 0.004	< 0.004	0.13	0.034
Iron (dissolved)	µg/l	4	ISO 17025	14	< 4.0	< 4.0	130	34
Magnesium (dissolved)	mg/l	0.005	ISO 17025	4.7	4.2	4.4	5.9	5.5
Sodium (dissolved)	mg/l	0.01	ISO 17025	36	23	44	17	32

Aluminium (dissolved)	µg/l	1	ISO 17025	6.2	18	3.3	13	9.8
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.6	0.4	0.8	0.5	0.7
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.43	0.24	0.21	0.18	0.24
Barium (dissolved)	µg/l	0.06	ISO 17025	34	25	38	21	46
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.1	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	0.3	< 0.2	< 0.2	< 0.2
Cobalt (dissolved)	µg/l	0.2	ISO 17025	6.1	< 0.2	< 0.2	0.3	0.4
Copper (dissolved)	µg/l	0.5	ISO 17025	3.1	< 0.5	1	1.3	1.4
Lead (dissolved)	µg/l	0.2	ISO 17025	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	110	3.9	1.2	43	1.1
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	12	< 0.5	1.3	1.6	1.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	< 0.6	< 0.6	< 0.6	< 0.6
Silver (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Tin (dissolved)	µg/l	0.2	ISO 17025	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Vanadium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Zinc (dissolved)	µg/l	0.5	ISO 17025	3.2	1.1	0.7	1.9	1.4

**Monoaromatics & Oxygenates**

Benzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
Toluene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
p & m-xylene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
o-xylene	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
Sum of m, p & o-Xylene	µg/l	2	ISO 17025	< 2.0	-	< 2.0	< 2.0	-



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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number	2430411		2430412		2430413		2430414		2430415	
Sample Reference	BH205		WS201		WS202		WS203		WS205	
Sample Number	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Date Sampled	15/09/2022		14/09/2022		14/09/2022		14/09/2022		14/09/2022	
Time Taken	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status							

## Petroleum Hydrocarbons

TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	-	< 10	< 10	-
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	-	< 10	< 10	-
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	-	< 10	< 10	-
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	-	< 10	< 10	-
TPH-CWG - Aliphatic >C16 - C35	µg/l	10	NONE	< 10	-	< 10	< 10	-
TPH-CWG - Aliphatic >C35 - C44	µg/l	10	NONE	< 10	-	< 10	< 10	-
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	-	< 10	< 10	-
TPH-CWG - Aliphatic (C5 - C44)	µg/l	10	NONE	< 10	-	< 10	< 10	-

TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	-	< 1.0	< 1.0	-
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	-	< 10	< 10	-
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	-	< 10	< 10	-
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	-	< 10	< 10	-
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	-	< 10	< 10	-
TPH-CWG - Aromatic >C35 - C44	µg/l	10	NONE	< 10	-	< 10	< 10	-
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	-	< 10	< 10	-
TPH-CWG - Aromatic (C5 - C44)	µg/l	10	NONE	< 10	-	< 10	< 10	-

TPH-CWG Total C5 - C44	µg/l	10	NONE	< 10	-	< 10	< 10	-
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## VOCs

Chloromethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Chloroethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Bromomethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Vinyl Chloride	µg/l	1	NONE	< 1.0	-	-	-	-
Trichlorofluoromethane	µg/l	1	NONE	< 1.0	-	-	-	-
1,1-Dichloroethene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Cis-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,1-Dichloroethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
2,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Trichloromethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,1,1-Trichloroethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,2-Dichloroethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,1-Dichloropropene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Trans-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Benzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Tetrachloromethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Trichloroethene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Dibromomethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Bromodichloromethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Cis-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Trans-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Toluene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,1,2-Trichloroethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-



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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number				2430411	2430412	2430413	2430414	2430415
Sample Reference				BH205	WS201	WS202	WS203	WS205
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/09/2022	14/09/2022	14/09/2022	14/09/2022	14/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					
1,3-Dichloropropane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Dibromochloromethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Tetrachloroethene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,2-Dibromoethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Chlorobenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
p & m-Xylene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Styrene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Tribromomethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
o-Xylene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Isopropylbenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Bromobenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
n-Propylbenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
2-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
4-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,3,5-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
tert-Butylbenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,2,4-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
sec-Butylbenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,3-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
p-Isopropyltoluene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,2-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,4-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Butylbenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,2,4-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
Hexachlorobutadiene	µg/l	1	ISO 17025	< 1.0	-	-	-	-
1,2,3-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	-	-	-	-

Dichloromethane	µg/l	3	NONE	< 3.0	-	-	-	-
Dichlorodifluoromethane	µg/l	1	NONE	< 1.0	-	-	-	-
Total Trihalomethanes	µg/l	4	NONE	< 4.0	-	-	-	-
Total Trichlorobenzenes	ug/l	3	NONE	< 3.0	-	-	-	-
Total Dichlorobenzenes	ug/l	3	NONE	< 3.0	-	-	-	-
Trichloroethylene (TCE) + Tetrachloroethylene (PCE)	ug/l	2	NONE	< 2.0	-	-	-	-
Total 1,2-Dichloroethene	ug/l	2	NONE	< 2.0	-	-	-	-
Total 1,3-Dichloropropane	ug/l	2	NONE	< 2.0	-	-	-	-
Tetrachloroethane	ug/l	2	NONE	< 2.0	-	-	-	-

**SVOCs**

Aniline	µg/l	0.05	NONE	< 0.05	-	-	-	-
Phenol	µg/l	0.05	NONE	< 0.05	-	-	-	-
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	-	-	-	-
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	-	-	-	-
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	-	-	-	-
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	-	-	-	-
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	-	-	-	-
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	-	-	-	-
2-Methylphenol	µg/l	0.05	NONE	< 0.05	-	-	-	-
Hexachloroethane	µg/l	0.05	NONE	< 0.05	-	-	-	-
Nitrobenzene	µg/l	0.05	NONE	< 0.05	-	-	-	-





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Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number				2430411	2430412	2430413	2430414	2430415
Sample Reference				BH205	WS201	WS202	WS203	WS205
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/09/2022	14/09/2022	14/09/2022	14/09/2022	14/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					
4-Methylphenol	µg/l	0.05	NONE	< 0.05	-	-	-	-
Isophorone	µg/l	0.05	NONE	< 0.05	-	-	-	-
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	-	-	-	-
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	-	-	-	-
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	-	-	-	-
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	-	-	-	-
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	-	-	-	-
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	-	-	-	-
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	-	-	-	-
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	-	-	-	-
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	-	-	-	-
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	-	-	-	-
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	-	-	-	-
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	-	-	-	-
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	-	-	-	-
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	-	-	-	-
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	-	-	-	-
Dibenzofuran	µg/l	0.05	NONE	< 0.05	-	-	-	-
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	-	-	-	-
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	-	-	-	-
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	-	-	-	-
Fluorene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
Azobenzene	µg/l	0.05	NONE	< 0.05	-	-	-	-
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	-	-	-	-
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	-	-	-	-
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
Anthracene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
Carbazole	µg/l	0.05	NONE	< 0.05	-	-	-	-
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	-	-	-	-
Anthraquinone	µg/l	0.05	NONE	< 0.05	-	-	-	-
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
Pyrene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	-	-	-	-
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
Chrysene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	-	-	-	-
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample



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Lab Sample Number	2430416				2430417				2430418				2430419				2430420			
Sample Reference	WS207				WS208				WS209				WS210				WS211			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Date Sampled	15/09/2022				15/09/2022				14/09/2022				14/09/2022				14/09/2022			
Time Taken	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status																	

**General Inorganics**

Parameter	Units	N/A	ISO 17025	2430416	2430417	2430418	2430419	2430420
pH	pH Units	N/A	ISO 17025	7.2	7.3	7.4	7.3	7.2
Electrical Conductivity at 20 °C	µS/cm	10	ISO 17025	730	710	690	700	1300
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sulphate as SO4	µg/l	45	ISO 17025	41900	55100	49500	67100	242000
Chloride	mg/l	0.15	ISO 17025	28	22	40	40	170
Fluoride	µg/l	50	ISO 17025	310	220	230	360	360
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	39	< 15	23	< 15	94
Ammoniacal Nitrogen as NH3	µg/l	15	ISO 17025	48	< 15	28	< 15	110
Ammoniacal Nitrogen as NH4	µg/l	15	ISO 17025	50	< 15	29	< 15	120
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3	2.14	1.37	1.19	3.74
Nitrate as N	mg/l	0.01	ISO 17025	0.08	4.55	13.5	12	0.15
Nitrate as NO3	mg/l	0.05	ISO 17025	0.35	20.2	59.9	52.9	0.66
Nitrite as N	µg/l	1	ISO 17025	1.6	100	11	75	2.8
Nitrite as NO2	µg/l	5	ISO 17025	5.3	340	35	240	9.2

Parameter	Units	N/A	ISO 17025	2430416	2430417	2430418	2430419	2430420
Hardness - Total	mgCaCO3/l	1	ISO 17025	444	452	396	415	531
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002

**Total Phenols**

Parameter	Units	N/A	ISO 17025	2430416	2430417	2430418	2430419	2430420
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.8	1.8	1.7	1.4	1.4

**Speciated PAHs**

Parameter	Units	N/A	ISO 17025	2430416	2430417	2430418	2430419	2430420
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Dibenzo(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

**PAH Sums**

Parameter	Units	N/A	ISO 17025	2430416	2430417	2430418	2430419	2430420
Sum of Benzo(b)fluoranthene & Benzo(k)fluoranthene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.04	NONE	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040

**Total PAH**

Parameter	Units	N/A	ISO 17025	2430416	2430417	2430418	2430419	2430420
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16



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Lab Sample Number	2430416		2430417		2430418		2430419		2430420	
Sample Reference	WS207		WS208		WS209		WS210		WS211	
Sample Number	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Date Sampled	15/09/2022		15/09/2022		14/09/2022		14/09/2022		14/09/2022	
Time Taken	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status							

**Heavy Metals / Metalloids**

Parameter	Units	Limit of detection	Accreditation Status	2430416	2430417	2430418	2430419	2430420
Boron (dissolved)	µg/l	10	ISO 17025	38	56	47	48	50
Calcium (dissolved)	mg/l	0.012	ISO 17025	170	170	150	160	200
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (III)	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Iron (dissolved)	mg/l	0.004	ISO 17025	0.008	0.008	0.15	< 0.004	0.019
Iron (dissolved)	µg/l	4	ISO 17025	7.6	8.3	150	< 4.0	19
Magnesium (dissolved)	mg/l	0.005	ISO 17025	3.5	4.4	4	4.1	9.7
Sodium (dissolved)	mg/l	0.01	ISO 17025	18	16	21	31	130

Aluminium (dissolved)	µg/l	1	ISO 17025	3.3	4.7	< 1.0	1.7	12
Antimony (dissolved)	µg/l	0.4	ISO 17025	1.3	0.6	< 0.4	0.5	0.5
Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.73	0.24	0.27	< 0.15	0.93
Barium (dissolved)	µg/l	0.06	ISO 17025	34	24	19	19	160
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	0.2	< 0.2
Cobalt (dissolved)	µg/l	0.2	ISO 17025	0.8	< 0.2	0.3	0.3	0.4
Copper (dissolved)	µg/l	0.5	ISO 17025	0.6	1.2	2.9	0.6	1.6
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	98	9.6	11	1.3	600
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	3.5	2.2	0.7	0.8	5.6
Selenium (dissolved)	µg/l	0.6	ISO 17025	1.5	< 0.6	< 0.6	1.1	1
Silver (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Tin (dissolved)	µg/l	0.2	ISO 17025	< 0.20	0.23	< 0.20	< 0.20	< 0.20
Vanadium (dissolved)	µg/l	0.2	ISO 17025	1.3	< 0.2	< 0.2	< 0.2	0.5
Zinc (dissolved)	µg/l	0.5	ISO 17025	3.7	1.4	1.2	2	1.3

**Monoaromatics & Oxygenates**

Benzene	µg/l	1	ISO 17025	-	< 1.0	-	-	< 1.0
Toluene	µg/l	1	ISO 17025	-	< 1.0	-	-	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	< 1.0
p & m-xylene	µg/l	1	ISO 17025	-	< 1.0	-	-	< 1.0
o-xylene	µg/l	1	ISO 17025	-	< 1.0	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	-	< 1.0	-	-	< 1.0
Sum of m, p & o-Xylene	µg/l	2	ISO 17025	-	< 2.0	-	-	< 2.0



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Lab Sample Number	2430416		2430417		2430418		2430419		2430420	
Sample Reference	WS207		WS208		WS209		WS210		WS211	
Sample Number	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Date Sampled	15/09/2022		15/09/2022		14/09/2022		14/09/2022		14/09/2022	
Time Taken	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status							

## Petroleum Hydrocarbons

Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status						
TPH-CWG - Aliphatic >C5 - C6 <sub>HS_ID_AL</sub>	µg/l	1	ISO 17025	-	< 1.0	-	-	-	< 1.0
TPH-CWG - Aliphatic >C6 - C8 <sub>HS_ID_AL</sub>	µg/l	1	ISO 17025	-	< 1.0	-	-	-	< 1.0
TPH-CWG - Aliphatic >C8 - C10 <sub>HS_ID_AL</sub>	µg/l	1	ISO 17025	-	< 1.0	-	-	-	< 1.0
TPH-CWG - Aliphatic >C10 - C12 <sub>EH_ID_AL_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10
TPH-CWG - Aliphatic >C12 - C16 <sub>EH_ID_AL_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10
TPH-CWG - Aliphatic >C16 - C21 <sub>EH_ID_AL_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10
TPH-CWG - Aliphatic >C21 - C35 <sub>EH_ID_AL_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10
TPH-CWG - Aliphatic >C16 - C35 <sub>EH_ID_AL_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10
TPH-CWG - Aliphatic >C35 - C44 <sub>EH_ID_AL_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10
TPH-CWG - Aliphatic (C5 - C35) <sub>HS+EH_ID_AL_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10
TPH-CWG - Aliphatic (C5 - C44) <sub>HS+EH_ID_AR_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10

TPH-CWG - Aromatic >C5 - C7 <sub>HS_ID_AR</sub>	µg/l	1	ISO 17025	-	< 1.0	-	-	-	< 1.0
TPH-CWG - Aromatic >C7 - C8 <sub>HS_ID_AR</sub>	µg/l	1	ISO 17025	-	< 1.0	-	-	-	< 1.0
TPH-CWG - Aromatic >C8 - C10 <sub>HS_ID_AR</sub>	µg/l	1	ISO 17025	-	< 1.0	-	-	-	< 1.0
TPH-CWG - Aromatic >C10 - C12 <sub>EH_ID_AR_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10
TPH-CWG - Aromatic >C12 - C16 <sub>EH_ID_AR_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10
TPH-CWG - Aromatic >C16 - C21 <sub>EH_ID_AR_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10
TPH-CWG - Aromatic >C21 - C35 <sub>EH_ID_AR_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10
TPH-CWG - Aromatic >C35 - C44 <sub>EH_ID_AR_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10
TPH-CWG - Aromatic (C5 - C35) <sub>HS+EH_ID_AR_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10
TPH-CWG - Aromatic (C5 - C44) <sub>HS+EH_ID_AR_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10

TPH-CWG Total C5 - C44 <sub>EH+HS_ID_TOTAL_#1_#2_MS</sub>	µg/l	10	NONE	-	< 10	-	-	-	< 10
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## VOCs

Chloromethane	µg/l	1	ISO 17025	-	-	-	-	-	-
Chloroethane	µg/l	1	ISO 17025	-	-	-	-	-	-
Bromomethane	µg/l	1	ISO 17025	-	-	-	-	-	-
Vinyl Chloride	µg/l	1	NONE	-	-	-	-	-	-
Trichlorofluoromethane	µg/l	1	NONE	-	-	-	-	-	-
1,1-Dichloroethene	µg/l	1	ISO 17025	-	-	-	-	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	ISO 17025	-	-	-	-	-	-
Cis-1,2-dichloroethene	µg/l	1	ISO 17025	-	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	-	-	-	-	-	-
1,1-Dichloroethane	µg/l	1	ISO 17025	-	-	-	-	-	-
2,2-Dichloropropane	µg/l	1	ISO 17025	-	-	-	-	-	-
Trichloromethane	µg/l	1	ISO 17025	-	-	-	-	-	-
1,1,1-Trichloroethane	µg/l	1	ISO 17025	-	-	-	-	-	-
1,2-Dichloroethane	µg/l	1	ISO 17025	-	-	-	-	-	-
1,1-Dichloropropene	µg/l	1	ISO 17025	-	-	-	-	-	-
Trans-1,2-dichloroethene	µg/l	1	ISO 17025	-	-	-	-	-	-
Benzene	µg/l	1	ISO 17025	-	-	-	-	-	-
Tetrachloromethane	µg/l	1	ISO 17025	-	-	-	-	-	-
1,2-Dichloropropane	µg/l	1	ISO 17025	-	-	-	-	-	-
Trichloroethene	µg/l	1	ISO 17025	-	-	-	-	-	-
Dibromomethane	µg/l	1	ISO 17025	-	-	-	-	-	-
Bromodichloromethane	µg/l	1	ISO 17025	-	-	-	-	-	-
Cis-1,3-dichloropropene	µg/l	1	ISO 17025	-	-	-	-	-	-
Trans-1,3-dichloropropene	µg/l	1	ISO 17025	-	-	-	-	-	-
Toluene	µg/l	1	ISO 17025	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/l	1	ISO 17025	-	-	-	-	-	-



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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number				2430416	2430417	2430418	2430419	2430420
Sample Reference				WS207	WS208	WS209	WS210	WS211
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/09/2022	15/09/2022	14/09/2022	14/09/2022	14/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					
1,3-Dichloropropane	µg/l	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/l	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/l	1	ISO 17025	-	-	-	-	-
1,2-Dibromoethane	µg/l	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/l	1	ISO 17025	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/l	1	ISO 17025	-	-	-	-	-
Ethylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
p & m-Xylene	µg/l	1	ISO 17025	-	-	-	-	-
Styrene	µg/l	1	ISO 17025	-	-	-	-	-
Tribromomethane	µg/l	1	ISO 17025	-	-	-	-	-
o-Xylene	µg/l	1	ISO 17025	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/l	1	ISO 17025	-	-	-	-	-
Isopropylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
Bromobenzene	µg/l	1	ISO 17025	-	-	-	-	-
n-Propylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/l	1	ISO 17025	-	-	-	-	-
4-Chlorotoluene	µg/l	1	ISO 17025	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
1,3-Dichlorobenzene	µg/l	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/l	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/l	1	ISO 17025	-	-	-	-	-
1,4-Dichlorobenzene	µg/l	1	ISO 17025	-	-	-	-	-
Butylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/l	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/l	1	ISO 17025	-	-	-	-	-
Hexachlorobutadiene	µg/l	1	ISO 17025	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/l	1	ISO 17025	-	-	-	-	-

Dichloromethane	µg/l	3	NONE	-	-	-	-	-
Dichlorodifluoromethane	µg/l	1	NONE	-	-	-	-	-
Total Trihalomethanes	µg/l	4	NONE	-	-	-	-	-
Total Trichlorobenzenes	ug/l	3	NONE	-	-	-	-	-
Total Dichlorobenzenes	ug/l	3	NONE	-	-	-	-	-
Trichloroethylene (TCE) + Tetrachloroethylene (PCE)	ug/l	2	NONE	-	-	-	-	-
Total 1,2-Dichloroethene	ug/l	2	NONE	-	-	-	-	-
Total 1,3-Dichloropropane	ug/l	2	NONE	-	-	-	-	-
Tetrachloroethane	ug/l	2	NONE	-	-	-	-	-

**SVOCs**

Aniline	µg/l	0.05	NONE	-	-	-	-	-
Phenol	µg/l	0.05	NONE	-	-	-	-	-
2-Chlorophenol	µg/l	0.05	NONE	-	-	-	-	-
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	-	-	-	-	-
1,3-Dichlorobenzene	µg/l	0.05	NONE	-	-	-	-	-
1,2-Dichlorobenzene	µg/l	0.05	NONE	-	-	-	-	-
1,4-Dichlorobenzene	µg/l	0.05	NONE	-	-	-	-	-
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	-	-	-	-	-
2-Methylphenol	µg/l	0.05	NONE	-	-	-	-	-
Hexachloroethane	µg/l	0.05	NONE	-	-	-	-	-
Nitrobenzene	µg/l	0.05	NONE	-	-	-	-	-





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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number				2430416	2430417	2430418	2430419	2430420
Sample Reference				WS207	WS208	WS209	WS210	WS211
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/09/2022	15/09/2022	14/09/2022	14/09/2022	14/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					
4-Methylphenol	µg/l	0.05	NONE	-	-	-	-	-
Isophorone	µg/l	0.05	NONE	-	-	-	-	-
2-Nitrophenol	µg/l	0.05	NONE	-	-	-	-	-
2,4-Dimethylphenol	µg/l	0.05	NONE	-	-	-	-	-
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	-	-	-	-	-
Naphthalene	µg/l	0.01	ISO 17025	-	-	-	-	-
2,4-Dichlorophenol	µg/l	0.05	NONE	-	-	-	-	-
4-Chloroaniline	µg/l	0.05	NONE	-	-	-	-	-
Hexachlorobutadiene	µg/l	0.05	NONE	-	-	-	-	-
4-Chloro-3-methylphenol	µg/l	0.05	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	µg/l	0.05	NONE	-	-	-	-	-
2,4,5-Trichlorophenol	µg/l	0.05	NONE	-	-	-	-	-
2-Methylnaphthalene	µg/l	0.05	NONE	-	-	-	-	-
2-Chloronaphthalene	µg/l	0.05	NONE	-	-	-	-	-
Dimethylphthalate	µg/l	0.05	NONE	-	-	-	-	-
2,6-Dinitrotoluene	µg/l	0.05	NONE	-	-	-	-	-
Acenaphthylene	µg/l	0.01	ISO 17025	-	-	-	-	-
Acenaphthene	µg/l	0.01	ISO 17025	-	-	-	-	-
2,4-Dinitrotoluene	µg/l	0.05	NONE	-	-	-	-	-
Dibenzofuran	µg/l	0.05	NONE	-	-	-	-	-
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	-	-	-	-	-
Diethyl phthalate	µg/l	0.05	NONE	-	-	-	-	-
4-Nitroaniline	µg/l	0.05	NONE	-	-	-	-	-
Fluorene	µg/l	0.01	ISO 17025	-	-	-	-	-
Azobenzene	µg/l	0.05	NONE	-	-	-	-	-
Bromophenyl phenyl ether	µg/l	0.05	NONE	-	-	-	-	-
Hexachlorobenzene	µg/l	0.05	NONE	-	-	-	-	-
Phenanthrene	µg/l	0.01	ISO 17025	-	-	-	-	-
Anthracene	µg/l	0.01	ISO 17025	-	-	-	-	-
Carbazole	µg/l	0.05	NONE	-	-	-	-	-
Dibutyl phthalate	µg/l	0.05	NONE	-	-	-	-	-
Anthraquinone	µg/l	0.05	NONE	-	-	-	-	-
Fluoranthene	µg/l	0.01	ISO 17025	-	-	-	-	-
Pyrene	µg/l	0.01	ISO 17025	-	-	-	-	-
Butyl benzyl phthalate	µg/l	0.05	NONE	-	-	-	-	-
Benzo(a)anthracene	µg/l	0.01	ISO 17025	-	-	-	-	-
Chrysene	µg/l	0.01	ISO 17025	-	-	-	-	-
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	-	-	-	-	-
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	-	-	-	-	-
Benzo(a)pyrene	µg/l	0.01	ISO 17025	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	-	-	-	-	-
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	-	-	-	-	-
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	-	-	-	-	-
3&4-Methylphenol	µg/l	0.1	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample



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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number	2430421				2430422				2430423				2430424				2430425			
Sample Reference	WS215				WS216				WS220				WS232				WS233			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Date Sampled	15/09/2022				14/09/2022				15/09/2022				15/09/2022				15/09/2022			
Time Taken	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status																	

**General Inorganics**

Parameter	Units	N/A	ISO 17025	2430421	2430422	2430423	2430424	2430425
pH	pH Units	N/A	ISO 17025	7.3	7.3	7.4	7.4	7.3
Electrical Conductivity at 20 °C	µS/cm	10	ISO 17025	720	840	630	790	830
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sulphate as SO4	µg/l	45	ISO 17025	56800	31600	55300	163000	176000
Chloride	mg/l	0.15	ISO 17025	34	57	25	31	30
Fluoride	µg/l	50	ISO 17025	390	360	330	350	290
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	< 15	< 15	< 15	< 15	< 15
Ammoniacal Nitrogen as NH3	µg/l	15	ISO 17025	< 15	< 15	< 15	< 15	< 15
Ammoniacal Nitrogen as NH4	µg/l	15	ISO 17025	< 15	< 15	< 15	< 15	< 15
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	1.8	1.58	1.05	1.75	1.67
Nitrate as N	mg/l	0.01	ISO 17025	3.67	29	12.4	7.52	6.32
Nitrate as NO3	mg/l	0.05	ISO 17025	16.3	128	54.9	33.3	28
Nitrite as N	µg/l	1	ISO 17025	50	150	3.8	240	180
Nitrite as NO2	µg/l	5	ISO 17025	170	490	13	780	580

Parameter	Units	N/A	ISO 17025	2430421	2430422	2430423	2430424	2430425
Hardness - Total	mgCaCO3/l	1	ISO 17025	424	459	369	497	465
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002

**Total Phenols**

Parameter	Units	N/A	ISO 17025	2430421	2430422	2430423	2430424	2430425
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	3.2	2

**Speciated PAHs**

Parameter	Units	N/A	ISO 17025	2430421	2430422	2430423	2430424	2430425
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Dibenzo(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

**PAH Sums**

Parameter	Units	N/A	ISO 17025	2430421	2430422	2430423	2430424	2430425
Sum of Benzo(b)fluoranthene & Benzo(k)fluoranthene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.04	NONE	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040

**Total PAH**

Parameter	Units	N/A	ISO 17025	2430421	2430422	2430423	2430424	2430425
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16



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Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number	2430421				2430422				2430423				2430424				2430425			
Sample Reference	WS215				WS216				WS220				WS232				WS233			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Date Sampled	15/09/2022				14/09/2022				15/09/2022				15/09/2022				15/09/2022			
Time Taken	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status																	

**Heavy Metals / Metalloids**

Parameter	Units	Limit of detection	Accreditation Status	2430421	2430422	2430423	2430424	2430425
Boron (dissolved)	µg/l	10	ISO 17025	36	30	25	29	35
Calcium (dissolved)	mg/l	0.012	ISO 17025	170	180	140	190	180
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (III)	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Iron (dissolved)	mg/l	0.004	ISO 17025	0.022	0.033	0.028	0.018	0.033
Iron (dissolved)	µg/l	4	ISO 17025	22	33	28	18	33
Magnesium (dissolved)	mg/l	0.005	ISO 17025	2.8	4.5	3.3	3.9	4.7
Sodium (dissolved)	mg/l	0.01	ISO 17025	16	19	12	17	34

Aluminium (dissolved)	µg/l	1	ISO 17025	19	5.6	9.9	12	4.9
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.5	0.7	0.5	0.6	0.7
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.24	0.19	0.18	0.4	0.2
Barium (dissolved)	µg/l	0.06	ISO 17025	19	19	19	17	19
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	0.3	0.8	0.2	< 0.2
Cobalt (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	0.6	1	< 0.5	0.7	0.6
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	1.4	2.8	1	1.6	1.7
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.9	1.1	< 0.5	1.4	< 0.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	1.7	10
Silver (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Tin (dissolved)	µg/l	0.2	ISO 17025	< 0.20	< 0.20	< 0.20	< 0.20	0.28
Vanadium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	0.3	< 0.2
Zinc (dissolved)	µg/l	0.5	ISO 17025	1	1	0.7	1.2	1.3

**Monoaromatics & Oxygenates**

Parameter	Units	Limit of detection	Accreditation Status	2430421	2430422	2430423	2430424	2430425
Benzene	µg/l	1	ISO 17025	-	-	< 1.0	-	-
Toluene	µg/l	1	ISO 17025	-	-	< 1.0	-	-
Ethylbenzene	µg/l	1	ISO 17025	-	-	< 1.0	-	-
p & m-xylene	µg/l	1	ISO 17025	-	-	< 1.0	-	-
o-xylene	µg/l	1	ISO 17025	-	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	-	-	< 1.0	-	-
Sum of m, p & o-Xylene	µg/l	2	ISO 17025	-	-	< 2.0	-	-



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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number	2430421	2430422	2430423	2430424	2430425
Sample Reference	WS215	WS216	WS220	WS232	WS233
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled	15/09/2022	14/09/2022	15/09/2022	15/09/2022	15/09/2022
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		

**Petroleum Hydrocarbons**

TPH-CWG - Aliphatic >C5 - C6	HS_ID_AL	µg/l	1	ISO 17025	-	-	< 1.0	-	-
TPH-CWG - Aliphatic >C6 - C8	HS_ID_AL	µg/l	1	ISO 17025	-	-	< 1.0	-	-
TPH-CWG - Aliphatic >C8 - C10	HS_ID_AL	µg/l	1	ISO 17025	-	-	< 1.0	-	-
TPH-CWG - Aliphatic >C10 - C12	EH_ID_AL_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-
TPH-CWG - Aliphatic >C12 - C16	EH_ID_AL_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-
TPH-CWG - Aliphatic >C16 - C21	EH_ID_AL_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-
TPH-CWG - Aliphatic >C21 - C35	EH_ID_AL_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-
TPH-CWG - Aliphatic >C16 - C35	EH_ID_AL_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-
TPH-CWG - Aliphatic >C35 - C44	EH_ID_AL_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-
TPH-CWG - Aliphatic (C5 - C35)	HS+EH_ID_AL_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-
TPH-CWG - Aliphatic (C5 - C44)	HS+EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-

TPH-CWG - Aromatic >C5 - C7	HS_ID_AR	µg/l	1	ISO 17025	-	-	< 1.0	-	-
TPH-CWG - Aromatic >C7 - C8	HS_ID_AR	µg/l	1	ISO 17025	-	-	< 1.0	-	-
TPH-CWG - Aromatic >C8 - C10	HS_ID_AR	µg/l	1	ISO 17025	-	-	< 1.0	-	-
TPH-CWG - Aromatic >C10 - C12	EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-
TPH-CWG - Aromatic >C12 - C16	EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-
TPH-CWG - Aromatic >C16 - C21	EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-
TPH-CWG - Aromatic >C21 - C35	EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-
TPH-CWG - Aromatic >C35 - C44	EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-
TPH-CWG - Aromatic (C5 - C35)	HS+EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-
TPH-CWG - Aromatic (C5 - C44)	HS+EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-

TPH-CWG Total C5 - C44	EH+HS_ID_TOTAL_#1_#2_MS	µg/l	10	NONE	-	-	< 10	-	-
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**VOCs**

Chloromethane	µg/l	1	ISO 17025	-	-	-	-	-	-
Chloroethane	µg/l	1	ISO 17025	-	-	-	-	-	-
Bromomethane	µg/l	1	ISO 17025	-	-	-	-	-	-
Vinyl Chloride	µg/l	1	NONE	-	-	-	-	-	-
Trichlorofluoromethane	µg/l	1	NONE	-	-	-	-	-	-
1,1-Dichloroethene	µg/l	1	ISO 17025	-	-	-	-	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	ISO 17025	-	-	-	-	-	-
Cis-1,2-dichloroethene	µg/l	1	ISO 17025	-	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	-	-	-	-	-	-
1,1-Dichloroethane	µg/l	1	ISO 17025	-	-	-	-	-	-
2,2-Dichloropropane	µg/l	1	ISO 17025	-	-	-	-	-	-
Trichloromethane	µg/l	1	ISO 17025	-	-	-	-	-	-
1,1,1-Trichloroethane	µg/l	1	ISO 17025	-	-	-	-	-	-
1,2-Dichloroethane	µg/l	1	ISO 17025	-	-	-	-	-	-
1,1-Dichloropropene	µg/l	1	ISO 17025	-	-	-	-	-	-
Trans-1,2-dichloroethene	µg/l	1	ISO 17025	-	-	-	-	-	-
Benzene	µg/l	1	ISO 17025	-	-	-	-	-	-
Tetrachloromethane	µg/l	1	ISO 17025	-	-	-	-	-	-
1,2-Dichloropropane	µg/l	1	ISO 17025	-	-	-	-	-	-
Trichloroethene	µg/l	1	ISO 17025	-	-	-	-	-	-
Dibromomethane	µg/l	1	ISO 17025	-	-	-	-	-	-
Bromodichloromethane	µg/l	1	ISO 17025	-	-	-	-	-	-
Cis-1,3-dichloropropene	µg/l	1	ISO 17025	-	-	-	-	-	-
Trans-1,3-dichloropropene	µg/l	1	ISO 17025	-	-	-	-	-	-
Toluene	µg/l	1	ISO 17025	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/l	1	ISO 17025	-	-	-	-	-	-



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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number				2430421	2430422	2430423	2430424	2430425
Sample Reference				WS215	WS216	WS220	WS232	WS233
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/09/2022	14/09/2022	15/09/2022	15/09/2022	15/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					
1,3-Dichloropropane	µg/l	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/l	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/l	1	ISO 17025	-	-	-	-	-
1,2-Dibromoethane	µg/l	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/l	1	ISO 17025	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/l	1	ISO 17025	-	-	-	-	-
Ethylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
p & m-Xylene	µg/l	1	ISO 17025	-	-	-	-	-
Styrene	µg/l	1	ISO 17025	-	-	-	-	-
Tribromomethane	µg/l	1	ISO 17025	-	-	-	-	-
o-Xylene	µg/l	1	ISO 17025	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/l	1	ISO 17025	-	-	-	-	-
Isopropylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
Bromobenzene	µg/l	1	ISO 17025	-	-	-	-	-
n-Propylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/l	1	ISO 17025	-	-	-	-	-
4-Chlorotoluene	µg/l	1	ISO 17025	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
1,3-Dichlorobenzene	µg/l	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/l	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/l	1	ISO 17025	-	-	-	-	-
1,4-Dichlorobenzene	µg/l	1	ISO 17025	-	-	-	-	-
Butylbenzene	µg/l	1	ISO 17025	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/l	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/l	1	ISO 17025	-	-	-	-	-
Hexachlorobutadiene	µg/l	1	ISO 17025	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/l	1	ISO 17025	-	-	-	-	-

Dichloromethane	µg/l	3	NONE	-	-	-	-	-
Dichlorodifluoromethane	µg/l	1	NONE	-	-	-	-	-
Total Trihalomethanes	µg/l	4	NONE	-	-	-	-	-
Total Trichlorobenzenes	ug/l	3	NONE	-	-	-	-	-
Total Dichlorobenzenes	ug/l	3	NONE	-	-	-	-	-
Trichloroethylene (TCE) + Tetrachloroethylene (PCE)	ug/l	2	NONE	-	-	-	-	-
Total 1,2-Dichloroethene	ug/l	2	NONE	-	-	-	-	-
Total 1,3-Dichloropropane	ug/l	2	NONE	-	-	-	-	-
Tetrachloroethane	ug/l	2	NONE	-	-	-	-	-

**SVOCs**

Aniline	µg/l	0.05	NONE	-	-	-	-	-
Phenol	µg/l	0.05	NONE	-	-	-	-	-
2-Chlorophenol	µg/l	0.05	NONE	-	-	-	-	-
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	-	-	-	-	-
1,3-Dichlorobenzene	µg/l	0.05	NONE	-	-	-	-	-
1,2-Dichlorobenzene	µg/l	0.05	NONE	-	-	-	-	-
1,4-Dichlorobenzene	µg/l	0.05	NONE	-	-	-	-	-
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	-	-	-	-	-
2-Methylphenol	µg/l	0.05	NONE	-	-	-	-	-
Hexachloroethane	µg/l	0.05	NONE	-	-	-	-	-
Nitrobenzene	µg/l	0.05	NONE	-	-	-	-	-





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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number				2430421	2430422	2430423	2430424	2430425
Sample Reference				WS215	WS216	WS220	WS232	WS233
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/09/2022	14/09/2022	15/09/2022	15/09/2022	15/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					
4-Methylphenol	µg/l	0.05	NONE	-	-	-	-	-
Isophorone	µg/l	0.05	NONE	-	-	-	-	-
2-Nitrophenol	µg/l	0.05	NONE	-	-	-	-	-
2,4-Dimethylphenol	µg/l	0.05	NONE	-	-	-	-	-
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	-	-	-	-	-
Naphthalene	µg/l	0.01	ISO 17025	-	-	-	-	-
2,4-Dichlorophenol	µg/l	0.05	NONE	-	-	-	-	-
4-Chloroaniline	µg/l	0.05	NONE	-	-	-	-	-
Hexachlorobutadiene	µg/l	0.05	NONE	-	-	-	-	-
4-Chloro-3-methylphenol	µg/l	0.05	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	µg/l	0.05	NONE	-	-	-	-	-
2,4,5-Trichlorophenol	µg/l	0.05	NONE	-	-	-	-	-
2-Methylnaphthalene	µg/l	0.05	NONE	-	-	-	-	-
2-Chloronaphthalene	µg/l	0.05	NONE	-	-	-	-	-
Dimethylphthalate	µg/l	0.05	NONE	-	-	-	-	-
2,6-Dinitrotoluene	µg/l	0.05	NONE	-	-	-	-	-
Acenaphthylene	µg/l	0.01	ISO 17025	-	-	-	-	-
Acenaphthene	µg/l	0.01	ISO 17025	-	-	-	-	-
2,4-Dinitrotoluene	µg/l	0.05	NONE	-	-	-	-	-
Dibenzofuran	µg/l	0.05	NONE	-	-	-	-	-
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	-	-	-	-	-
Diethyl phthalate	µg/l	0.05	NONE	-	-	-	-	-
4-Nitroaniline	µg/l	0.05	NONE	-	-	-	-	-
Fluorene	µg/l	0.01	ISO 17025	-	-	-	-	-
Azobenzene	µg/l	0.05	NONE	-	-	-	-	-
Bromophenyl phenyl ether	µg/l	0.05	NONE	-	-	-	-	-
Hexachlorobenzene	µg/l	0.05	NONE	-	-	-	-	-
Phenanthrene	µg/l	0.01	ISO 17025	-	-	-	-	-
Anthracene	µg/l	0.01	ISO 17025	-	-	-	-	-
Carbazole	µg/l	0.05	NONE	-	-	-	-	-
Dibutyl phthalate	µg/l	0.05	NONE	-	-	-	-	-
Anthraquinone	µg/l	0.05	NONE	-	-	-	-	-
Fluoranthene	µg/l	0.01	ISO 17025	-	-	-	-	-
Pyrene	µg/l	0.01	ISO 17025	-	-	-	-	-
Butyl benzyl phthalate	µg/l	0.05	NONE	-	-	-	-	-
Benzo(a)anthracene	µg/l	0.01	ISO 17025	-	-	-	-	-
Chrysene	µg/l	0.01	ISO 17025	-	-	-	-	-
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	-	-	-	-	-
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	-	-	-	-	-
Benzo(a)pyrene	µg/l	0.01	ISO 17025	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	-	-	-	-	-
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	-	-	-	-	-
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	-	-	-	-	-
3&4-Methylphenol	µg/l	0.1	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample



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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number	2430426				2430427				2430428				2430429				2430430			
Sample Reference	WS234				WS238				WS239				WS241				WS245			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Date Sampled	15/09/2022				14/09/2022				15/09/2022				15/09/2022				14/09/2022			
Time Taken	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status																	

**General Inorganics**

Parameter	Units	N/A	ISO 17025	7.4	7.3	7.4	7.4	7.3
pH	pH Units	N/A	ISO 17025	7.4	7.3	7.4	7.4	7.3
Electrical Conductivity at 20 °C	µS/cm	10	ISO 17025	690	910	670	760	830
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sulphate as SO4	µg/l	45	ISO 17025	69700	153000	69800	58500	161000
Chloride	mg/l	0.15	ISO 17025	38	70	24	55	44
Fluoride	µg/l	50	ISO 17025	390	380	220	300	270
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	< 15	< 15	< 15	20	18
Ammoniacal Nitrogen as NH3	µg/l	15	ISO 17025	< 15	< 15	< 15	25	21
Ammoniacal Nitrogen as NH4	µg/l	15	ISO 17025	< 15	< 15	< 15	26	23
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3.28	4.74	1.22	2.66	2.43
Nitrate as N	mg/l	0.01	ISO 17025	0.33	0.13	11	0.57	0.73
Nitrate as NO3	mg/l	0.05	ISO 17025	1.46	0.56	48.6	2.53	3.23
Nitrite as N	µg/l	1	ISO 17025	160	10	66	20	250
Nitrite as NO2	µg/l	5	ISO 17025	530	33	220	65	810

Parameter	mgCaCO3/l	1	ISO 17025	389	507	399	369	500
Hardness - Total	mgCaCO3/l	1	ISO 17025	389	507	399	369	500
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002

**Total Phenols**

Parameter	µg/l	1	ISO 17025	1.7	2.2	2.5	2.6	2
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.7	2.2	2.5	2.6	2

**Speciated PAHs**

Parameter	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Dibenzo(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

**PAH Sums**

Parameter	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene & Benzo(k)fluoranthene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.04	NONE	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040

**Total PAH**

Parameter	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16



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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number	2430426				2430427				2430428				2430429				2430430			
Sample Reference	WS234				WS238				WS239				WS241				WS245			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Date Sampled	15/09/2022				14/09/2022				15/09/2022				15/09/2022				14/09/2022			
Time Taken	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status																	

**Heavy Metals / Metalloids**

Parameter	Units	Limit of detection	Accreditation Status	2430426	2430427	2430428	2430429	2430430
Boron (dissolved)	µg/l	10	ISO 17025	49	230	45	82	73
Calcium (dissolved)	mg/l	0.012	ISO 17025	150	180	150	140	190
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (III)	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Iron (dissolved)	mg/l	0.004	ISO 17025	0.03	0.006	0.033	0.016	0.037
Iron (dissolved)	µg/l	4	ISO 17025	30	6.5	33	16	37
Magnesium (dissolved)	mg/l	0.005	ISO 17025	3.6	12	3.3	6.5	4.8
Sodium (dissolved)	mg/l	0.01	ISO 17025	25	33	12	38	29

Aluminium (dissolved)	µg/l	1	ISO 17025	5.9	17	15	5.2	8.6
Antimony (dissolved)	µg/l	0.4	ISO 17025	3.8	2.8	0.5	0.6	0.6
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.29	0.49	0.18	0.59	0.79
Barium (dissolved)	µg/l	0.06	ISO 17025	47	37	19	30	200
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.04	0.05	< 0.02	0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	0.3	< 0.2	< 0.2
Cobalt (dissolved)	µg/l	0.2	ISO 17025	< 0.2	0.6	< 0.2	< 0.2	0.9
Copper (dissolved)	µg/l	0.5	ISO 17025	1.1	1	1	1.5	0.5
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	32	360	3.7	1.5	800
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.1	7	0.5	2.4	4.4
Selenium (dissolved)	µg/l	0.6	ISO 17025	1.6	1.2	0.8	< 0.6	< 0.6
Silver (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Tin (dissolved)	µg/l	0.2	ISO 17025	0.2	< 0.20	< 0.20	< 0.20	< 0.20
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.3	< 0.2	< 0.2	0.4	0.2
Zinc (dissolved)	µg/l	0.5	ISO 17025	2.1	1.9	1.7	1.1	1.6

**Monoaromatics & Oxygenates**

Benzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	-	-
Toluene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	-	-
Ethylbenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	-	-
p & m-xylene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	-	-
o-xylene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	-	< 1.0	< 1.0	-	-
Sum of m, p & o-Xylene	µg/l	2	ISO 17025	-	< 2.0	< 2.0	-	-



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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number	2430426	2430427	2430428	2430429	2430430				
Sample Reference	WS234	WS238	WS239	WS241	WS245				
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied				
Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied				
Date Sampled	15/09/2022	14/09/2022	15/09/2022	15/09/2022	14/09/2022				
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied				
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status						

## Petroleum Hydrocarbons

TPH-CWG - Aliphatic >C5 - C6	HS_ID_AL	µg/l	1	ISO 17025	-	< 1.0	< 1.0	-	-
TPH-CWG - Aliphatic >C6 - C8	HS_ID_AL	µg/l	1	ISO 17025	-	< 1.0	< 1.0	-	-
TPH-CWG - Aliphatic >C8 - C10	HS_ID_AL	µg/l	1	ISO 17025	-	< 1.0	< 1.0	-	-
TPH-CWG - Aliphatic >C10 - C12	EH_ID_AL_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-
TPH-CWG - Aliphatic >C12 - C16	EH_ID_AL_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-
TPH-CWG - Aliphatic >C16 - C21	EH_ID_AL_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-
TPH-CWG - Aliphatic >C21 - C35	EH_ID_AL_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-
TPH-CWG - Aliphatic >C16 - C35	EH_ID_AL_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-
TPH-CWG - Aliphatic >C35 - C44	EH_ID_AL_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-
TPH-CWG - Aliphatic (C5 - C35)	HS+EH_ID_AL_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-
TPH-CWG - Aliphatic (C5 - C44)	HS+EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-

TPH-CWG - Aromatic >C5 - C7	HS_ID_AR	µg/l	1	ISO 17025	-	< 1.0	< 1.0	-	-
TPH-CWG - Aromatic >C7 - C8	HS_ID_AR	µg/l	1	ISO 17025	-	< 1.0	< 1.0	-	-
TPH-CWG - Aromatic >C8 - C10	HS_ID_AR	µg/l	1	ISO 17025	-	< 1.0	< 1.0	-	-
TPH-CWG - Aromatic >C10 - C12	EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-
TPH-CWG - Aromatic >C12 - C16	EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-
TPH-CWG - Aromatic >C16 - C21	EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-
TPH-CWG - Aromatic >C21 - C35	EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-
TPH-CWG - Aromatic >C35 - C44	EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-
TPH-CWG - Aromatic (C5 - C35)	HS+EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-
TPH-CWG - Aromatic (C5 - C44)	HS+EH_ID_AR_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-

TPH-CWG Total C5 - C44	EH+HS_ID_TOTAL_#1_#2_MS	µg/l	10	NONE	-	< 10	< 10	-	-
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## VOCs

Chloromethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
Chloroethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
Bromomethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
Vinyl Chloride	µg/l	1	NONE	-	< 1.0	-	-	-	-
Trichlorofluoromethane	µg/l	1	NONE	-	< 1.0	-	-	-	-
1,1-Dichloroethene	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
Cis-1,2-dichloroethene	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
1,1-Dichloroethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
2,2-Dichloropropane	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
Trichloromethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
1,1,1-Trichloroethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
1,2-Dichloroethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
1,1-Dichloropropene	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
Trans-1,2-dichloroethene	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
Benzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
Tetrachloromethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
1,2-Dichloropropane	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
Trichloroethene	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
Dibromomethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
Bromodichloromethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
Cis-1,3-dichloropropene	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
Trans-1,3-dichloropropene	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
Toluene	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-
1,1,2-Trichloroethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-	-



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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number				2430426	2430427	2430428	2430429	2430430
Sample Reference				WS234	WS238	WS239	WS241	WS245
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/09/2022	14/09/2022	15/09/2022	15/09/2022	14/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					
1,3-Dichloropropane	µg/l	1	ISO 17025	-	< 1.0	-	-	-
Dibromochloromethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-
Tetrachloroethene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
1,2-Dibromoethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-
Chlorobenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
1,1,1,2-Tetrachloroethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-
Ethylbenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
p & m-Xylene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
Styrene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
Tribromomethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-
o-Xylene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
1,1,2,2-Tetrachloroethane	µg/l	1	ISO 17025	-	< 1.0	-	-	-
Isopropylbenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
Bromobenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
n-Propylbenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
2-Chlorotoluene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
4-Chlorotoluene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
1,3,5-Trimethylbenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
tert-Butylbenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
1,2,4-Trimethylbenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
sec-Butylbenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
1,3-Dichlorobenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
p-Isopropyltoluene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
1,2-Dichlorobenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
1,4-Dichlorobenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
Butylbenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
1,2-Dibromo-3-chloropropane	µg/l	1	ISO 17025	-	< 1.0	-	-	-
1,2,4-Trichlorobenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
Hexachlorobutadiene	µg/l	1	ISO 17025	-	< 1.0	-	-	-
1,2,3-Trichlorobenzene	µg/l	1	ISO 17025	-	< 1.0	-	-	-

Dichloromethane	µg/l	3	NONE	-	< 3.0	-	-	-
Dichlorodifluoromethane	µg/l	1	NONE	-	< 1.0	-	-	-
Total Trihalomethanes	µg/l	4	NONE	-	< 4.0	-	-	-
Total Trichlorobenzenes	ug/l	3	NONE	-	< 3.0	-	-	-
Total Dichlorobenzenes	ug/l	3	NONE	-	< 3.0	-	-	-
Trichloroethylene (TCE) + Tetrachloroethylene (PCE)	ug/l	2	NONE	-	< 2.0	-	-	-
Total 1,2-Dichloroethene	ug/l	2	NONE	-	< 2.0	-	-	-
Total 1,3-Dichloropropane	ug/l	2	NONE	-	< 2.0	-	-	-
Tetrachloroethane	ug/l	2	NONE	-	< 2.0	-	-	-

**SVOCs**

Aniline	µg/l	0.05	NONE	-	< 0.05	-	-	-
Phenol	µg/l	0.05	NONE	-	< 0.05	-	-	-
2-Chlorophenol	µg/l	0.05	NONE	-	< 0.05	-	-	-
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	-	< 0.05	-	-	-
1,3-Dichlorobenzene	µg/l	0.05	NONE	-	< 0.05	-	-	-
1,2-Dichlorobenzene	µg/l	0.05	NONE	-	< 0.05	-	-	-
1,4-Dichlorobenzene	µg/l	0.05	NONE	-	< 0.05	-	-	-
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	-	< 0.05	-	-	-
2-Methylphenol	µg/l	0.05	NONE	-	< 0.05	-	-	-
Hexachloroethane	µg/l	0.05	NONE	-	< 0.05	-	-	-
Nitrobenzene	µg/l	0.05	NONE	-	< 0.05	-	-	-





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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number				2430426	2430427	2430428	2430429	2430430
Sample Reference				WS234	WS238	WS239	WS241	WS245
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				15/09/2022	14/09/2022	15/09/2022	15/09/2022	14/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					
4-Methylphenol	µg/l	0.05	NONE	-	< 0.05	-	-	-
Isophorone	µg/l	0.05	NONE	-	< 0.05	-	-	-
2-Nitrophenol	µg/l	0.05	NONE	-	< 0.05	-	-	-
2,4-Dimethylphenol	µg/l	0.05	NONE	-	< 0.05	-	-	-
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	-	< 0.05	-	-	-
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	-	< 0.05	-	-	-
Naphthalene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
2,4-Dichlorophenol	µg/l	0.05	NONE	-	< 0.05	-	-	-
4-Chloroaniline	µg/l	0.05	NONE	-	< 0.05	-	-	-
Hexachlorobutadiene	µg/l	0.05	NONE	-	< 0.05	-	-	-
4-Chloro-3-methylphenol	µg/l	0.05	NONE	-	< 0.05	-	-	-
2,4,6-Trichlorophenol	µg/l	0.05	NONE	-	< 0.05	-	-	-
2,4,5-Trichlorophenol	µg/l	0.05	NONE	-	< 0.05	-	-	-
2-Methylnaphthalene	µg/l	0.05	NONE	-	< 0.05	-	-	-
2-Chloronaphthalene	µg/l	0.05	NONE	-	< 0.05	-	-	-
Dimethylphthalate	µg/l	0.05	NONE	-	< 0.05	-	-	-
2,6-Dinitrotoluene	µg/l	0.05	NONE	-	< 0.05	-	-	-
Acenaphthylene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
Acenaphthene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
2,4-Dinitrotoluene	µg/l	0.05	NONE	-	< 0.05	-	-	-
Dibenzofuran	µg/l	0.05	NONE	-	< 0.05	-	-	-
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	-	< 0.05	-	-	-
Diethyl phthalate	µg/l	0.05	NONE	-	< 0.05	-	-	-
4-Nitroaniline	µg/l	0.05	NONE	-	< 0.05	-	-	-
Fluorene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
Azobenzene	µg/l	0.05	NONE	-	< 0.05	-	-	-
Bromophenyl phenyl ether	µg/l	0.05	NONE	-	< 0.05	-	-	-
Hexachlorobenzene	µg/l	0.05	NONE	-	< 0.05	-	-	-
Phenanthrene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
Anthracene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
Carbazole	µg/l	0.05	NONE	-	< 0.05	-	-	-
Dibutyl phthalate	µg/l	0.05	NONE	-	< 0.05	-	-	-
Anthraquinone	µg/l	0.05	NONE	-	< 0.05	-	-	-
Fluoranthene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
Pyrene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
Butyl benzyl phthalate	µg/l	0.05	NONE	-	< 0.05	-	-	-
Benzo(a)anthracene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
Chrysene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
Benzo(a)pyrene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	-	< 0.01	-	-	-
3&4-Methylphenol	µg/l	0.1	NONE	-	< 0.10	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample



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Analytical Report Number: 22-85131

Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number				2430431	2430432
Sample Reference				WS251	WS252
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				15/09/2022	15/09/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		

**General Inorganics**

pH	pH Units	N/A	ISO 17025	7.4	7.5
Electrical Conductivity at 20 °C	µS/cm	10	ISO 17025	950	890
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0
Sulphate as SO4	µg/l	45	ISO 17025	183000	149000
Chloride	mg/l	0.15	ISO 17025	86	77
Fluoride	µg/l	50	ISO 17025	360	380
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	180	1200
Ammoniacal Nitrogen as NH3	µg/l	15	ISO 17025	220	1400
Ammoniacal Nitrogen as NH4	µg/l	15	ISO 17025	230	1500
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3.52	3.88
Nitrate as N	mg/l	0.01	ISO 17025	0.07	0.08
Nitrate as NO3	mg/l	0.05	ISO 17025	0.3	0.35
Nitrite as N	µg/l	1	ISO 17025	12	27
Nitrite as NO2	µg/l	5	ISO 17025	39	88

Hardness - Total	mgCaCO3/l	1	ISO 17025	442	417
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002	< 0.002

**Total Phenols**

Total Phenols (monohydric)	µg/l	1	ISO 17025	1.1	1.6
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**Speciated PAHs**

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.001	NONE	< 0.001	< 0.001
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01

**PAH Sums**

Sum of Benzo(b)fluoranthene & Benzo(k)fluoranthene	µg/l	0.02	NONE	< 0.020	< 0.020
Sum of Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.02	NONE	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.04	NONE	< 0.040	< 0.040

**Total PAH**

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16
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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

<b>Lab Sample Number</b>				2430431	2430432
<b>Sample Reference</b>				WS251	WS252
<b>Sample Number</b>				None Supplied	None Supplied
<b>Depth (m)</b>				None Supplied	None Supplied
<b>Date Sampled</b>				15/09/2022	15/09/2022
<b>Time Taken</b>				None Supplied	None Supplied
<b>Analytical Parameter (Water Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>		

**Heavy Metals / Metalloids**

Boron (dissolved)	µg/l	10	ISO 17025	82	170
Calcium (dissolved)	mg/l	0.012	ISO 17025	170	160
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0
Chromium (III)	µg/l	5	NONE	< 5.0	< 5.0
Iron (dissolved)	mg/l	0.004	ISO 17025	< 0.004	0.025
Iron (dissolved)	µg/l	4	ISO 17025	< 4.0	25
Magnesium (dissolved)	mg/l	0.005	ISO 17025	6.9	7
Sodium (dissolved)	mg/l	0.01	ISO 17025	72	60

Aluminium (dissolved)	µg/l	1	ISO 17025	1.3	15
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.5	1.1
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.45	0.46
Barium (dissolved)	µg/l	0.06	ISO 17025	46	74
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.04	0.06
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2
Cobalt (dissolved)	µg/l	0.2	ISO 17025	0.8	0.7
Copper (dissolved)	µg/l	0.5	ISO 17025	1.3	3.6
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	510	140
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	4.3	5.2
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	0.7
Silver (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05
Tin (dissolved)	µg/l	0.2	ISO 17025	< 0.20	< 0.20
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.6	0.4
Zinc (dissolved)	µg/l	0.5	ISO 17025	1.8	6.5

**Monoaromatics & Oxygenates**

Benzene	µg/l	1	ISO 17025	< 1.0	-
Toluene	µg/l	1	ISO 17025	< 1.0	-
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	-
p & m-xylene	µg/l	1	ISO 17025	< 1.0	-
o-xylene	µg/l	1	ISO 17025	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	-
Sum of m, p & o-Xylene	µg/l	2	ISO 17025	< 2.0	-



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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number	2430431		2430432	
Sample Reference	WS251		WS252	
Sample Number	None Supplied		None Supplied	
Depth (m)	None Supplied		None Supplied	
Date Sampled	15/09/2022		15/09/2022	
Time Taken	None Supplied		None Supplied	
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status	

**Petroleum Hydrocarbons**

TPH-CWG - Aliphatic >C5 - C6 HS_ID_AL	µg/l	1	ISO 17025	< 1.0	-
TPH-CWG - Aliphatic >C6 - C8 HS_ID_AL	µg/l	1	ISO 17025	< 1.0	-
TPH-CWG - Aliphatic >C8 - C10 HS_ID_AL	µg/l	1	ISO 17025	< 1.0	-
TPH-CWG - Aliphatic >C10 - C12 EH_ID_AL_#1_#2_MS	µg/l	10	NONE	< 10	-
TPH-CWG - Aliphatic >C12 - C16 EH_ID_AL_#1_#2_MS	µg/l	10	NONE	< 10	-
TPH-CWG - Aliphatic >C16 - C21 EH_ID_AL_#1_#2_MS	µg/l	10	NONE	< 10	-
TPH-CWG - Aliphatic >C21 - C35 EH_ID_AL_#1_#2_MS	µg/l	10	NONE	< 10	-
TPH-CWG - Aliphatic >C16 - C35 EH_ID_AL_#1_#2_MS	µg/l	10	NONE	< 10	-
TPH-CWG - Aliphatic >C35 - C44 EH_ID_AL_#1_#2_MS	µg/l	10	NONE	< 10	-
TPH-CWG - Aliphatic (C5 - C35) HS+EH_ID_AL_#1_#2_MS	µg/l	10	NONE	< 10	-
TPH-CWG - Aliphatic (C5 - C44) HS+EH_ID_AR_#1_#2_MS	µg/l	10	NONE	< 10	-

TPH-CWG - Aromatic >C5 - C7 HS_ID_AR	µg/l	1	ISO 17025	< 1.0	-
TPH-CWG - Aromatic >C7 - C8 HS_ID_AR	µg/l	1	ISO 17025	< 1.0	-
TPH-CWG - Aromatic >C8 - C10 HS_ID_AR	µg/l	1	ISO 17025	< 1.0	-
TPH-CWG - Aromatic >C10 - C12 EH_ID_AR_#1_#2_MS	µg/l	10	NONE	< 10	-
TPH-CWG - Aromatic >C12 - C16 EH_ID_AR_#1_#2_MS	µg/l	10	NONE	< 10	-
TPH-CWG - Aromatic >C16 - C21 EH_ID_AR_#1_#2_MS	µg/l	10	NONE	< 10	-
TPH-CWG - Aromatic >C21 - C35 EH_ID_AR_#1_#2_MS	µg/l	10	NONE	< 10	-
TPH-CWG - Aromatic >C35 - C44 EH_ID_AR_#1_#2_MS	µg/l	10	NONE	< 10	-
TPH-CWG - Aromatic (C5 - C35) HS+EH_ID_AR_#1_#2_MS	µg/l	10	NONE	< 10	-
TPH-CWG - Aromatic (C5 - C44) HS+EH_ID_AR_#1_#2_MS	µg/l	10	NONE	< 10	-

TPH-CWG Total C5 - C44 EH+HS_ID_TOTAL_#1_#2_MS	µg/l	10	NONE	< 10	-
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**VOCs**

Chloromethane	µg/l	1	ISO 17025	-	-
Chloroethane	µg/l	1	ISO 17025	-	-
Bromomethane	µg/l	1	ISO 17025	-	-
Vinyl Chloride	µg/l	1	NONE	-	-
Trichlorofluoromethane	µg/l	1	NONE	-	-
1,1-Dichloroethene	µg/l	1	ISO 17025	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	ISO 17025	-	-
Cis-1,2-dichloroethene	µg/l	1	ISO 17025	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	-	-
1,1-Dichloroethane	µg/l	1	ISO 17025	-	-
2,2-Dichloropropane	µg/l	1	ISO 17025	-	-
Trichloromethane	µg/l	1	ISO 17025	-	-
1,1,1-Trichloroethane	µg/l	1	ISO 17025	-	-
1,2-Dichloroethane	µg/l	1	ISO 17025	-	-
1,1-Dichloropropene	µg/l	1	ISO 17025	-	-
Trans-1,2-dichloroethene	µg/l	1	ISO 17025	-	-
Benzene	µg/l	1	ISO 17025	-	-
Tetrachloromethane	µg/l	1	ISO 17025	-	-
1,2-Dichloropropane	µg/l	1	ISO 17025	-	-
Trichloroethene	µg/l	1	ISO 17025	-	-
Dibromomethane	µg/l	1	ISO 17025	-	-
Bromodichloromethane	µg/l	1	ISO 17025	-	-
Cis-1,3-dichloropropene	µg/l	1	ISO 17025	-	-
Trans-1,3-dichloropropene	µg/l	1	ISO 17025	-	-
Toluene	µg/l	1	ISO 17025	-	-
1,1,2-Trichloroethane	µg/l	1	ISO 17025	-	-



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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number				2430431	2430432
Sample Reference				WS251	WS252
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				15/09/2022	15/09/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		
1,3-Dichloropropane	µg/l	1	ISO 17025	-	-
Dibromochloromethane	µg/l	1	ISO 17025	-	-
Tetrachloroethene	µg/l	1	ISO 17025	-	-
1,2-Dibromoethane	µg/l	1	ISO 17025	-	-
Chlorobenzene	µg/l	1	ISO 17025	-	-
1,1,1,2-Tetrachloroethane	µg/l	1	ISO 17025	-	-
Ethylbenzene	µg/l	1	ISO 17025	-	-
p & m-Xylene	µg/l	1	ISO 17025	-	-
Styrene	µg/l	1	ISO 17025	-	-
Tribromomethane	µg/l	1	ISO 17025	-	-
o-Xylene	µg/l	1	ISO 17025	-	-
1,1,2,2-Tetrachloroethane	µg/l	1	ISO 17025	-	-
Isopropylbenzene	µg/l	1	ISO 17025	-	-
Bromobenzene	µg/l	1	ISO 17025	-	-
n-Propylbenzene	µg/l	1	ISO 17025	-	-
2-Chlorotoluene	µg/l	1	ISO 17025	-	-
4-Chlorotoluene	µg/l	1	ISO 17025	-	-
1,3,5-Trimethylbenzene	µg/l	1	ISO 17025	-	-
tert-Butylbenzene	µg/l	1	ISO 17025	-	-
1,2,4-Trimethylbenzene	µg/l	1	ISO 17025	-	-
sec-Butylbenzene	µg/l	1	ISO 17025	-	-
1,3-Dichlorobenzene	µg/l	1	ISO 17025	-	-
p-Isopropyltoluene	µg/l	1	ISO 17025	-	-
1,2-Dichlorobenzene	µg/l	1	ISO 17025	-	-
1,4-Dichlorobenzene	µg/l	1	ISO 17025	-	-
Butylbenzene	µg/l	1	ISO 17025	-	-
1,2-Dibromo-3-chloropropane	µg/l	1	ISO 17025	-	-
1,2,4-Trichlorobenzene	µg/l	1	ISO 17025	-	-
Hexachlorobutadiene	µg/l	1	ISO 17025	-	-
1,2,3-Trichlorobenzene	µg/l	1	ISO 17025	-	-

Dichloromethane	µg/l	3	NONE	-	-
Dichlorodifluoromethane	µg/l	1	NONE	-	-
Total Trihalomethanes	µg/l	4	NONE	-	-
Total Trichlorobenzenes	ug/l	3	NONE	-	-
Total Dichlorobenzenes	ug/l	3	NONE	-	-
Trichloroethylene (TCE) + Tetrachloroethylene (PCE)	ug/l	2	NONE	-	-
Total 1,2-Dichloroethene	ug/l	2	NONE	-	-
Total 1,3-Dichloropropane	ug/l	2	NONE	-	-
Tetrachloroethane	ug/l	2	NONE	-	-

**SVOCs**

Aniline	µg/l	0.05	NONE	-	-
Phenol	µg/l	0.05	NONE	-	-
2-Chlorophenol	µg/l	0.05	NONE	-	-
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	-	-
1,3-Dichlorobenzene	µg/l	0.05	NONE	-	-
1,2-Dichlorobenzene	µg/l	0.05	NONE	-	-
1,4-Dichlorobenzene	µg/l	0.05	NONE	-	-
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	-	-
2-Methylphenol	µg/l	0.05	NONE	-	-
Hexachloroethane	µg/l	0.05	NONE	-	-
Nitrobenzene	µg/l	0.05	NONE	-	-





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Analytical Report Number: 22-85131  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number				2430431	2430432
Sample Reference				WS251	WS252
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				15/09/2022	15/09/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status		
4-Methylphenol	µg/l	0.05	NONE	-	-
Isophorone	µg/l	0.05	NONE	-	-
2-Nitrophenol	µg/l	0.05	NONE	-	-
2,4-Dimethylphenol	µg/l	0.05	NONE	-	-
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	-	-
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	-	-
Naphthalene	µg/l	0.01	ISO 17025	-	-
2,4-Dichlorophenol	µg/l	0.05	NONE	-	-
4-Chloroaniline	µg/l	0.05	NONE	-	-
Hexachlorobutadiene	µg/l	0.05	NONE	-	-
4-Chloro-3-methylphenol	µg/l	0.05	NONE	-	-
2,4,6-Trichlorophenol	µg/l	0.05	NONE	-	-
2,4,5-Trichlorophenol	µg/l	0.05	NONE	-	-
2-Methylnaphthalene	µg/l	0.05	NONE	-	-
2-Chloronaphthalene	µg/l	0.05	NONE	-	-
Dimethylphthalate	µg/l	0.05	NONE	-	-
2,6-Dinitrotoluene	µg/l	0.05	NONE	-	-
Acenaphthylene	µg/l	0.01	ISO 17025	-	-
Acenaphthene	µg/l	0.01	ISO 17025	-	-
2,4-Dinitrotoluene	µg/l	0.05	NONE	-	-
Dibenzofuran	µg/l	0.05	NONE	-	-
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	-	-
Diethyl phthalate	µg/l	0.05	NONE	-	-
4-Nitroaniline	µg/l	0.05	NONE	-	-
Fluorene	µg/l	0.01	ISO 17025	-	-
Azobenzene	µg/l	0.05	NONE	-	-
Bromophenyl phenyl ether	µg/l	0.05	NONE	-	-
Hexachlorobenzene	µg/l	0.05	NONE	-	-
Phenanthrene	µg/l	0.01	ISO 17025	-	-
Anthracene	µg/l	0.01	ISO 17025	-	-
Carbazole	µg/l	0.05	NONE	-	-
Dibutyl phthalate	µg/l	0.05	NONE	-	-
Anthraquinone	µg/l	0.05	NONE	-	-
Fluoranthene	µg/l	0.01	ISO 17025	-	-
Pyrene	µg/l	0.01	ISO 17025	-	-
Butyl benzyl phthalate	µg/l	0.05	NONE	-	-
Benzo(a)anthracene	µg/l	0.01	ISO 17025	-	-
Chrysene	µg/l	0.01	ISO 17025	-	-
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	-	-
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	-	-
Benzo(a)pyrene	µg/l	0.01	ISO 17025	-	-
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	-	-
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	-	-
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	-	-
3&4-Methylphenol	µg/l	0.1	NONE	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample



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Analytical Report Number : 22-85131

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 *for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Electrical conductivity at 20oC of water	Determination of electrical conductivity in water by electrometric measurement. Accredited Matrices SW, GW, PW	In-house method	L031-PL	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by Ion Selective Electrode. Accredited matrices: SW, PW, GW.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Total Hardness of water	Determination of hardness in waters by calculation from calcium and magnesium. Accredited Matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry).Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025



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Analytical Report Number : 22-85131

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Speciated EPA-16 PAHs in water (LOW LEVEL Dets)	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270 (low level)	L102B-PL	W	NONE
TPH in (Water)	Determination of TPH bands by HS-GC-MS/GC-MS	In-house method, TPH with carbon banding.	L070-PL	W	NONE
Ammonia as NH3 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammoniacal Nitrogen as N in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammonium as NH4 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrite as N in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry). Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L078-PL	W	ISO 17025
TPH Chromatogram in Water	TPH Chromatogram in Water.	In-house method	L070-PL	W	NONE
Volatile organic compounds in water extended	Determination of volatile organic compounds in water by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
Cr (III) in water	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
Free cyanide (low level) in water	Determination of free cyanide by distillation followed by colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Bromate in Water	Determination of bromate in waters based on ion chromatography. Accredited matrices GW, PW, SW.	In house method based on Standard Methods for the Analysis of Water and Waste Water, method 4500	L008-PL	W	ISO 17025
Specific PAH sums in water	Determination of PAH compounds in water by extraction in hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L070-PL	W	NONE
Chloride in water	Determination of Chloride (diissolved) colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260. Accredited matrices: SW, PW, GW.	L082-PL	W	ISO 17025

Analytical Report Number : 22-85131

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

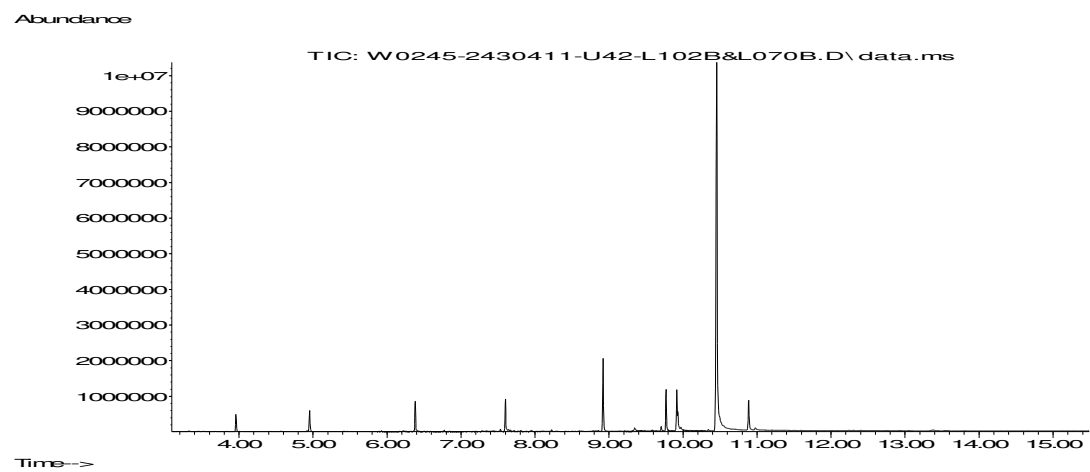
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

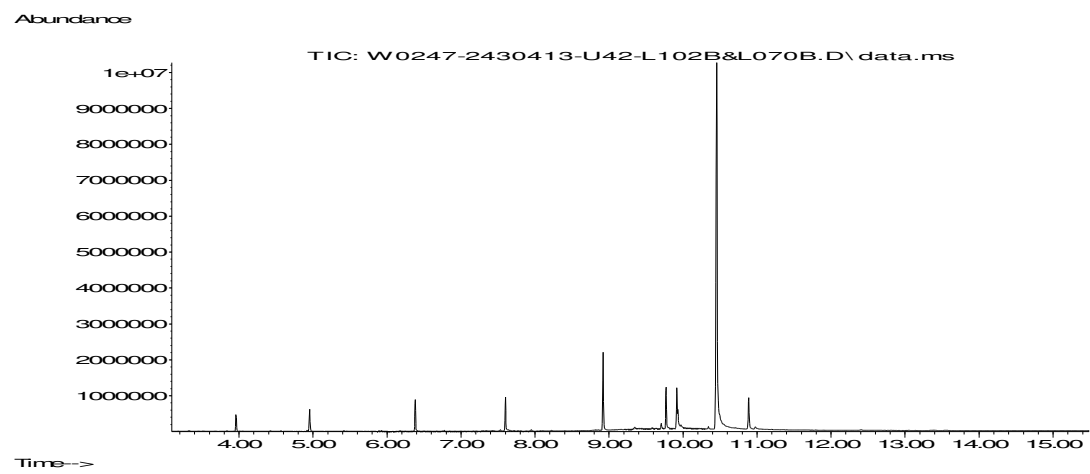
## Information in Support of Analytical Results

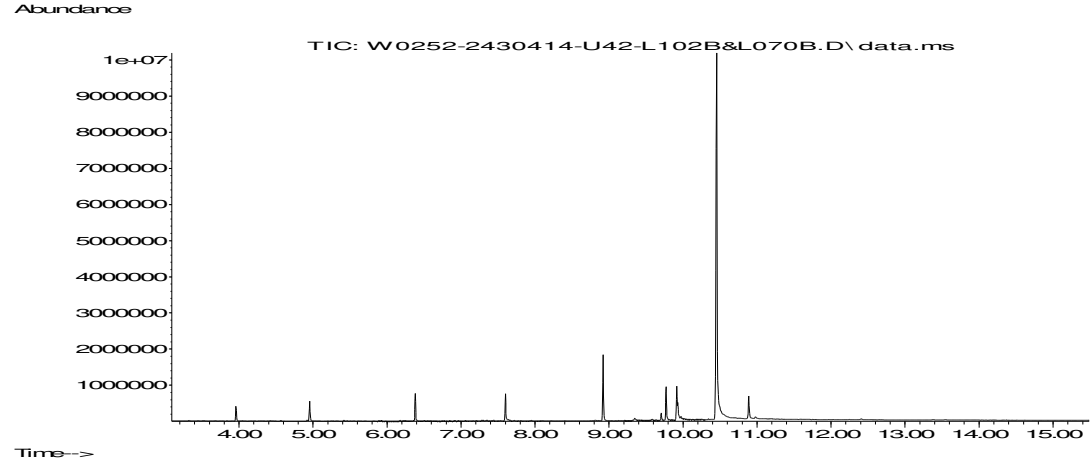
### List of HWOL Acronyms and Operators

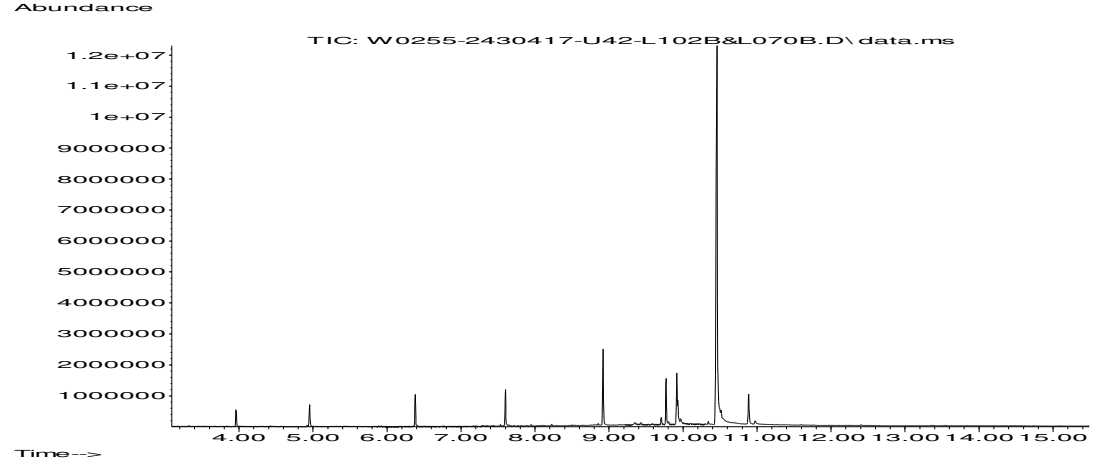
Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

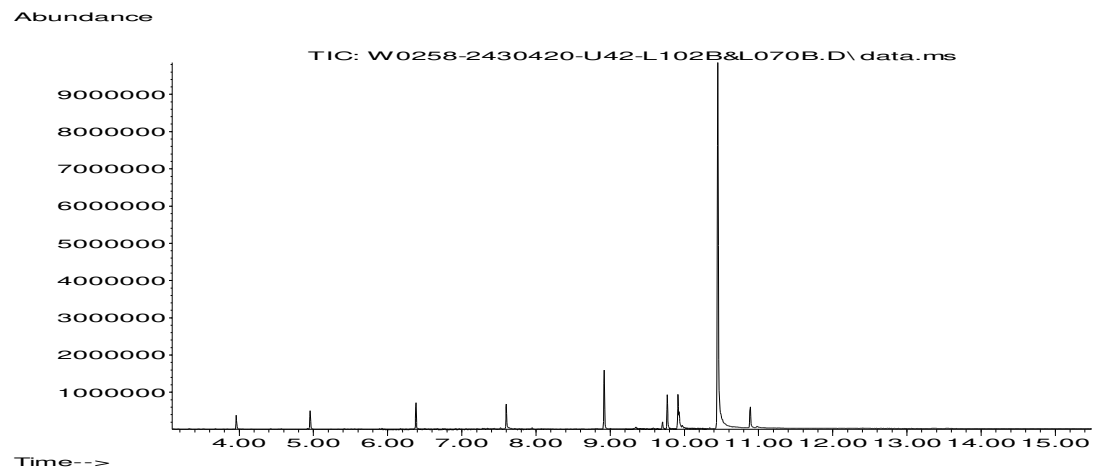


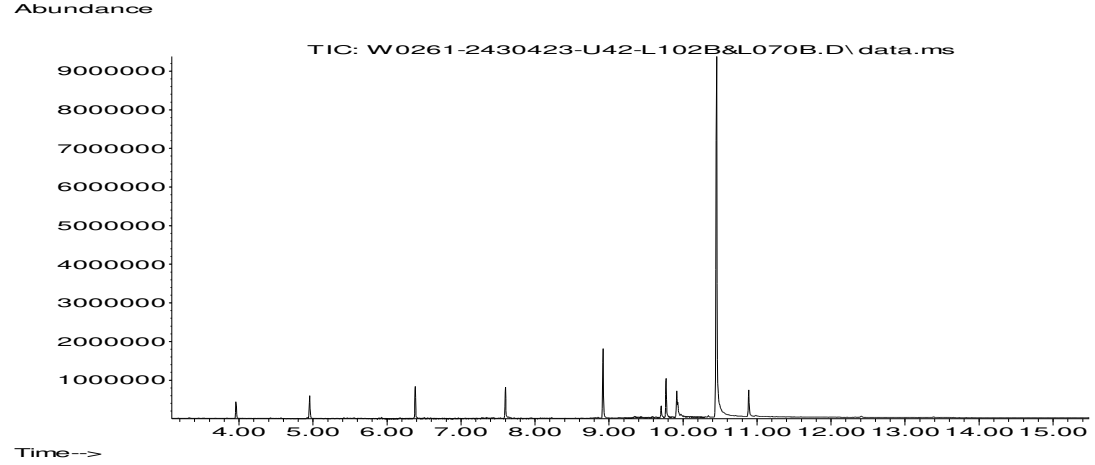




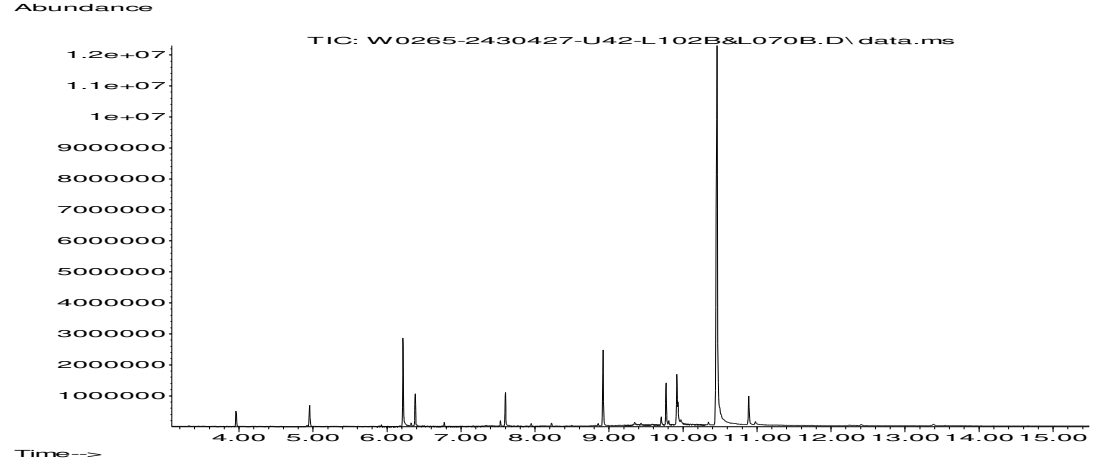


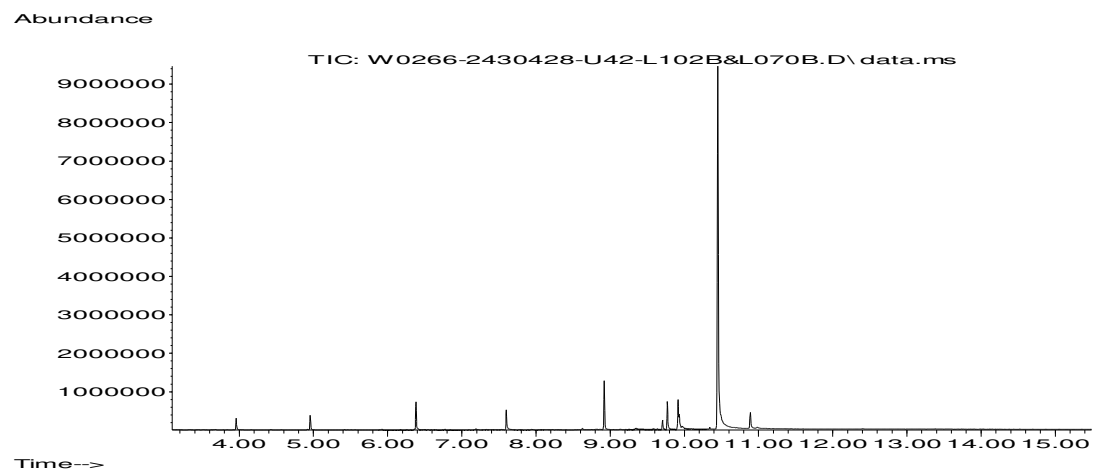


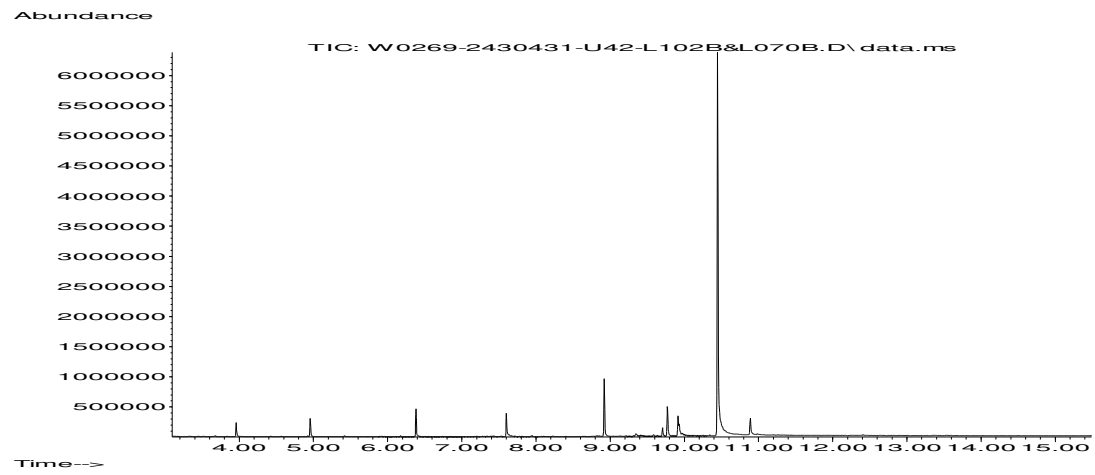












## Sample Deviation Report



**Analytical Report Number : 22-85131**

**Project / Site name: Begbroke**

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BH205	None Supplied	W	2430411	c	Ammonia as NH3 in water	L082-PL	c
BH205	None Supplied	W	2430411	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH205	None Supplied	W	2430411	c	Ammonium as NH4 in water	L082-PL	c
BH205	None Supplied	W	2430411	c	Electrical conductivity at 20oC of water	L031-PL	c
BH205	None Supplied	W	2430411	c	Nitrate as N in water	L078-PL	c
BH205	None Supplied	W	2430411	c	Nitrate in water	L078-PL	c
BH205	None Supplied	W	2430411	c	Nitrite as N in water	L082-PL	c
BH205	None Supplied	W	2430411	c	Nitrite in water	L082-PL	c
BH205	None Supplied	W	2430411	c	pH at 20oC in water (automated)	L099-PL	c
WS201	None Supplied	W	2430412	c	Ammonia as NH3 in water	L082-PL	c
WS201	None Supplied	W	2430412	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS201	None Supplied	W	2430412	c	Ammonium as NH4 in water	L082-PL	c
WS201	None Supplied	W	2430412	c	Electrical conductivity at 20oC of water	L031-PL	c
WS201	None Supplied	W	2430412	c	Nitrate as N in water	L078-PL	c
WS201	None Supplied	W	2430412	c	Nitrate in water	L078-PL	c
WS201	None Supplied	W	2430412	c	Nitrite as N in water	L082-PL	c
WS201	None Supplied	W	2430412	c	Nitrite in water	L082-PL	c
WS201	None Supplied	W	2430412	c	pH at 20oC in water (automated)	L099-PL	c
WS202	None Supplied	W	2430413	c	Ammonia as NH3 in water	L082-PL	c
WS202	None Supplied	W	2430413	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS202	None Supplied	W	2430413	c	Ammonium as NH4 in water	L082-PL	c
WS202	None Supplied	W	2430413	c	Electrical conductivity at 20oC of water	L031-PL	c
WS202	None Supplied	W	2430413	c	Nitrate as N in water	L078-PL	c
WS202	None Supplied	W	2430413	c	Nitrate in water	L078-PL	c
WS202	None Supplied	W	2430413	c	Nitrite as N in water	L082-PL	c
WS202	None Supplied	W	2430413	c	Nitrite in water	L082-PL	c
WS202	None Supplied	W	2430413	c	pH at 20oC in water (automated)	L099-PL	c
WS203	None Supplied	W	2430414	c	Ammonia as NH3 in water	L082-PL	c
WS203	None Supplied	W	2430414	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS203	None Supplied	W	2430414	c	Ammonium as NH4 in water	L082-PL	c
WS203	None Supplied	W	2430414	c	Electrical conductivity at 20oC of water	L031-PL	c
WS203	None Supplied	W	2430414	c	Nitrate as N in water	L078-PL	c
WS203	None Supplied	W	2430414	c	Nitrate in water	L078-PL	c
WS203	None Supplied	W	2430414	c	Nitrite as N in water	L082-PL	c
WS203	None Supplied	W	2430414	c	Nitrite in water	L082-PL	c
WS203	None Supplied	W	2430414	c	pH at 20oC in water (automated)	L099-PL	c
WS205	None Supplied	W	2430415	c	Ammonia as NH3 in water	L082-PL	c
WS205	None Supplied	W	2430415	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS205	None Supplied	W	2430415	c	Ammonium as NH4 in water	L082-PL	c
WS205	None Supplied	W	2430415	c	Electrical conductivity at 20oC of water	L031-PL	c
WS205	None Supplied	W	2430415	c	Nitrate as N in water	L078-PL	c
WS205	None Supplied	W	2430415	c	Nitrate in water	L078-PL	c
WS205	None Supplied	W	2430415	c	Nitrite as N in water	L082-PL	c
WS205	None Supplied	W	2430415	c	Nitrite in water	L082-PL	c
WS205	None Supplied	W	2430415	c	pH at 20oC in water (automated)	L099-PL	c
WS207	None Supplied	W	2430416	c	Ammonia as NH3 in water	L082-PL	c
WS207	None Supplied	W	2430416	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS207	None Supplied	W	2430416	c	Ammonium as NH4 in water	L082-PL	c
WS207	None Supplied	W	2430416	c	Electrical conductivity at 20oC of water	L031-PL	c
WS207	None Supplied	W	2430416	c	Nitrate as N in water	L078-PL	c
WS207	None Supplied	W	2430416	c	Nitrate in water	L078-PL	c
WS207	None Supplied	W	2430416	c	Nitrite as N in water	L082-PL	c
WS207	None Supplied	W	2430416	c	Nitrite in water	L082-PL	c
WS207	None Supplied	W	2430416	c	pH at 20oC in water (automated)	L099-PL	c
WS208	None Supplied	W	2430417	c	Ammonia as NH3 in water	L082-PL	c
WS208	None Supplied	W	2430417	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS208	None Supplied	W	2430417	c	Ammonium as NH4 in water	L082-PL	c
WS208	None Supplied	W	2430417	c	Electrical conductivity at 20oC of water	L031-PL	c
WS208	None Supplied	W	2430417	c	Nitrate as N in water	L078-PL	c

## Sample Deviation Report



**Analytical Report Number : 22-85131**

**Project / Site name: Begbroke**

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BH205	None Supplied	W	2430411	c	Ammonia as NH3 in water	L082-PL	c
WS208	None Supplied	W	2430417	c	Nitrate in water	L078-PL	c
WS208	None Supplied	W	2430417	c	Nitrite as N in water	L082-PL	c
WS208	None Supplied	W	2430417	c	Nitrite in water	L082-PL	c
WS208	None Supplied	W	2430417	c	pH at 20oC in water (automated)	L099-PL	c
WS209	None Supplied	W	2430418	c	Ammonia as NH3 in water	L082-PL	c
WS209	None Supplied	W	2430418	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS209	None Supplied	W	2430418	c	Ammonium as NH4 in water	L082-PL	c
WS209	None Supplied	W	2430418	c	Electrical conductivity at 20oC of water	L031-PL	c
WS209	None Supplied	W	2430418	c	Nitrate as N in water	L078-PL	c
WS209	None Supplied	W	2430418	c	Nitrate in water	L078-PL	c
WS209	None Supplied	W	2430418	c	Nitrite as N in water	L082-PL	c
WS209	None Supplied	W	2430418	c	Nitrite in water	L082-PL	c
WS209	None Supplied	W	2430418	c	pH at 20oC in water (automated)	L099-PL	c
WS210	None Supplied	W	2430419	c	Ammonia as NH3 in water	L082-PL	c
WS210	None Supplied	W	2430419	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS210	None Supplied	W	2430419	c	Ammonium as NH4 in water	L082-PL	c
WS210	None Supplied	W	2430419	c	Electrical conductivity at 20oC of water	L031-PL	c
WS210	None Supplied	W	2430419	c	Nitrate as N in water	L078-PL	c
WS210	None Supplied	W	2430419	c	Nitrate in water	L078-PL	c
WS210	None Supplied	W	2430419	c	Nitrite as N in water	L082-PL	c
WS210	None Supplied	W	2430419	c	Nitrite in water	L082-PL	c
WS210	None Supplied	W	2430419	c	pH at 20oC in water (automated)	L099-PL	c
WS211	None Supplied	W	2430420	c	Ammonia as NH3 in water	L082-PL	c
WS211	None Supplied	W	2430420	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS211	None Supplied	W	2430420	c	Ammonium as NH4 in water	L082-PL	c
WS211	None Supplied	W	2430420	c	Electrical conductivity at 20oC of water	L031-PL	c
WS211	None Supplied	W	2430420	c	Nitrate as N in water	L078-PL	c
WS211	None Supplied	W	2430420	c	Nitrate in water	L078-PL	c
WS211	None Supplied	W	2430420	c	Nitrite as N in water	L082-PL	c
WS211	None Supplied	W	2430420	c	Nitrite in water	L082-PL	c
WS211	None Supplied	W	2430420	c	pH at 20oC in water (automated)	L099-PL	c
WS215	None Supplied	W	2430421	c	Ammonia as NH3 in water	L082-PL	c
WS215	None Supplied	W	2430421	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS215	None Supplied	W	2430421	c	Ammonium as NH4 in water	L082-PL	c
WS215	None Supplied	W	2430421	c	Electrical conductivity at 20oC of water	L031-PL	c
WS215	None Supplied	W	2430421	c	Nitrate as N in water	L078-PL	c
WS215	None Supplied	W	2430421	c	Nitrate in water	L078-PL	c
WS215	None Supplied	W	2430421	c	Nitrite as N in water	L082-PL	c
WS215	None Supplied	W	2430421	c	Nitrite in water	L082-PL	c
WS215	None Supplied	W	2430421	c	pH at 20oC in water (automated)	L099-PL	c
WS216	None Supplied	W	2430422	c	Ammonia as NH3 in water	L082-PL	c
WS216	None Supplied	W	2430422	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS216	None Supplied	W	2430422	c	Ammonium as NH4 in water	L082-PL	c
WS216	None Supplied	W	2430422	c	Electrical conductivity at 20oC of water	L031-PL	c
WS216	None Supplied	W	2430422	c	Nitrate as N in water	L078-PL	c
WS216	None Supplied	W	2430422	c	Nitrate in water	L078-PL	c
WS216	None Supplied	W	2430422	c	Nitrite as N in water	L082-PL	c
WS216	None Supplied	W	2430422	c	Nitrite in water	L082-PL	c
WS216	None Supplied	W	2430422	c	pH at 20oC in water (automated)	L099-PL	c
WS220	None Supplied	W	2430423	c	Ammonia as NH3 in water	L082-PL	c
WS220	None Supplied	W	2430423	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS220	None Supplied	W	2430423	c	Ammonium as NH4 in water	L082-PL	c
WS220	None Supplied	W	2430423	c	Electrical conductivity at 20oC of water	L031-PL	c
WS220	None Supplied	W	2430423	c	Nitrate as N in water	L078-PL	c
WS220	None Supplied	W	2430423	c	Nitrate in water	L078-PL	c
WS220	None Supplied	W	2430423	c	Nitrite as N in water	L082-PL	c
WS220	None Supplied	W	2430423	c	Nitrite in water	L082-PL	c
WS220	None Supplied	W	2430423	c	pH at 20oC in water (automated)	L099-PL	c



## Sample Deviation Report



**Analytical Report Number : 22-85131**

**Project / Site name: Begbroke**

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BH205	None Supplied	W	2430411	c	Ammonia as NH3 in water	L082-PL	c
WS232	None Supplied	W	2430424	c	Ammonia as NH3 in water	L082-PL	c
WS232	None Supplied	W	2430424	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS232	None Supplied	W	2430424	c	Ammonium as NH4 in water	L082-PL	c
WS232	None Supplied	W	2430424	c	Electrical conductivity at 20oC of water	L031-PL	c
WS232	None Supplied	W	2430424	c	Nitrate as N in water	L078-PL	c
WS232	None Supplied	W	2430424	c	Nitrate in water	L078-PL	c
WS232	None Supplied	W	2430424	c	Nitrite as N in water	L082-PL	c
WS232	None Supplied	W	2430424	c	Nitrite in water	L082-PL	c
WS232	None Supplied	W	2430424	c	pH at 20oC in water (automated)	L099-PL	c
WS233	None Supplied	W	2430425	c	Ammonia as NH3 in water	L082-PL	c
WS233	None Supplied	W	2430425	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS233	None Supplied	W	2430425	c	Ammonium as NH4 in water	L082-PL	c
WS233	None Supplied	W	2430425	c	Electrical conductivity at 20oC of water	L031-PL	c
WS233	None Supplied	W	2430425	c	Nitrate as N in water	L078-PL	c
WS233	None Supplied	W	2430425	c	Nitrate in water	L078-PL	c
WS233	None Supplied	W	2430425	c	Nitrite as N in water	L082-PL	c
WS233	None Supplied	W	2430425	c	Nitrite in water	L082-PL	c
WS233	None Supplied	W	2430425	c	pH at 20oC in water (automated)	L099-PL	c
WS234	None Supplied	W	2430426	c	Ammonia as NH3 in water	L082-PL	c
WS234	None Supplied	W	2430426	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS234	None Supplied	W	2430426	c	Ammonium as NH4 in water	L082-PL	c
WS234	None Supplied	W	2430426	c	Electrical conductivity at 20oC of water	L031-PL	c
WS234	None Supplied	W	2430426	c	Nitrate as N in water	L078-PL	c
WS234	None Supplied	W	2430426	c	Nitrate in water	L078-PL	c
WS234	None Supplied	W	2430426	c	Nitrite as N in water	L082-PL	c
WS234	None Supplied	W	2430426	c	Nitrite in water	L082-PL	c
WS234	None Supplied	W	2430426	c	pH at 20oC in water (automated)	L099-PL	c
WS238	None Supplied	W	2430427	c	Ammonia as NH3 in water	L082-PL	c
WS238	None Supplied	W	2430427	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS238	None Supplied	W	2430427	c	Ammonium as NH4 in water	L082-PL	c
WS238	None Supplied	W	2430427	c	Electrical conductivity at 20oC of water	L031-PL	c
WS238	None Supplied	W	2430427	c	Nitrate as N in water	L078-PL	c
WS238	None Supplied	W	2430427	c	Nitrate in water	L078-PL	c
WS238	None Supplied	W	2430427	c	Nitrite as N in water	L082-PL	c
WS238	None Supplied	W	2430427	c	Nitrite in water	L082-PL	c
WS238	None Supplied	W	2430427	c	pH at 20oC in water (automated)	L099-PL	c
WS239	None Supplied	W	2430428	c	Ammonia as NH3 in water	L082-PL	c
WS239	None Supplied	W	2430428	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS239	None Supplied	W	2430428	c	Ammonium as NH4 in water	L082-PL	c
WS239	None Supplied	W	2430428	c	Electrical conductivity at 20oC of water	L031-PL	c
WS239	None Supplied	W	2430428	c	Nitrate as N in water	L078-PL	c
WS239	None Supplied	W	2430428	c	Nitrate in water	L078-PL	c
WS239	None Supplied	W	2430428	c	Nitrite as N in water	L082-PL	c
WS239	None Supplied	W	2430428	c	Nitrite in water	L082-PL	c
WS239	None Supplied	W	2430428	c	pH at 20oC in water (automated)	L099-PL	c
WS241	None Supplied	W	2430429	c	Ammonia as NH3 in water	L082-PL	c
WS241	None Supplied	W	2430429	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS241	None Supplied	W	2430429	c	Ammonium as NH4 in water	L082-PL	c
WS241	None Supplied	W	2430429	c	Electrical conductivity at 20oC of water	L031-PL	c
WS241	None Supplied	W	2430429	c	Nitrate as N in water	L078-PL	c
WS241	None Supplied	W	2430429	c	Nitrate in water	L078-PL	c
WS241	None Supplied	W	2430429	c	Nitrite as N in water	L082-PL	c
WS241	None Supplied	W	2430429	c	Nitrite in water	L082-PL	c
WS241	None Supplied	W	2430429	c	pH at 20oC in water (automated)	L099-PL	c
WS245	None Supplied	W	2430430	c	Ammonia as NH3 in water	L082-PL	c
WS245	None Supplied	W	2430430	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS245	None Supplied	W	2430430	c	Ammonium as NH4 in water	L082-PL	c
WS245	None Supplied	W	2430430	c	Electrical conductivity at 20oC of water	L031-PL	c

## Sample Deviation Report



**Analytical Report Number : 22-85131**

**Project / Site name: Begbroke**

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BH205	None Supplied	W	2430411	c	Ammonia as NH3 in water	L082-PL	c
WS245	None Supplied	W	2430430	c	Nitrate as N in water	L078-PL	c
WS245	None Supplied	W	2430430	c	Nitrate in water	L078-PL	c
WS245	None Supplied	W	2430430	c	Nitrite as N in water	L082-PL	c
WS245	None Supplied	W	2430430	c	Nitrite in water	L082-PL	c
WS245	None Supplied	W	2430430	c	pH at 20oC in water (automated)	L099-PL	c
WS251	None Supplied	W	2430431	c	Ammonia as NH3 in water	L082-PL	c
WS251	None Supplied	W	2430431	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS251	None Supplied	W	2430431	c	Ammonium as NH4 in water	L082-PL	c
WS251	None Supplied	W	2430431	c	Electrical conductivity at 20oC of water	L031-PL	c
WS251	None Supplied	W	2430431	c	Nitrate as N in water	L078-PL	c
WS251	None Supplied	W	2430431	c	Nitrate in water	L078-PL	c
WS251	None Supplied	W	2430431	c	Nitrite as N in water	L082-PL	c
WS251	None Supplied	W	2430431	c	Nitrite in water	L082-PL	c
WS251	None Supplied	W	2430431	c	pH at 20oC in water (automated)	L099-PL	c
WS252	None Supplied	W	2430432	c	Ammonia as NH3 in water	L082-PL	c
WS252	None Supplied	W	2430432	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS252	None Supplied	W	2430432	c	Ammonium as NH4 in water	L082-PL	c
WS252	None Supplied	W	2430432	c	Electrical conductivity at 20oC of water	L031-PL	c
WS252	None Supplied	W	2430432	c	Nitrate as N in water	L078-PL	c
WS252	None Supplied	W	2430432	c	Nitrate in water	L078-PL	c
WS252	None Supplied	W	2430432	c	Nitrite as N in water	L082-PL	c
WS252	None Supplied	W	2430432	c	Nitrite in water	L082-PL	c
WS252	None Supplied	W	2430432	c	pH at 20oC in water (automated)	L099-PL	c



4041



**Nathan Thompson**  
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## **Analytical Report Number : 22-86105**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	22/09/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	26/09/2022
<b>Your order number:</b>	PO20129	<b>Analysis completed by:</b>	03/10/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	03/10/2022
<b>Samples Analysed:</b>	5 water samples		

**Signed:** \_\_\_\_\_

Anna Goc  
Junior Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :	soils	- 4 weeks from reporting
	leachates	- 2 weeks from reporting
	waters	- 2 weeks from reporting
	asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.



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Analytical Report Number: 22-86105  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number	2435970				2435971	2435972	2435973	2435974
Sample Reference	WS235				BH001	BH003	BH006	BH007
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled	22/09/2022				22/09/2022	22/09/2022	22/09/2022	22/09/2022
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

**General Inorganics**

Parameter	Units	N/A	ISO 17025	2435970	2435971	2435972	2435973	2435974
pH	pH Units	N/A	ISO 17025	7.3	6.8	7.4	7.5	6.8
Electrical Conductivity at 20 °C	µS/cm	10	ISO 17025	700	1500	640	560	1200
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	2	< 1.0	< 1.0	1.2
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sulphate as SO4	µg/l	45	ISO 17025	64000	606000	73800	48300	255000
Chloride	mg/l	0.15	ISO 17025	56	31	31	28	32
Fluoride	µg/l	50	ISO 17025	430	420	610	700	250
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	120	7200	17	< 15	310
Ammoniacal Nitrogen as NH3	µg/l	15	ISO 17025	150	8800	21	< 15	380
Ammoniacal Nitrogen as NH4	µg/l	15	ISO 17025	160	9300	22	< 15	400
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	1.69	6.04	1.52	1.36	3.11
Nitrate as N	mg/l	0.01	ISO 17025	9.48	0.06	11.9	13.1	5.06
Nitrate as NO3	mg/l	0.05	ISO 17025	42	0.25	52.6	58.2	22.4
Nitrite as N	µg/l	1	ISO 17025	6.8	42	8.1	< 1.0	74
Nitrite as NO2	µg/l	5	ISO 17025	22	140	27	< 5.0	240

Parameter	Units	N/A	ISO 17025	2435970	2435971	2435972	2435973	2435974
Hardness - Total	mgCaCO3/l	1	ISO 17025	354	1270	398	308	813
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002

**Total Phenols**

Parameter	Units	N/A	ISO 17025	2435970	2435971	2435972	2435973	2435974
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	1.2	1.8	1.8	1.4

**Speciated PAHs**

Parameter	Units	N/A	ISO 17025	2435970	2435971	2435972	2435973	2435974
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Dibenzo(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

**PAH Sums**

Parameter	Units	N/A	ISO 17025	2435970	2435971	2435972	2435973	2435974
Sum of Benzo(b)fluoranthene & Benzo(k)fluoranthene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene & Indeno(1,2,3-cd)pyrene	µg/l	0.04	NONE	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040

**Total PAH**

Parameter	Units	N/A	ISO 17025	2435970	2435971	2435972	2435973	2435974
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16



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Sample Reference	WS235				BH001	BH003	BH006	BH007
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled	22/09/2022				22/09/2022	22/09/2022	22/09/2022	22/09/2022
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

**Heavy Metals / Metalloids**

	µg/l	10	ISO 17025	110	96	94	31	130
Boron (dissolved)	mg/l	0.012	ISO 17025	130	470	150	120	290
Calcium (dissolved)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (hexavalent)	µg/l	5	NONE	< 5.0	7.9	< 5.0	< 5.0	6.4
Chromium (III)	mg/l	0.004	ISO 17025	0.076	0.095	0.01	0.011	0.031
Iron (dissolved)	µg/l	4	ISO 17025	76	95	10	11	31
Magnesium (dissolved)	mg/l	0.005	ISO 17025	5.9	25	4.1	3.5	21
Sodium (dissolved)	mg/l	0.01	ISO 17025	31	49	18	16	33

	µg/l	1	ISO 17025	5.2	3.9	< 1.0	61	14
Aluminium (dissolved)	µg/l	0.4	ISO 17025	0.5	0.7	0.4	0.6	0.7
Antimony (dissolved)	µg/l	0.15	ISO 17025	0.64	2.13	0.23	0.28	0.44
Arsenic (dissolved)	µg/l	0.06	ISO 17025	19	36	20	18	30
Barium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.05	< 0.02	0.09	< 0.02
Cadmium (dissolved)	µg/l	0.2	ISO 17025	2.5	7.9	3.3	1.9	6.4
Chromium (dissolved)	µg/l	0.2	ISO 17025	1	11	0.3	0.3	0.7
Cobalt (dissolved)	µg/l	0.5	ISO 17025	1.1	3.4	1.2	0.6	0.9
Copper (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Lead (dissolved)	µg/l	0.05	ISO 17025	5.7	940	0.32	2.9	21
Manganese (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Mercury (dissolved)	µg/l	0.5	ISO 17025	1.4	13	1.8	1.7	4.8
Nickel (dissolved)	µg/l	0.6	ISO 17025	1	0.9	< 0.6	< 0.6	0.7
Selenium (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Silver (dissolved)	µg/l	0.2	ISO 17025	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Tin (dissolved)	µg/l	0.2	ISO 17025	0.5	0.3	0.3	0.5	0.3
Vanadium (dissolved)	µg/l	0.5	ISO 17025	5.8	4.4	0.7	1.8	1.3
Zinc (dissolved)								

**Monoaromatics & Oxygenates**

	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1 <td>ISO 17025</td> <td>-</td> <td>&lt; 1.0</td> <td>&lt; 1.0</td> <td>&lt; 1.0</td> <td>&lt; 1.0</td>	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	2 <td>ISO 17025</td> <td>-</td> <td>&lt; 2.0</td> <td>&lt; 2.0</td> <td>&lt; 2.0</td> <td>&lt; 2.0</td>	ISO 17025	-	< 2.0	< 2.0	< 2.0	< 2.0
Sum of m, p & o-Xylene								





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Sample Reference	WS235				BH001	BH003	BH006	BH007
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled	22/09/2022				22/09/2022	22/09/2022	22/09/2022	22/09/2022
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

VOCs

Analytical Parameter	Units	Limit of detection	Accreditation Status	2435970	2435971	2435972	2435973	2435974
Chloromethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/l	1	NONE	-	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/l	1	NONE	-	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2,2-Tetrachloroethane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0



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Sample Reference	WS235		BH001		BH003		BH006		BH007	
Sample Number	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Date Sampled	22/09/2022		22/09/2022		22/09/2022		22/09/2022		22/09/2022	
Time Taken	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status							
1,2-Dibromo-3-chloropropane	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/l	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Dichloromethane	µg/l	3	NONE	-	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dichlorodifluoromethane	µg/l	1	NONE	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Trihalomethanes	µg/l	4	NONE	-	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Total Trichlorobenzenes	ug/l	3	NONE	-	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Total Dichlorobenzenes	ug/l	3	NONE	-	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethylene (TCE) + Tetrachloroethylene (PCE)	ug/l	2	NONE	-	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total 1,2-Dichloroethene	ug/l	2	NONE	-	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total 1,3-Dichloropropane	ug/l	2	NONE	-	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Tetrachloroethane	ug/l	2	NONE	-	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0

## SVOCs

Aniline	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05



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Analytical Report Number: 22-86105  
Project / Site name: Begbroke

Your Order No: PO20129

Lab Sample Number				2435970	2435971	2435972	2435973	2435974
Sample Reference				WS235	BH001	BH003	BH006	BH007
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				22/09/2022	22/09/2022	22/09/2022	22/09/2022	22/09/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					
Bromophenyl phenyl ether	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	-	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	-	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	-	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample



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Analytical Report Number : 22-86105

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 *for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Electrical conductivity at 20oC of water	Determination of electrical conductivity in water by electrometric measurement. Accredited Matrices SW, GW, PW	In-house method	L031-PL	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by Ion Selective Electrode. Accredited matrices: SW, PW, GW.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Total Hardness of water	Determination of hardness in waters by calculation from calcium and magnesium. Accredited Matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry).Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Speciated EPA-16 PAHs in water (LOW LEVEL Dets)	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270 (low level)	L102B-PL	W	NONE



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Analytical Report Number : 22-86105

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Ammonia as NH3 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammoniacal Nitrogen as N in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammonium as NH4 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrite as N in water	Determination of nitrite in water by addition of sulphaniamide and NED followed by discrete analyser (colorimetry). Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Volatile organic compounds in water extended	Determination of volatile organic compounds in water by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
Cr (III) in water	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
Free cyanide (low level) in water	Determination of free cyanide by distillation followed by colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Bromate in Water	Determination of bromate in waters based on ion chromatography. Accredited matrices GW, PW, SW.	In house method based on Standard Methods for the Analysis of Water and Waste Water, method 4500	L008-PL	W	ISO 17025
Specific PAH sums in water	Determination of PAH compounds in water by extraction in hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L070-PL	W	NONE
Chloride in water	Determination of Chloride (dissolved) colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260. Accredited matrices: SW, PW, GW.	L082-PL	W	ISO 17025

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



**Analytical Report Number : 22-86105**

**Project / Site name: Begbroke**

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BH001	None Supplied	W	2435971	c	Ammonia as NH3 in water	L082-PL	c
BH001	None Supplied	W	2435971	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH001	None Supplied	W	2435971	c	Ammonium as NH4 in water	L082-PL	c
BH001	None Supplied	W	2435971	c	Electrical conductivity at 20oC of water	L031-PL	c
BH001	None Supplied	W	2435971	c	pH at 20oC in water (automated)	L099-PL	c
BH003	None Supplied	W	2435972	c	Ammonia as NH3 in water	L082-PL	c
BH003	None Supplied	W	2435972	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH003	None Supplied	W	2435972	c	Ammonium as NH4 in water	L082-PL	c
BH003	None Supplied	W	2435972	c	Electrical conductivity at 20oC of water	L031-PL	c
BH003	None Supplied	W	2435972	c	pH at 20oC in water (automated)	L099-PL	c
BH006	None Supplied	W	2435973	c	Ammonia as NH3 in water	L082-PL	c
BH006	None Supplied	W	2435973	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH006	None Supplied	W	2435973	c	Ammonium as NH4 in water	L082-PL	c
BH006	None Supplied	W	2435973	c	Electrical conductivity at 20oC of water	L031-PL	c
BH006	None Supplied	W	2435973	c	pH at 20oC in water (automated)	L099-PL	c
BH007	None Supplied	W	2435974	c	Ammonia as NH3 in water	L082-PL	c
BH007	None Supplied	W	2435974	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH007	None Supplied	W	2435974	c	Ammonium as NH4 in water	L082-PL	c
BH007	None Supplied	W	2435974	c	Electrical conductivity at 20oC of water	L031-PL	c
BH007	None Supplied	W	2435974	c	pH at 20oC in water (automated)	L099-PL	c
WS235	None Supplied	W	2435970	c	Ammonia as NH3 in water	L082-PL	c
WS235	None Supplied	W	2435970	c	Ammoniacal Nitrogen as N in water	L082-PL	c
WS235	None Supplied	W	2435970	c	Ammonium as NH4 in water	L082-PL	c
WS235	None Supplied	W	2435970	c	Electrical conductivity at 20oC of water	L031-PL	c
WS235	None Supplied	W	2435970	c	pH at 20oC in water (automated)	L099-PL	c

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## **Analytical Report Number : 22-83979**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	13/09/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	13/09/2022
<b>Your order number:</b>	PO19941	<b>Analysis completed by:</b>	22/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	22/09/2022
<b>Samples Analysed:</b>	1 soil sample		

**Signed:** 

Dominika Warjan  
Junior Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

**i2 Analytical**  
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Certificate of Analysis										
BS 3882:2015 Specification For Topsoil										
			<b>Fail BS 3882</b>						client	
<b>Report No:</b>	<b>22-83979</b>				Hydrock Consultants Ltd  01604842888					
<b>Location</b>	Begbroke									
<b>Lab Reference (Sample Number)</b>	2423946									
<b>Sampling Date</b>	31/08/2022									
<b>Sample ID</b>	WS221									
<b>Depth (m)</b>	<b>0.20</b>			<b>Compliant with range (Y/N)</b>						
		<b>unit</b>	<b>Result</b>	<b>Multi-P</b>	<b>Acid</b>	<b>Calc</b>	<b>Low-F</b>	<b>Low-F(a)</b>	<b>Low-F(c)</b>	
<b>Soil texture</b>	<2mm fraction	%m/m	SANDY LOAM	Y	Y	Y	Y	Y	Y	
<b>Maximum coarse fragment content:</b>	>2mm	%m/m	13.00	Y	Y	Y	Y	Y	Y	
	>20mm	%m/m	0.00	Y	Y	Y	Y	Y		
	>50mm	%m/m	0.00	Y	Y	Y	Y	Y	Y	
<b>Mass loss on ignition</b>		%	3.40							
	Clay 5-20%		Y	Y	Y	Y	Y	Y		
	Clay 20-35%		-	-	-	-	-	-		
<b>Soil pH:</b>		pH	8.10	Y	N	Y	Y	N	Y	
<b>Carbonate:</b>		%m/m	4.40	-	-	Y	-	-	Y	
<b>Available plant nutrients</b>	Nitrogen	%m/m	0.16	Y	Y	Y	-	-	-	
	Extractable Phosphate (as P)	mg/l	29.00	Y	Y	Y	N	N	N	
	Extractable Potassium	mg/l	111.00	N	N	N	-	-	-	
	Extractable Magnesium	mg/l	57.00	Y	Y	Y	-	-	-	
<b>Carbon: Nitrogen Ratio:</b>		:1	13.00	Y	Y	Y	Y	Y	Y	
<b>Conductivity</b>		us/cm	1900.00	Y	-	-	-	-	-	
<b>Phytotoxic contaminants:</b>	** Total Zinc	mg/kg	87.00	Y	Y	Y	Y	Y	Y	
	** Total Copper	mg/kg	17.00	Y	Y	Y	Y	Y		
	** Total Nickel	mg/kg	28.00	Y	Y	Y	Y	Y	Y	
<b>Visible contaminants:</b>	>2mm	%m/m	0.00	Y	Y	Y	Y	Y	Y	
	Plastics	%m/m	0.00	Y	Y	Y	Y	Y		
	Sharps	no. in 1 kg	0.00	Y	Y	Y	Y	Y	Y	
<b>Compliance:</b>				Fail	Fail	Fail	Fail	Fail	Fail	

Results are expressed on a dry weight basis, after correction for moisture content where applicable  
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

\*\* = MCERTS accredited



**Analytical Report Number : 22-83979**  
**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2423946	WS221	None Supplied	0.2	Brown loam and clay with vegetation and gravel

Analytical Report Number : 22-83979

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Geotechnical Testing in Soil	See attached geotechnical report	See attached geotechnical report		W	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Textural Classification Diagram	Textural classification Diagram	BS3882:2015		D	NONE
Carbon to Nitrogen Ratio (Topsoil - BS3882:2015)	Carbon to Nitrogen ratio (:1) calculated using Loss on Ignition.	BS3882:2015	L01TS2015	W	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Kjeldahl nitrogen in soil	Determination of total nitrogen using the Kjeldahl-digestion method and colorimetric determination.	In house method based on BS 7755-3.7:1995 &	L087-PL	D	NONE
Topsoil	See attached report.	BS 3882: 2015	PL	W	NONE
Mass loss on ignition (Topsoil - BS3882)	Determination of Loss on Ignition as per BS 3882:2015.	BS3882:2015	L047-PL	D	NONE
Carbonate (Topsoil - BS3882)	Determination of Carbonate as per BS 3882:2015.	BS3882:2015	L034-PL	D	NONE
Phosphorus as PO4 (BS3882/BS8601)	Determination of the extractable phosphorus in soil, in accordance with BS3882:2007 methodology.	BS3882:2015 & BS8601:2013	L048-PL	D	NONE
Coarse Fragment and Contaminant Analysis	Determination of >2mm contaminants	BS3882:2007 & BS8601:2013 & PAS 100:2005	L01TS	D	NONE
Nitrogen (TKN)	Determination of total nitrogen by Kjeldahl method.	BS3882:2007	L087-PL	D	NONE
Conductivity (BS3882/BS8601)	Determination of the conductivity of soil in accordance with BS 3882:2007 methodology	BS3882:2007 & BS8601:2013	L099-PL	D	NONE
pH (BS3882/BS8601)	Determination of the pH of soil in accordance with BS 3882:2007 methodology	BS3882:2007 & BS8601:2013	L099-PL	D	NONE
Extractable/Available Metals (BS3882/BS8601)	Determination of the extractable metals in soil, in accordance with BS3882:2007 methodology.	BS3882:2007 & BS8601:2013	L038-PL	D	NONE
Sodium (exchangeable %)	Determination of exchangeable sodium (%) by calculation, in accordance with BS3882:2007 methodology.	BS3882:2007	L038-PL	D	NONE



Analytical Report Number : 22-83979  
Project / Site name: Begbroke

**Water matrix abbreviations:**

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Textural Classification (BS3882/BS8601)	Determination of the textural classification of soil following BS3882:2007 methodology.	BS3882:2007 & BS8601:2013	L01TS	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

# TEST CERTIFICATE

**SPECIFICATION FOR TOPSOIL**  
 Tested in Accordance with: BS 3882: 2015

i2 Analytical Ltd  
 7 Woodshots Meadow  
 Croxley Green Business Park  
 Watford Herts WD18 8YS



Environmental Science

Client: Hydrock Consultants Ltd  
 Client Address: 2-4 Hawthorne Park, Holdenby Road,  
 Spratton, Northamptonshire,  
 NN6 8LD  
 Contact: Nathan Thompson  
 Site Address: Begbroke

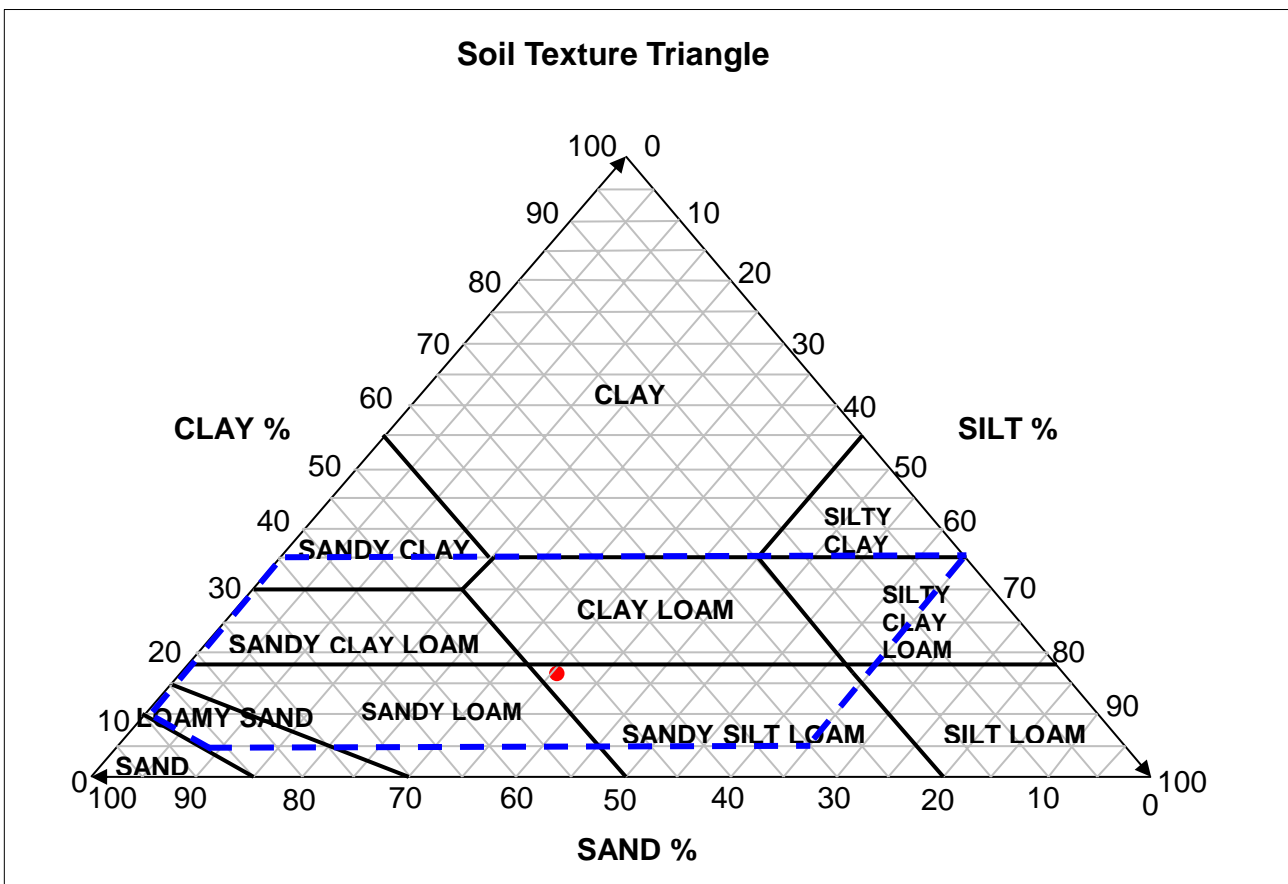
Client Reference: 19114  
 Job Number: 22-82417  
 Date Sampled: 26/08/2022  
 Date Received: 06/09/2022  
 Date Tested: 12/09/2022  
 Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

**Test Results:**

Laboratory Reference: 2415215  
 Hole No.: WS232  
 Sample Reference: Not Given  
 Sample Description: SANDY SILT LOAM

Depth Top [m]: 0.20  
 Depth Base [m]: Not Given  
 Sample Type: B



Sample Proportion	% dry mass
Sand	48.3
Silt	34.0
Clay	17.7

Compliant with range (Y/N)

Multipurpose topsoil  Y

Remarks:

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

Signed:

*Monika Siewior*

Monika Siewior  
 Reporting Specialist  
 for and on behalf of i2 Analytical Ltd

# TEST CERTIFICATE

**SPECIFICATION FOR TOPSOIL**  
Tested in Accordance with: BS 3882: 2015

i2 Analytical Ltd  
7 Woodshots Meadow  
Croxley Green Business Park  
Watford Herts WD18 8YS



Environmental Science

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

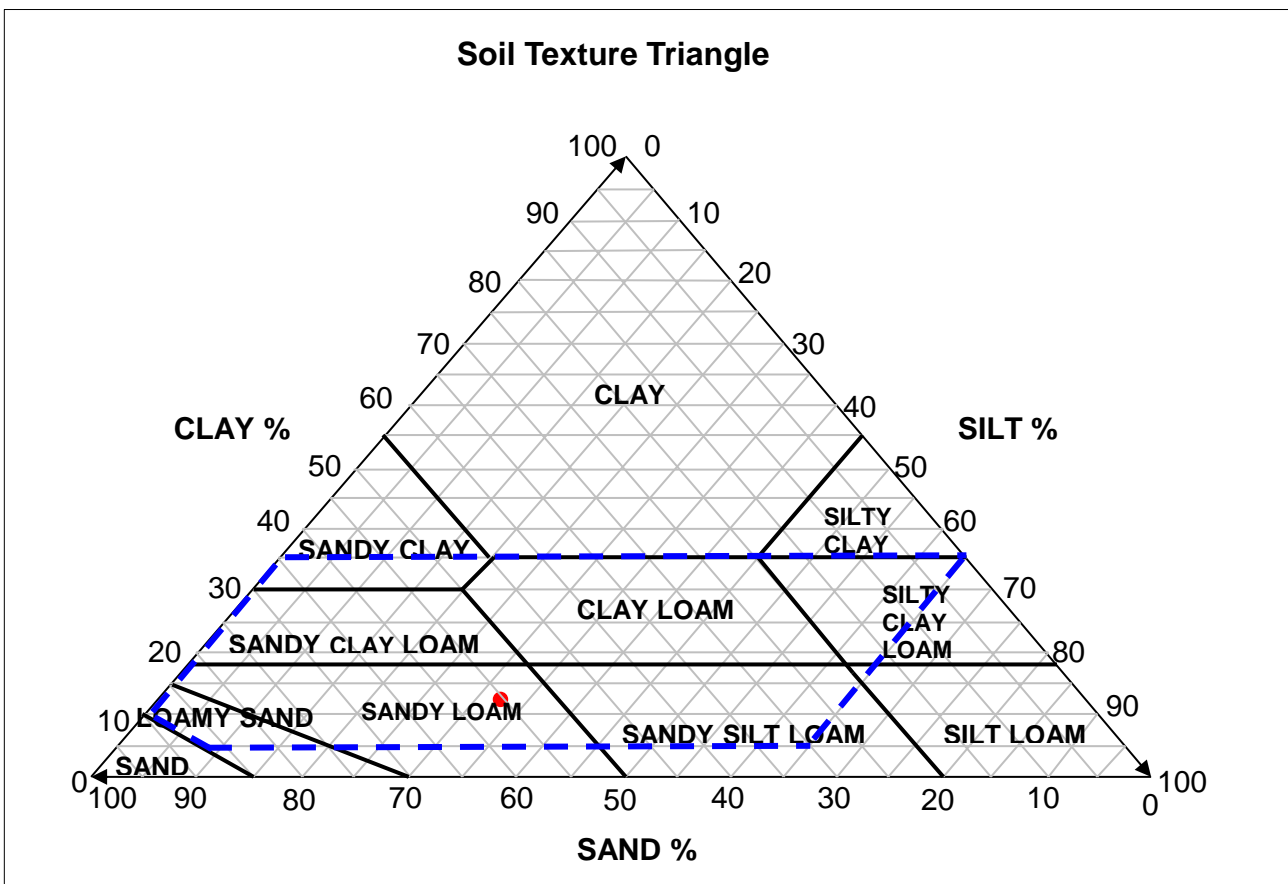
Client Reference: 19114  
Job Number: 22-82417  
Date Sampled: 01/09/2022  
Date Received: 06/09/2022  
Date Tested: 12/09/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

**Test Results:**

Laboratory Reference: 2415216  
Hole No.: BH203  
Sample Reference: Not Given  
Sample Description: SANDY LOAM

Depth Top [m]: 0.10  
Depth Base [m]: Not Given  
Sample Type: B



Sample Proportion	% dry mass
Sand	55.7
Silt	30.8
Clay	13.5

Compliant with range (Y/N)

Multipurpose topsoil  Y

Remarks:

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Signed:

*Monika Siewior*

Monika Siewior  
Reporting Specialist  
for and on behalf of i2 Analytical Ltd





**Nathan Thompson**  
Hydrock Consultants Ltd  
2-4 Hawthorne Park  
Holdenby Road  
Spratton  
Northamptonshire  
NN6 8LD

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**e:** nathanthompson@hydrock.com

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Business Park,  
Watford,  
Herts,  
WD18 8YS

**t:** 01923 225404  
**f:** 01923 237404  
**e:** reception@i2analytical.com

## **Analytical Report Number : 22-82417**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	06/09/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	06/09/2022
<b>Your order number:</b>	PO19941	<b>Analysis completed by:</b>	16/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	16/09/2022
<b>Samples Analysed:</b>	3 soil samples		

**Signed:** \_\_\_\_\_

Elzbieta Suchy  
Junior Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting  
leachates - 2 weeks from reporting  
waters - 2 weeks from reporting  
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.





4041



Environmental Science

**i2 Analytical**7 Woodshots Meadow  
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Fax: 01923 237404  
email:reception@i2analytical.com

Certificate of Analysis										
BS 3882:2015 Specification For Topsoil										
	Pass BS 3882 for Low fertility;							client		
<b>Report No:</b>	<b>22-82417</b>						<b>Hydrock Consultants Ltd</b>			
<b>Location</b>	Begbroke						01604842888			
<b>Lab Reference Number (Sample Number)</b>	2415215									
<b>Sampling Date</b>	26/08/2022									
<b>Sample ID</b>	WS232									
<b>Depth (m)</b>	<b>0.20</b>			<b>Compliant with range (Y/N)</b>						
		<b>unit</b>	<b>Result</b>	<b>Multi-P</b>	<b>Acid</b>	<b>Calc</b>	<b>Low-F</b>	<b>Low-F(a)</b>	<b>Low-F(c)</b>	
<b>Soil texture</b>	<2mm fraction	%m/m	SANDY SILT LOAM	Y	Y	Y	Y	Y	Y	
<b>Maximum coarse fragment content:</b>	>2mm	%m/m	3.50	Y	Y	Y	Y	Y	Y	
	>20mm	%m/m	0.00	Y	Y	Y	Y	Y	Y	
	>50mm	%m/m	0.00	Y	Y	Y	Y	Y	Y	
<b>Mass loss on ignition</b>		%	3.30							
	Clay 5-20%		Y	Y	Y	Y	Y	Y	Y	
	Clay 20-35%		-	-	-	-	-	-	-	
<b>Soil pH:</b>		pH	7.00	Y	N	N	Y	N	N	
<b>Carbonate:</b>		%m/m	4.40	-	-	Y	-	-	Y	
<b>Available plant nutrients</b>	Nitrogen	%m/m	0.19	Y	Y	Y	-	-	-	
	Extractable Phosphate (as P)	mg/l	18.00	Y	Y	Y	Y	Y	Y	
	Extractable Potassium	mg/l	67.80	N	N	N	-	-	-	
	Extractable Magnesium	mg/l	32.00	N	N	N	-	-	-	
<b>Carbon: Nitrogen Ratio:</b>		:1	11.00	Y	Y	Y	Y	Y	Y	
<b>Conductivity</b>		us/cm	1900.00	Y	-	-	-	-	-	
<b>Phytotoxic contaminants:</b>	** Total Zinc	mg/kg	67.00	Y	Y	Y	Y	Y	Y	
	** Total Copper	mg/kg	15.00	Y	Y	Y	Y	Y	Y	
	** Total Nickel	mg/kg	25.00	Y	Y	Y	Y	Y	Y	
<b>Visible contaminants:</b>	>2mm	%m/m	0.00	Y	Y	Y	Y	Y	Y	
	Plastics	%m/m	0.00	Y	Y	Y	Y	Y	Y	
	Sharps	no. in 1 kg	0.00	Y	Y	Y	Y	Y	Y	
<b>Compliance:</b>				Fail	Fail	Fail	Pass	Fail	Fail	

Results are expressed on a dry weight basis, after correction for moisture content where applicable  
 Stated limits are for guidance only and I2 cannot be held responsible for any discrepancies with current legislation

\*\* = MCERTS accredited



4041



Environmental Science

**i2 Analytical**

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Telephone: 01923 225404  
Fax: 01923 237404  
email:reception@i2analytical.com

Certificate of Analysis										
BS 3882:2015 Specification For Topsoil										
	Pass BS 3882 for Low fertility;							client		
<b>Report No:</b>	<b>22-82417</b>						<b>Hydrock Consultants Ltd</b>			
<b>Location</b>	Begbroke						01604842888			
<b>Lab Reference (Sample Number)</b>	2415216									
<b>Sampling Date</b>	01/09/2022									
<b>Sample ID</b>	BH203									
<b>Depth (m)</b>	<b>0.10</b>			<b>Compliant with range (Y/N)</b>						
		<b>unit</b>	<b>Result</b>	<b>Multi-P</b>	<b>Acid</b>	<b>Calc</b>	<b>Low-F</b>	<b>Low-F(a)</b>	<b>Low-F(c)</b>	
<b>Soil texture</b>	<2mm fraction	%m/m	SANDY LOAM	Y	Y	Y	Y	Y	Y	
<b>Maximum coarse fragment content:</b>	>2mm	%m/m	5.90	Y	Y	Y	Y	Y	Y	
	>20mm	%m/m	0.00	Y	Y	Y	Y	Y	Y	
	>50mm	%m/m	0.00	Y	Y	Y	Y	Y	Y	
<b>Mass loss on ignition</b>		%	4.10							
	Clay 5-20%		Y	Y	Y	Y	Y	Y	Y	
	Clay 20-35%		-	-	-	-	-	-	-	
<b>Soil pH:</b>		pH	6.80	Y	N	N	Y	N	N	
<b>Carbonate:</b>		%m/m	3.90	-	-	Y	-	-	Y	
<b>Available plant nutrients</b>	Nitrogen	%m/m	0.19	Y	Y	Y	-	-	-	
	Extractable Phosphate (as P)	mg/l	11.00	N	N	N	Y	Y	Y	
	Extractable Potassium	mg/l	102.00	N	N	N	-	-	-	
	Extractable Magnesium	mg/l	43.00	N	N	N	-	-	-	
<b>Carbon: Nitrogen Ratio:</b>		:1	13.00	Y	Y	Y	Y	Y	Y	
<b>Conductivity</b>		us/cm	1800.00	Y	-	-	-	-	-	
<b>Phytotoxic contaminants:</b>	** Total Zinc	mg/kg	84.00	Y	Y	Y	Y	Y	Y	
	** Total Copper	mg/kg	14.00	Y	Y	Y	Y	Y	Y	
	** Total Nickel	mg/kg	29.00	Y	Y	Y	Y	Y	Y	
<b>Visible contaminants:</b>	>2mm	%m/m	0.00	Y	Y	Y	Y	Y	Y	
	Plastics	%m/m	0.00	Y	Y	Y	Y	Y	Y	
	Sharps	no. in 1 kg	0.00	Y	Y	Y	Y	Y	Y	
<b>Compliance:</b>				Fail	Fail	Fail	Pass	Fail	Fail	

Results are expressed on a dry weight basis, after correction for moisture content where applicable  
Stated limits are for guidance only and I2 cannot be held responsible for any discrepancies with current legislation

\*\* = MCERTS accredited



4041



Environmental Science

**i2 Analytical**

7 Woodshots Meadow  
Croxley Green Business Park  
Watford, WD18 8YS

Telephone: 01923 225404  
Fax: 01923 237404  
email:reception@i2analytical.com

Certificate of Analysis									
BS 3882:2015 Specification For Topsoil									
Pass BS 3882 for Low fertility;						client			
Report No:	22-82417				Hydrock Consultants Ltd				
Location	Begbroke				01604842888				
Lab Reference (Sample Number)	2415217								
Sampling Date	01/09/2022								
Sample ID	WS251								
Depth (m)	0.20			Compliant with range (Y/N)					
		unit	Result	Multi-P	Acid	Calc	Low-F	Low-F(a)	Low-F(c)
Soil texture	<2mm fraction	%m/m	CLAY LOAM	Y	Y	Y	Y	Y	Y
Maximum coarse fragment content:	>2mm	%m/m	8.10	Y	Y	Y	Y	Y	Y
	>20mm	%m/m	0.00	Y	Y	Y	Y	Y	Y
	>50mm	%m/m	0.00	Y	Y	Y	Y	Y	Y
Mass loss on ignition		%	3.80						
	Clay 5-20%		-	N	N	N	Y	Y	Y
	Clay 20-35%		Y	N	N	N	Y	Y	Y
Soil pH:		pH	7.10	Y	N	N	Y	N	N
Carbonate:		%m/m	5.80	-	-	Y	-	-	Y
Available plant nutrients	Nitrogen	%m/m	0.18	Y	Y	Y	-	-	-
	Extractable Phosphate (as P)	mg/l	3.70	N	N	N	Y	Y	Y
	Extractable Potassium	mg/l	39.40	N	N	N	-	-	-
	Extractable Magnesium	mg/l	33.00	N	N	N	-	-	-
Carbon: Nitrogen Ratio:		:1	12.00	Y	Y	Y	Y	Y	Y
Conductivity		us/cm	1800.00	Y	-	-	-	-	-
Phytotoxic contaminants:	** Total Zinc	mg/kg	54.00	Y	Y	Y	Y	Y	Y
	** Total Copper	mg/kg	9.90	Y	Y	Y	Y	Y	Y
	** Total Nickel	mg/kg	25.00	Y	Y	Y	Y	Y	Y
Visible contaminants:	>2mm	%m/m	0.00	Y	Y	Y	Y	Y	Y
	Plastics	%m/m	0.00	Y	Y	Y	Y	Y	Y
	Sharps	no. in 1 kg	0.00	Y	Y	Y	Y	Y	Y
Compliance:				Fail	Fail	Fail	Pass	Fail	Fail

Results are expressed on a dry weight basis, after correction for moisture content where applicable  
Stated limits are for guidance only and I2 cannot be held responsible for any discrepancies with current legislation

\*\* = MCERTS accredited

**Analytical Report Number : 22-82417**

**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2415215	WS232	None Supplied	0.2	Brown sand with fibrous material and gravel
2415216	BH203	None Supplied	0.1	Brown loam and clay with gravel.
2415217	WS251	None Supplied	0.2	Brown loam and clay with gravel.

**Analytical Report Number : 22-82417**

**Project / Site name: Begbroke**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Geotechnical Testing in Soil	See attached geotechnical report	See attached geotechnical report		W	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Textural Classification Diagram	Textural classification Diagram	BS3882:2015		D	NONE
Carbon to Nitrogen Ratio (Topsoil - BS3882:2015)	Carbon to Nitrogen ratio (:1) calculated using Loss on Ignition.	BS3882:2015	L01TS2015	W	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Kjeldahl nitrogen in soil	Determination of total nitrogen using the Kjeldahl-digestion method and colorimetric determination.	In house method based on BS 7755-3.7:1995 &	L087-PL	D	NONE
Topsoil	See attached report.	BS 3882: 2015	PL	W	NONE
Mass loss on ignition (Topsoil - BS3882)	Determination of Loss on Ignition as per BS 3882:2015.	BS3882:2015	L047-PL	D	NONE
Carbonate (Topsoil - BS3882)	Determination of Carbonate as per BS 3882:2015.	BS3882:2015	L034-PL	D	NONE
Phosphorus as PO4 (BS3882/BS8601)	Determination of the extractable phosphorus in soil, in accordance with BS3882:2007 methodology.	BS3882:2015 & BS8601:2013	L048-PL	D	NONE
Coarse Fragment and Contaminant Analysis	Determination of >2mm contaminants	BS3882:2007 & BS8601:2013 & PAS 100:2005	L01TS	D	NONE
Nitrogen (TKN)	Determination of total nitrogen by Kjeldahl method.	BS3882:2007	L087-PL	D	NONE
Conductivity (BS3882/BS8601)	Determination of the conductivity of soil in accordance with BS 3882:2007 methodology	BS3882:2007 & BS8601:2013	L099-PL	D	NONE
pH (BS3882/BS8601)	Determination of the pH of soil in accordance with BS 3882:2007 methodology	BS3882:2007 & BS8601:2013	L099-PL	D	NONE
Extractable/Available Metals (BS3882/BS8601)	Determination of the extractable metals in soil, in accordance with BS3882:2007 methodology.	BS3882:2007 & BS8601:2013	L038-PL	D	NONE
Sodium (exchangeable %)	Determination of exchangeable sodium (%) by calculation, in accordance with BS3882:2007 methodology.	BS3882:2007	L038-PL	D	NONE





**Analytical Report Number : 22-82417**

**Project / Site name: Begbroke**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Textural Classification (BS3882/BS8601)	Determination of the textural classification of soil following BS3882:2007 methodology.	BS3882:2007 & BS8601:2013	L01TS	D	NONE

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**

# TEST CERTIFICATE

**SPECIFICATION FOR TOPSOIL**  
Tested in Accordance with: BS 3882: 2015

i2 Analytical Ltd  
7 Woodshots Meadow  
Croxley Green Business Park  
Watford Herts WD18 8YS



Environmental Science

Client: Hydrock Consultants Ltd  
Client Address: 2-4 Hawthorne Park, Holdenby Road,  
Spratton, Northamptonshire,  
NN6 8LD  
Contact: Nathan Thompson  
Site Address: Begbroke

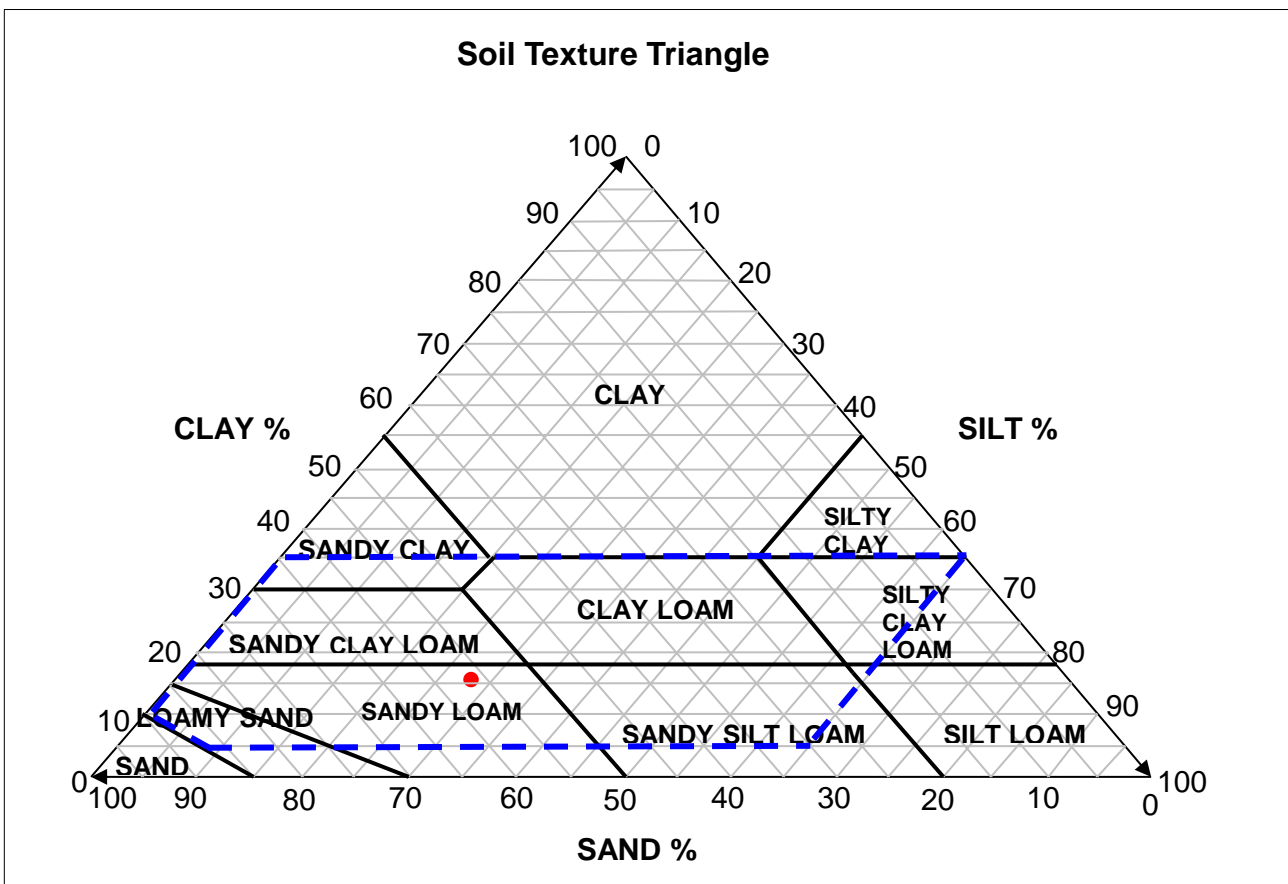
Client Reference: 19114  
Job Number: 22-83979  
Date Sampled: 31/08/2022  
Date Received: 13/09/2022  
Date Tested: 16/09/2022  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

**Test Results:**

Laboratory Reference: 2423946  
Hole No.: WS221  
Sample Reference: Not Given  
Sample Description: SANDY LOAM

Depth Top [m]: 0.20  
Depth Base [m]: Not Given  
Sample Type: ES



Sample Proportion	% dry mass
Sand	56.9
Silt	26.4
Clay	16.7

Compliant with range (Y/N)

Multipurpose topsoil  Y

Remarks:

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

Signed:

Anna Dudzinska  
PL Deputy Head of Reporting Team  
for and on behalf of i2 Analytical Ltd



**Nathan Thompson**  
Hydrock Consultants Ltd  
2-4 Hawthorne Park  
Holdenby Road  
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**t:** 01923 225404  
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**e:** reception@i2analytical.com

## **Analytical Report Number : 21-99303**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	14/09/2021
<b>Your job number:</b>	C-19114-C	<b>Samples instructed on/ Analysis started on:</b>	15/09/2021
<b>Your order number:</b>	PO09846	<b>Analysis completed by:</b>	21/09/2021
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	21/09/2021
<b>Samples Analysed:</b>	3 water samples		

**Signed:** *Izabela Wójcik*

Izabela Wójcik  
Technical Reviewer (Reporting Team)  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 21-99303

Project / Site name: Begbroke

Your Order No: PO09846

Lab Sample Number	2010451	2010452	2010453
Sample Reference	BH01	BH02	BH03
Sample Number	None Supplied	None Supplied	None Supplied
Depth (m)	4.62	3.44	3.06
Date Sampled	14/09/2021	14/09/2021	14/09/2021
Time Taken	0900	0900	0900
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status

#### General Inorganics

	pH Units	N/A	ISO 17025	6.9	6.7	6.8
pH						
Electrical Conductivity at 20 °C	µS/cm	10	ISO 17025	830	1300	1300
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	2.6
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Sulphate as SO4	µg/l	45	ISO 17025	127000	573000	406000
Chloride	mg/l	0.15	ISO 17025	34	34	28
Fluoride	µg/l	50	ISO 17025	140	110	120
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	69	1800	18000
Ammoniacal Nitrogen as NH3	µg/l	15	ISO 17025	84	2200	22000
Ammoniacal Nitrogen as NH4	µg/l	15	ISO 17025	89	2300	24000
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	1.08	6.07	4.99
Nitrate as N	mg/l	0.01	ISO 17025	3.02	0.34	2.21
Nitrate as NO3	mg/l	0.05	ISO 17025	13.4	1.50	9.81
Nitrite as N	µg/l	1	ISO 17025	50	< 1.0	1.7
Nitrite as NO2	µg/l	5	ISO 17025	160	< 5.0	5.5

	mgCaCO3/l	1	ISO 17025	593	1290	921
Hardness - Total						
Bromate by IC	mg/l	0.002	ISO 17025	< 0.002	< 0.002	< 0.002

#### Total Phenols

Total Phenols (monohydric)	µg/l	1	ISO 17025	1.2	< 1.0	2.0

#### Speciated PAHs

	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Naphthalene						
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.001	NONE	< 0.001	< 0.001	< 0.001
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.001	NONE	< 0.001	< 0.001	< 0.001

#### PAH Sums

	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene & Benzo(k)fluoranthene						
Sum of Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.04	NONE	< 0.040	< 0.040	< 0.040

#### Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16



Analytical Report Number: 21-99303  
 Project / Site name: Begbroke

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Lab Sample Number	2010451	2010452	2010453
Sample Reference	BH01	BH02	BH03
Sample Number	None Supplied	None Supplied	None Supplied
Depth (m)	4.62	3.44	3.06
Date Sampled	14/09/2021	14/09/2021	14/09/2021
Time Taken	0900	0900	0900
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status

**Heavy Metals / Metalloids**

Boron (dissolved)	µg/l	10	ISO 17025	210	1400	780
Calcium (dissolved)	mg/l	0.012	ISO 17025	220	450	310
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0
Chromium (III)	µg/l	1	NONE	5.3	7.6	7.1
Iron (dissolved)	mg/l	0.004	ISO 17025	0.014	0.11	0.042
Iron (dissolved)	µg/l	4	ISO 17025	14	110	42
Magnesium (dissolved)	mg/l	0.005	ISO 17025	9.0	39	35
Sodium (dissolved)	mg/l	0.01	ISO 17025	33	49	40

Aluminium (dissolved)	µg/l	1	ISO 17025	4.0	43	1.6
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.5	0.6	0.6
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.45	6.01	2.70
Barium (dissolved)	µg/l	0.06	ISO 17025	59	31	74
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03	< 0.02	0.06
Chromium (dissolved)	µg/l	0.2	ISO 17025	5.3	7.6	7.1
Cobalt (dissolved)	µg/l	0.2	ISO 17025	1.5	6.2	17
Copper (dissolved)	µg/l	0.5	ISO 17025	2.7	1.4	3.1
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	320	670	2500
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	5.6	11	16
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6
Silver (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Tin (dissolved)	µg/l	0.2	ISO 17025	0.35	< 0.20	< 0.20
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.2	0.3	< 0.2
Zinc (dissolved)	µg/l	0.5	ISO 17025	5.6	5.3	8.3





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Depth (m)	4.62	3.44	3.06
Date Sampled	14/09/2021	14/09/2021	14/09/2021
Time Taken	0900	0900	0900
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status

#### Monoaromatics & Oxygenates

Compound	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Sum of m, p & o-Xylene	µg/l	2	ISO 17025	< 2.0	< 2.0	< 2.0

#### Petroleum Hydrocarbons

TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C35	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C35 - C44	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C44)	µg/l	10	NONE	< 10	< 10	< 10

TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C35 - C44	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C44)	µg/l	10	NONE	< 10	< 10	< 10

TPH-CWG Total C5 - C44	µg/l	10	NONE	< 10	< 10	< 10
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#### VOCs

Compound	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Chloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Chloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Bromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/l	1	NONE	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0



Analytical Report Number: 21-99303

Project / Site name: Begbroke

Your Order No: PO09846

Lab Sample Number				2010451	2010452	2010453
Sample Reference				BH01	BH02	BH03
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				4.62	3.44	3.06
Date Sampled				14/09/2021	14/09/2021	14/09/2021
Time Taken				0900	0900	0900
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status			
Tetrachloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Styrene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
o-Xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0

Dichloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Dichlorodifluoromethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0
Total Trihalomethanes	µg/l	4	NONE	< 4.0	< 4.0	< 4.0
Total Trichlorobenzenes	ug/l	3	NONE	< 3.0	< 3.0	< 3.0
Total Dichlorobenzenes	ug/l	3	NONE	< 3.0	< 3.0	< 3.0
Trichloroethylene (TCE) + Tetrachloroethylene (PCE)	ug/l	2	NONE	< 2.0	< 2.0	< 2.0
Total 1,2-Dichloroethene	ug/l	2	NONE	< 2.0	< 2.0	< 2.0
Total 1,3-Dichloropropane	ug/l	2	NONE	< 2.0	< 2.0	< 2.0
Tetrachloroethane	ug/l	2	NONE	< 2.0	< 2.0	< 2.0

**VOCS TICs**

VOCS TICs Compound Name		10	NONE	ND	ND	ND
VOC % Match	%	10	NONE	0	0	0



Environmental Science

Analytical Report Number: 21-99303

Project / Site name: Begbroke

Your Order No: PO09846

Lab Sample Number	2010451	2010452	2010453
Sample Reference	BH01	BH02	BH03
Sample Number	None Supplied	None Supplied	None Supplied
Depth (m)	4.62	3.44	3.06
Date Sampled	14/09/2021	14/09/2021	14/09/2021
Time Taken	0900	0900	0900
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status

SVOCs

Analytical Parameter	Units	Limit of detection	Accreditation Status	2010451	2010452	2010453
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01



Analytical Report Number: 21-99303  
 Project / Site name: Begbroke

Your Order No: PO09846

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Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				4.62	3.44	3.06
Date Sampled				14/09/2021	14/09/2021	14/09/2021
Time Taken				0900	0900	0900
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status			
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10

**SVOCs TICs**

SVOCs TICs Compound Name		N/A	NONE	ND	ND	ND
SVOC % Match	%	N/A	NONE	0	0	0

U/S = Unsuitable Sample I/S = Insufficient Sample



**Analytical Report Number : 21-99303**  
**Project / Site name: Begbroke**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Electrical conductivity at 20oC of water	Determination of electrical conductivity in water by electrometric measurement. Accredited Matrices SW, GW, PW	In-house method	L031-PL	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by Ion Selective Electrode. Accredited matrices: SW, PW, GW.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Total Hardness of water	Determination of hardness in waters by calculation from calcium and magnesium. Accredited Matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalari)	L080-PL	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry).Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	NONE
Tentatively identified compounds (SVOC) in water	Determination of semi-volatile organic compounds total ion count in water by extraction with hexane followed by GC-MS followed by a full library scan.	In-house method based on USEPA 8270	L070-PL	W	NONE
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Tentatively identified compounds (VOC) in water	Determination of volatile organic compounds total ion count in water by headspace GC-MS followed by a full library scan.	In-house method based on USEPA8260	L073B-PL	W	NONE





**Analytical Report Number : 21-99303**  
**Project / Site name: Begbroke**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Speciated EPA-16 PAHs in water (LOW LEVEL Dets)	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270 (low level)	L102B-PL	W	NONE
TPH in (Water)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding.	L070-PL	W	NONE
Ammonia as NH <sub>3</sub> in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammoniacal Nitrogen as N in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammonium as NH <sub>4</sub> in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrite as N in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry). Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
TPH Chromatogram in Water	TPH Chromatogram in Water.	In-house method	L070-PL	W	NONE
Volatile organic compounds in water extended	Determination of volatile organic compounds in water by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
Cr (III) in water	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20°C in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
Free cyanide (low level) in water	Determination of free cyanide by distillation followed by colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Bromate in Water	Determination of bromate in waters based on ion chromatography. Accredited matrices GW, PW, SW.	In house method based on Standard Methods for the Analysis of Water and Waste Water, method 4500	L008-PL	W	ISO 17025
Specific PAH sums in water	Determination of PAH compounds in water by extraction in hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L070-PL	W	NONE



**Analytical Report Number : 21-99303**  
**Project / Site name: Begbroke**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

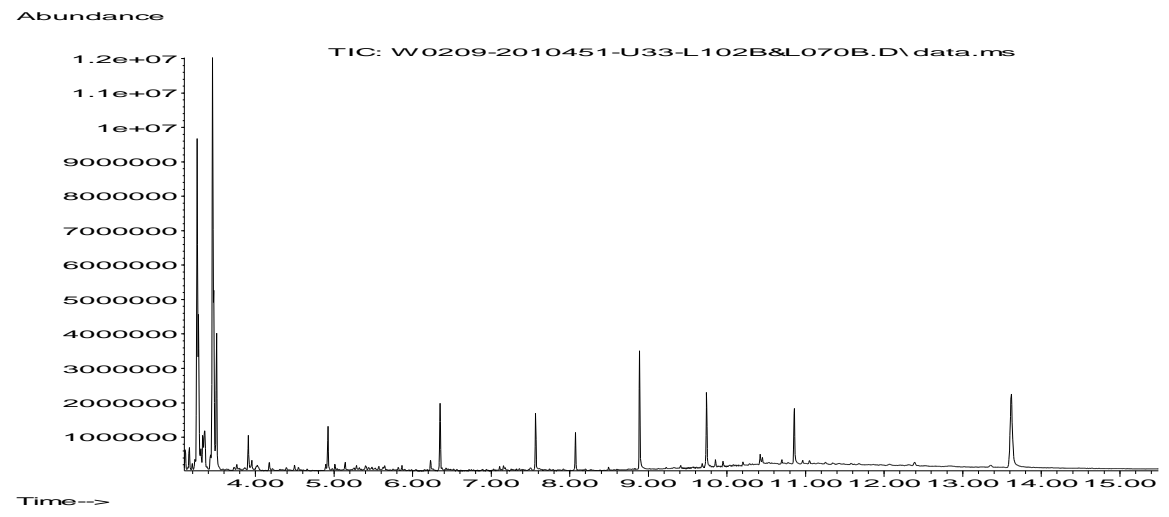
<b>Analytical Test Name</b>	<b>Analytical Method Description</b>	<b>Analytical Method Reference</b>	<b>Method number</b>	<b>Wet / Dry Analysis</b>	<b>Accreditation Status</b>
Chloride in water	Determination of Chloride (diissolved) colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260. Accredited matrices: SW, PW, GW.	L082-PL	W	ISO 17025

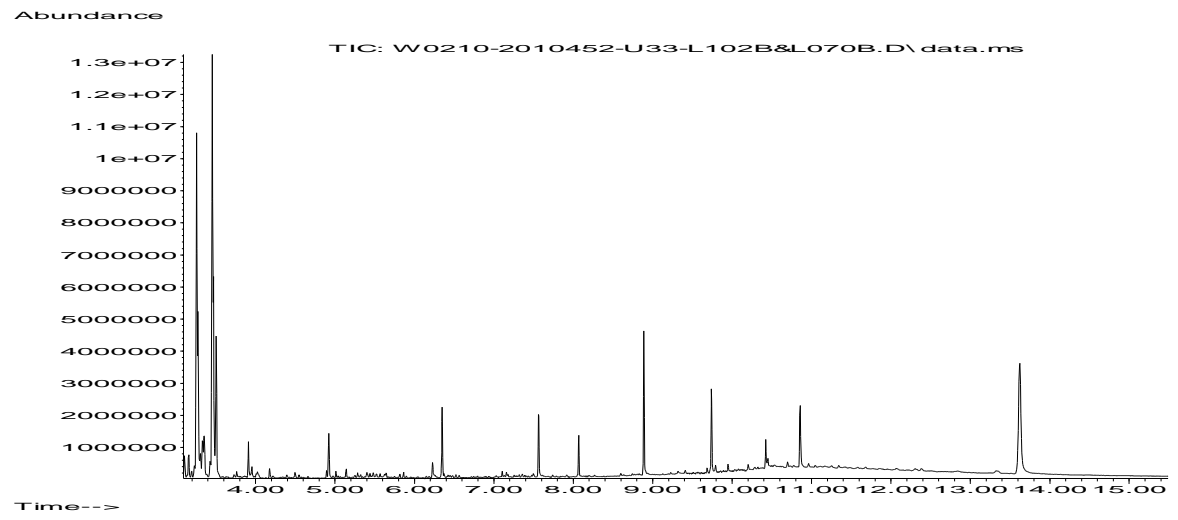
**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

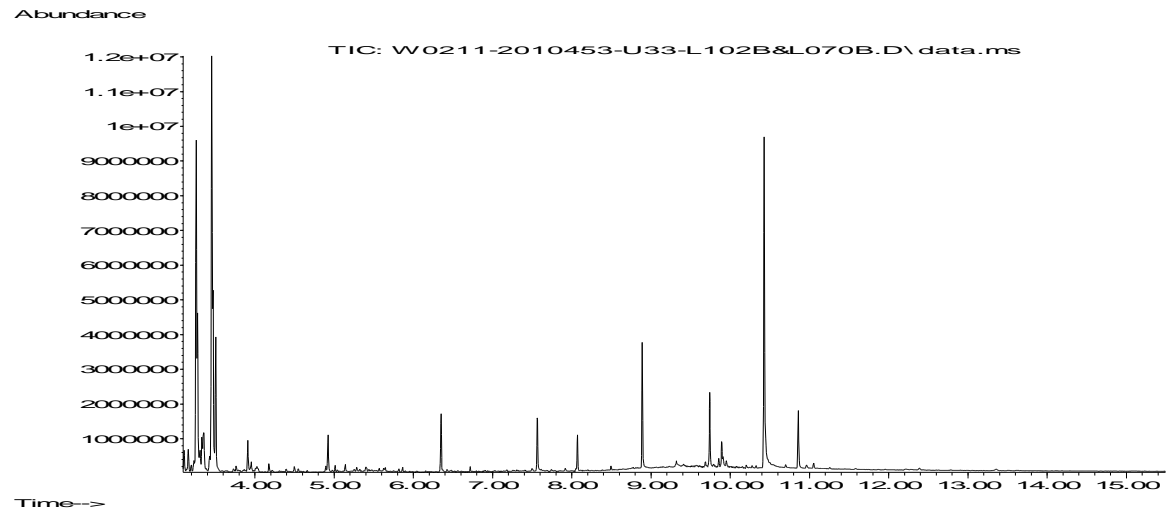
**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**











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## **Analytical Report Number : 21-95097**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	24/08/2021
<b>Your job number:</b>	C-19114-C	<b>Samples instructed on/ Analysis started on:</b>	25/08/2021
<b>Your order number:</b>	PO09383	<b>Analysis completed by:</b>	02/09/2021
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	02/09/2021
<b>Samples Analysed:</b>	3 water samples		

  
**Signed:** \_\_\_\_\_

Joanna Wawrzeczko  
Technical Reviewer (Reporting Team)  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 21-95097  
Project / Site name: Begbroke

Your Order No: P009383

Lab Sample Number	1985416	1985417	1985418
Sample Reference	BH01	BH02	BH03
Sample Number	None Supplied	None Supplied	None Supplied
Depth (m)	4.55	3.80	3.45
Date Sampled	24/08/2021	24/08/2021	24/08/2021
Time Taken	0900	0900	0900
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status

**General Inorganics**

Parameter	Units	Limit of detection	Accreditation Status	1985416	1985417	1985418
pH	pH Units	N/A	ISO 17025	7.0	6.8	6.9
Electrical Conductivity at 20 °C	µS/cm	10	ISO 17025	960	1200	1100
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	3.1
Free Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Sulphate as SO4	µg/l	45	ISO 17025	170000	645000	491000
Chloride	mg/l	0.15	ISO 17025	34	32	28
Fluoride	µg/l	50	ISO 17025	130	170	130
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	77	1600	18000
Ammoniacal Nitrogen as NH3	µg/l	15	ISO 17025	93	1900	21000
Ammoniacal Nitrogen as NH4	µg/l	15	ISO 17025	99	2000	23000
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	2.75	5.87	6.14
Nitrate as N	mg/l	0.01	ISO 17025	3.46	0.10	0.23
Nitrate as NO3	mg/l	0.05	ISO 17025	15.3	0.46	1.03
Nitrite as N	µg/l	1	ISO 17025	330	< 1.0	3.8
Nitrite as NO2	µg/l	5	ISO 17025	1100	< 5.0	13

Hardness - Total	mgCaCO3/l	1	ISO 17025	701	1460	1130
Bromate by IC	mg/l	0.002	NONE	< 0.002	< 0.002	< 0.002

**Total Phenols**

Total Phenols (monohydric)	µg/l	1	ISO 17025	1.6	2.0	2.8
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Analytical Report Number: 21-95097  
Project / Site name: Begbroke

Your Order No: P009383

<b>Lab Sample Number</b>				1985416	1985417	1985418
<b>Sample Reference</b>				BH01	BH02	BH03
<b>Sample Number</b>				None Supplied	None Supplied	None Supplied
<b>Depth (m)</b>				4.55	3.80	3.45
<b>Date Sampled</b>				24/08/2021	24/08/2021	24/08/2021
<b>Time Taken</b>				0900	0900	0900
<b>Analytical Parameter (Water Analysis)</b>	<b>Units</b>	<b>Limit of detection</b>	<b>Accreditation Status</b>			

**Speciated PAHs**

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01

**PAH Sums**

Sum of Benzo(b)fluoranthene & Benzo(k)fluoranthene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020
Sum of Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.02	NONE	< 0.020	< 0.020	< 0.020
Sum of Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(ghi)perylene & Indeno(1,2,3-cd)pyrene	µg/l	0.04	NONE	< 0.040	< 0.040	< 0.040

**Total PAH**

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16	< 0.16
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Analytical Report Number: 21-95097  
Project / Site name: Begbroke

Your Order No: P009383

Lab Sample Number	1985416			1985417			1985418		
Sample Reference	BH01			BH02			BH03		
Sample Number	None Supplied			None Supplied			None Supplied		
Depth (m)	4.55			3.80			3.45		
Date Sampled	24/08/2021			24/08/2021			24/08/2021		
Time Taken	0900			0900			0900		
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status						

**Heavy Metals / Metalloids**

Parameter	Units	Limit of detection	Accreditation Status	1985416	1985417	1985418
Boron (dissolved)	µg/l	10	ISO 17025	240	1500	960
Calcium (dissolved)	mg/l	0.012	ISO 17025	260	510	380
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0
Chromium (III)	µg/l	1	NONE	6.7	9.2	8.4
Iron (dissolved)	mg/l	0.004	ISO 17025	0.023	0.42	0.016
Iron (dissolved)	µg/l	4	ISO 17025	23	420	17
Magnesium (dissolved)	mg/l	0.005	ISO 17025	12	48	41
Sodium (dissolved)	mg/l	0.01	ISO 17025	57	60	48

Aluminium (dissolved)	µg/l	1	ISO 17025	67	2.6	15
Antimony (dissolved)	µg/l	0.4	ISO 17025	0.8	0.5	0.6
Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.21	6.85	2.49
Barium (dissolved)	µg/l	0.06	ISO 17025	69	31	75
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03	< 0.02	0.05
Chromium (dissolved)	µg/l	0.2	ISO 17025	6.7	9.2	8.4
Cobalt (dissolved)	µg/l	0.2	ISO 17025	1.9	8.7	19
Copper (dissolved)	µg/l	0.5	ISO 17025	8.5	3.7	6.4
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	230	810	1900
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	7.0	14	15
Selenium (dissolved)	µg/l	0.6	ISO 17025	3.0	0.9	0.8
Silver (dissolved)	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Tin (dissolved)	µg/l	0.2	ISO 17025	0.27	< 0.20	0.29
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.6	0.3	0.3
Zinc (dissolved)	µg/l	0.5	ISO 17025	6.9	7.0	9.5

**Monoaromatics & Oxygenates**

Parameter	Units	Limit of detection	Accreditation Status	1985416	1985417	1985418
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Sum of m, p & o-Xylene	µg/l	2	ISO 17025	< 2.0	< 2.0	< 2.0



Analytical Report Number: 21-95097  
Project / Site name: Begbroke

Your Order No: P009383

Lab Sample Number	1985416			1985417			1985418		
Sample Reference	BH01			BH02			BH03		
Sample Number	None Supplied			None Supplied			None Supplied		
Depth (m)	4.55			3.80			3.45		
Date Sampled	24/08/2021			24/08/2021			24/08/2021		
Time Taken	0900			0900			0900		
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status						

**Petroleum Hydrocarbons**

TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C35	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic >C35 - C44	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C44)	µg/l	10	NONE	< 10	< 10	< 10

TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic >C35 - C44	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C44)	µg/l	10	NONE	< 10	< 10	< 10

TPH-CWG Total C5 - C44	µg/l	10	NONE	< 10	< 10	< 10
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**VOCs**

Chloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Chloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Bromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/l	1	NONE	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0





Analytical Report Number: 21-95097  
Project / Site name: Begbroke

Your Order No: P009383

Lab Sample Number				1985416	1985417	1985418
Sample Reference				BH01	BH02	BH03
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				4.55	3.80	3.45
Date Sampled				24/08/2021	24/08/2021	24/08/2021
Time Taken				0900	0900	0900
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status			
1,2-Dibromoethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Styrene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
o-Xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0

Dichloromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Dichlorodifluoromethane	µg/l	1	NONE	< 1.0	< 1.0	< 1.0
Total Trihalomethanes	µg/l	4	NONE	< 4.0	< 4.0	< 4.0
Total Trichlorobenzenes	ug/l	3	NONE	< 3.0	< 3.0	< 3.0
Total Dichlorobenzenes	ug/l	3	NONE	< 3.0	< 3.0	< 3.0
Trichloroethylene (TCE) + Tetrachloroethylene (PCE)	ug/l	2	NONE	< 2.0	< 2.0	< 2.0
Total 1,2-Dichloroethene	ug/l	2	NONE	< 2.0	< 2.0	< 2.0
Total 1,3-Dichloropropane	ug/l	2	NONE	< 2.0	< 2.0	< 2.0
Tetrachloroethane	ug/l	2	NONE	< 2.0	< 2.0	< 2.0

**VOCs TICs**

VOCs TICs Compound Name		10	NONE	ND	ND	ND

**SVOCs**

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05



Analytical Report Number: 21-95097  
Project / Site name: Begbroke

Your Order No: P009383

Lab Sample Number				1985416	1985417	1985418
Sample Reference				BH01	BH02	BH03
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				4.55	3.80	3.45
Date Sampled				24/08/2021	24/08/2021	24/08/2021
Time Taken				0900	0900	0900
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status			
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10

**SVOCs TICs**

SVOCs TICs Compound Name		N/A	NONE	ND	ND	ND

U/S = Unsuitable Sample I/S = Insufficient Sample



**Analytical Report Number : 21-95097**  
**Project / Site name: Begbroke**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Electrical conductivity at 20oC of water	Determination of electrical conductivity in water by electrometric measurement. Accredited Matrices SW, GW, PW	In-house method	L031-PL	W	ISO 17025
Fluoride in water	Determination of fluoride in water by 1:1 ratio with a buffer solution followed by Ion Selective Electrode. Accredited matrices: SW, PW, GW.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Total Hardness of water	Determination of hardness in waters by calculation from calcium and magnesium. Accredited Matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by discrete analyser (colorimetry). Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08,	L078-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	NONE
Tentatively identified compounds (SVOC) in water	Determination of semi-volatile organic compounds total ion count in water by extraction with hexane followed by GC-MS followed by a full library scan.	In-house method based on USEPA 8270	L070-PL	W	NONE
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Tentatively identified compounds (VOC) in water	Determination of volatile organic compounds total ion count in water by headspace GC-MS followed by a full library scan.	In-house method based on USEPA8260	L073B-PL	W	NONE



**Analytical Report Number : 21-95097**  
**Project / Site name: Begbroke**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Speciated EPA-16 PAHs in water (LOW LEVEL Dets)	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270 (low level)	L102B-PL	W	NONE
TPH in (Water)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding.	L070-PL	W	NONE
Ammonia as NH3 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammoniacal Nitrogen as N in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Ammonium as NH4 in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrite as N in water	Determination of nitrite in water by addition of sulphaniamide and NED followed by discrete analyser (colorimetry). Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate and colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L078-PL	W	ISO 17025
TPH Chromatogram in Water	TPH Chromatogram in Water.	In-house method	L070-PL	W	NONE
Volatile organic compounds in water extended	Determination of volatile organic compounds in water by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
Cr (III) in water	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
Free cyanide (low level) in water	Determination of free cyanide by distillation followed by colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Bromate in Water	Determination of bromate in waters based on ion chromatography. Accredited matrices GW, PW, SW.	In house method based on Standard Methods for the Analysis of Water and Waste Water, method 4500	L008-PL	W	NONE
Specific PAH sums in water	Determination of PAH compounds in water by extraction in hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L070-PL	W	NONE



Analytical Report Number : 21-95097  
Project / Site name: Begbroke

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride in water	Determination of Chloride (dissolved) colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260. Accredited matrices: SW, PW, GW.	L082-PL	W	ISO 17025

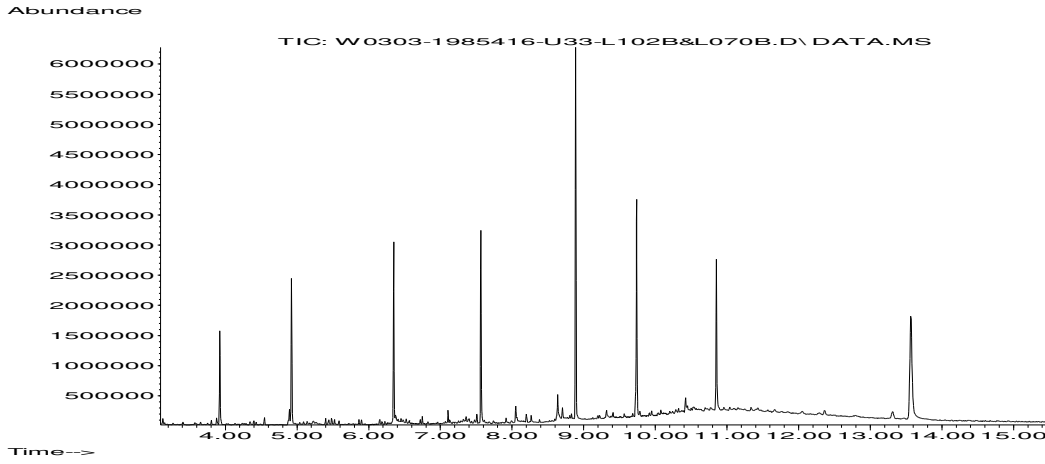
For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

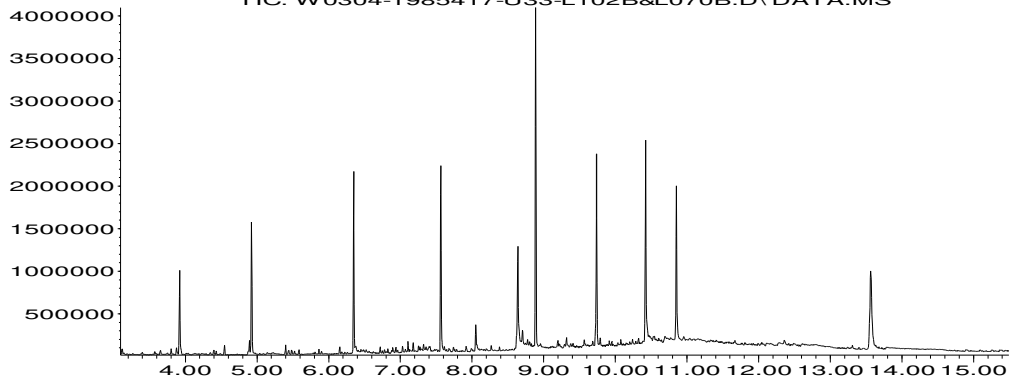
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

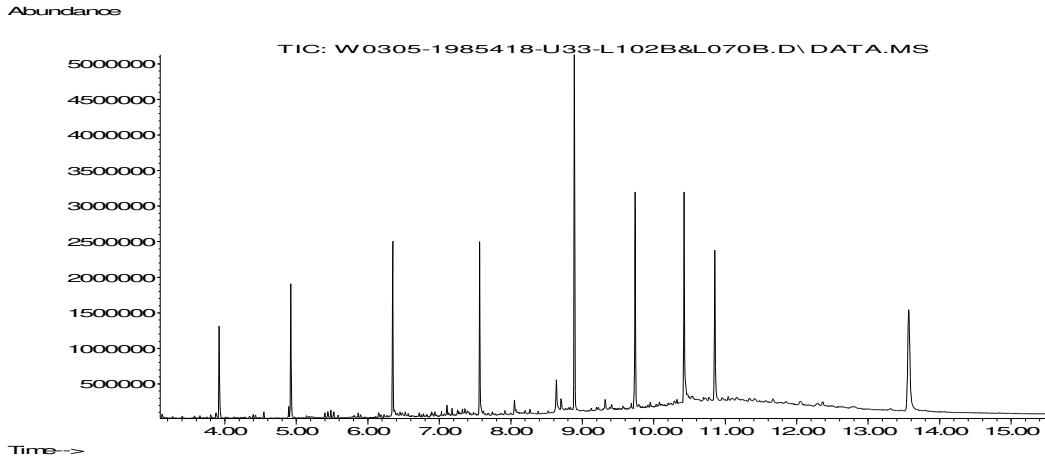




Abundance

TIC: W0304-1985417-U33-L102B&L070B.D\DATA.MS







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## **Analytical Report Number : 21-96277**

Replaces Analytical Report Number: 21-96277, issue no. 1  
Result correction by laboratory.

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	31/08/2021
<b>Your job number:</b>	C 19114 C	<b>Samples instructed on/ Analysis started on:</b>	31/08/2021
<b>Your order number:</b>	PO09383	<b>Analysis completed by:</b>	08/09/2021
<b>Report Issue Number:</b>	2	<b>Report issued on:</b>	08/09/2021
<b>Samples Analysed:</b>	32 soil samples		

**Signed:** *Karolina Marek*

Karolina Marek  
PL Head of Reporting Team  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992549	1992550	1992551	1992552	1992553			
Sample Reference	BH01	BH02	BH02	BH03	TP01			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	2.50	3.00	1.50	1.00	1.00			
Date Sampled	18/08/2021	19/08/2021	19/08/2021	18/08/2021	17/08/2021			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	18	19	25	19	21
Total mass of sample received	kg	0.001	NONE	1.0	1.0	0.80	0.90	1.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	Chrysotile- Rope	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Detected	Not-detected

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	7.9	7.3	7.9	8.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.22	1.7	1.4	0.28	1.4
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.013	0.028	0.046	0.018	0.023

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.62	0.32	1.3	0.27	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.62	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	2.0	0.92	2.1	0.72	< 0.05
Pyrene	mg/kg	0.05	MCERTS	1.9	0.93	2.0	0.66	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.5	< 0.05	1.6	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	1.2	< 0.05	1.2	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.7	< 0.05	1.7	0.64	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.53	< 0.05	0.51	0.27	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.3	< 0.05	1.4	0.50	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.96	< 0.05	0.93	0.35	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.27	< 0.05	0.28	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.0	< 0.05	1.0	0.40	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	13.0	2.17	14.7	3.81	< 0.80
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	78	84	40	53	73
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	2.0	2.4	3.2	1.6	3.0
Boron (water soluble)	mg/kg	0.2	MCERTS	1.8	3.4	6.6	12	8.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.5	5.3	2.5	3.4	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (III)	mg/kg	1	NONE	75	74	54	55	55
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	75	74	54	56	55
Copper (aqua regia extractable)	mg/kg	1	MCERTS	35	1000	240	920	300
Lead (aqua regia extractable)	mg/kg	1	MCERTS	170	120	210	420	730
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	44	150	46	90	91
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	140	130	61	84	93
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	240	540	2100	3700	340



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 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992549				1992550	1992551	1992552	1992553
Sample Reference	BH01				BH02	BH02	BH03	TP01
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	2.50				3.00	1.50	1.00	1.00
Date Sampled	18/08/2021				19/08/2021	19/08/2021	18/08/2021	17/08/2021
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

#### Monoaromatics & Oxygenates

Compound	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-	-

#### Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	6.7	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	48	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	920	-	-	-
TPH-CWG - Aliphatic >EC16 - EC35	mg/kg	10	MCERTS	-	970	-	-	-
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	-	340	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	970	-	-	-
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	-	1300	-	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	13	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	340	-	-	-
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	-	230	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	350	-	-	-
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	-	580	-	-	-

TPH Total C5 - C44	mg/kg	10	NONE	-	1900	-	-	-
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#### VOCs

Chloromethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Chloroethane	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
Bromomethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Vinyl Chloride	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
1,1-Dichloroethane	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Cis-1,2-dichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Trichloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Trans-1,2-dichloroethane	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0

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 Project / Site name: Begbroke  
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Lab Sample Number				1992549	1992550	1992551	1992552	1992553
Sample Reference				BH01	BH02	BH02	BH03	TP01
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.50	3.00	1.50	1.00	1.00
Date Sampled				18/08/2021	19/08/2021	19/08/2021	18/08/2021	17/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Tetrachloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Styrene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Tribromomethane	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0

**VOCs TICs**

VOCs TICs Compound Name		N/A	NONE	-	ND	-	-	ND

**SVOCs**

Aniline	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2	-	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3

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 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number				1992549	1992550	1992551	1992552	1992553
Sample Reference				BH01	BH02	BH02	BH03	TP01
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.50	3.00	1.50	1.00	1.00
Date Sampled				18/08/2021	19/08/2021	19/08/2021	18/08/2021	17/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Hexachloroethane	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2	-	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3	-	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	0.32	-	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	0.92	-	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	0.93	-	-	< 0.05
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3	-	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05

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 Project / Site name: Begbroke  
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Lab Sample Number	1992549	1992550	1992551	1992552	1992553
Sample Reference	BH01	BH02	BH02	BH03	TP01
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	2.50	3.00	1.50	1.00	1.00
Date Sampled	18/08/2021	19/08/2021	19/08/2021	18/08/2021	17/08/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

**SVOCs TICs**

SVOCs TICs Compound Name	SVOC % Match	Units	Limit of detection	Accreditation Status	1992549	1992550	1992551	1992552	1992553
SVOCs TICs Compound Name		N/A	NONE	NONE	-	10,18-Bisnorabieta 5,7,9(10),11,13-pentaene	-	-	9-Octadecenamamide, (Z)-
SVOC % Match	%	N/A	NONE	NONE	-	99	-	-	95
SVOCs TICs Compound Name		N/A	NONE	NONE	-	1-Hexacosene	-	-	Eicosane
SVOC % Match	%	N/A	NONE	NONE	-	95	-	-	95
SVOCs TICs Compound Name		N/A	NONE	NONE	-	Phenanthrene, 1-methyl-7-(1-methylethyl)-	-	-	Heneicosane
SVOC % Match	%	N/A	NONE	NONE	-	95	-	-	95
SVOCs TICs Compound Name		N/A	NONE	NONE	-	Eicosane	-	-	10,18-Bisnorabieta 5,7,9(10),11,13-pentaene
SVOC % Match	%	N/A	NONE	NONE	-	95	-	-	93
SVOCs TICs Compound Name		N/A	NONE	NONE	-	Cyclohexane-1,3-dione, 2-allylaminothymene-5,5-dimethyl-	-	-	Hexadecane, 7,9-dimethyl-
SVOC % Match	%	N/A	NONE	NONE	-	95	-	-	92
SVOCs TICs Compound Name		N/A	NONE	NONE	-	Nonadecane	-	-	Cyclopentasiloxane, decamethyl-
SVOC % Match	%	N/A	NONE	NONE	-	93	-	-	91
SVOCs TICs Compound Name		N/A	NONE	NONE	-	1-Bromo-11-iodoundecane	-	-	Pyridine-3-carboxamide, oxime, N-(2-trifluoromethylphenyl)-
SVOC % Match	%	N/A	NONE	NONE	-	93	-	-	91
SVOCs TICs Compound Name		N/A	NONE	NONE	-	Antra-9,10-quinone, 1-(3-hydroxy-3-phenyl-1-triazenyl)-	-	-	Antra-9,10-quinone, 1-(3-hydroxy-3-phenyl-1-triazenyl)-
SVOC % Match	%	N/A	NONE	NONE	-	93	-	-	91
SVOCs TICs Compound Name		N/A	NONE	NONE	-	Tricosane	-	-	
SVOC % Match	%	N/A	NONE	NONE	-	92	-	-	
SVOCs TICs Compound Name		N/A	NONE	NONE	-		-	-	
SVOC % Match	%	N/A	NONE	NONE	-		-	-	

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992554	1992555	1992556	1992557	1992558			
Sample Reference	TP02	TP02	TP02	TP02	TP03			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.80	1.50	2.50	3.30	2.30			
Date Sampled	20/08/2021	20/08/2021	20/08/2021	20/08/2021	20/08/2021			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	23	19	18	15	22
Total mass of sample received	kg	0.001	NONE	1.0	1.0	1.0	1.0	1.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	-	Not-detected	Not-detected

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.0	8.2	-	8.7	8.1
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	1.4	0.94	-	0.13	0.83
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.030	0.029	-	0.0041	0.022

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.58	-	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.95	-	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	1.6	-	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.64	11	-	< 0.05	0.66
Anthracene	mg/kg	0.05	MCERTS	< 0.05	3.7	-	< 0.05	0.22
Fluoranthene	mg/kg	0.05	MCERTS	1.0	21	-	< 0.05	1.5
Pyrene	mg/kg	0.05	MCERTS	0.84	17	-	< 0.05	1.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.60	12	-	< 0.05	1.0
Chrysene	mg/kg	0.05	MCERTS	0.60	8.8	-	< 0.05	0.89
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.57	9.7	-	< 0.05	0.90
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.32	4.6	-	< 0.05	0.53
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.49	8.5	-	< 0.05	0.84
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.32	5.2	-	< 0.05	0.55
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	1.6	-	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.39	5.7	-	< 0.05	0.63

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	5.79	112	-	< 0.80	9.17
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	85	27	-	84	77
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	7.3	1.3	-	1.8	2.3
Boron (water soluble)	mg/kg	0.2	MCERTS	17	14	-	2.2	4.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	< 0.2	22
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	-	< 1.2	< 1.2
Chromium (III)	mg/kg	1	NONE	56	25	-	54	55
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	57	25	-	54	55
Copper (aqua regia extractable)	mg/kg	1	MCERTS	170	34	-	22	81
Lead (aqua regia extractable)	mg/kg	1	MCERTS	270	57	-	24	190
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	81	24	-	57	55
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	110	50	-	150	95
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	1300	290	-	250	6500



Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992554				1992555				1992556				1992557				1992558			
Sample Reference	TP02				TP02				TP02				TP02				TP03			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	0.80				1.50				2.50				3.30				2.30			
Date Sampled	20/08/2021				20/08/2021				20/08/2021				20/08/2021				20/08/2021			
Time Taken	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status																	

#### Monoaromatics & Oxygenates

Compound	Units	Limit of detection	Accreditation Status	1992554	1992555	1992556	1992557	1992558
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

#### Petroleum Hydrocarbons

Compound	Units	Limit of detection	Accreditation Status	1992554	1992555	1992556	1992557	1992558
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	1.8	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	15	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	67	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	51	41	250	< 8.0	39
TPH-CWG - Aliphatic >EC16 - EC35	mg/kg	10	MCERTS	51	41	320	< 10	39
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	17	24	87	< 8.4	28
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	53	47	330	< 10	45
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	69	71	420	< 10	73

Compound	Units	Limit of detection	Accreditation Status	1992554	1992555	1992556	1992557	1992558
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	5.1	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	6.8	110	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	53	600	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	32	110	620	< 10	25
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	16	30	150	< 8.4	13
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	35	170	1300	< 10	28
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	51	200	1500	< 10	41

Compound	Units	Limit of detection	Accreditation Status	1992554	1992555	1992556	1992557	1992558
TPH Total C5 - C44	mg/kg	10	NONE	120	270	1900	< 10	110

#### VOCs

Compound	Units	Limit of detection	Accreditation Status	1992554	1992555	1992556	1992557	1992558
Chloromethane	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0
Chloroethane	µg/kg	1	NONE	-	-	< 1.0	-	< 1.0
Bromomethane	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0
Vinyl Chloride	µg/kg	1	NONE	-	-	< 1.0	-	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	-	-	< 1.0	-	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	-	-	< 1.0	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Trichloromethane	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	< 1.0	-	< 1.0
Benzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0

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 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number				1992554	1992555	1992556	1992557	1992558
Sample Reference				TP02	TP02	TP02	TP02	TP03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.80	1.50	2.50	3.30	2.30
Date Sampled				20/08/2021	20/08/2021	20/08/2021	20/08/2021	20/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Tetrachloromethane	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	-	-	< 1.0	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Styrene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Tribromomethane	µg/kg	1	NONE	-	-	< 1.0	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	< 1.0	-	< 1.0

#### VOCs TICs

VOCs TICs Compound Name		N/A	NONE	-	-	ND	-	ND

#### SVOCs

Aniline	mg/kg	0.1	NONE	-	-	< 0.1	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	-	< 0.2	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	< 0.1	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	< 0.2	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	< 0.2	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	< 0.1	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	< 0.2	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	< 0.1	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	< 0.3	-	< 0.3

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number				1992554	1992555	1992556	1992557	1992558
Sample Reference				TP02	TP02	TP02	TP02	TP03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.80	1.50	2.50	3.30	2.30
Date Sampled				20/08/2021	20/08/2021	20/08/2021	20/08/2021	20/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	-	< 0.2	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	-	< 0.2	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	< 0.3	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	< 0.3	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	< 0.3	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	-	5.7	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	< 0.3	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	-	< 0.1	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	< 0.1	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	< 0.1	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	< 0.1	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	< 0.2	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	6.3	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	< 0.1	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	< 0.1	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	< 0.1	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	4.1	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	20	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	< 0.2	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	17	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	< 0.3	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	< 0.2	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	< 0.2	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	-	34	-	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	< 0.2	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	-	190	-	0.66
Anthracene	mg/kg	0.05	MCERTS	-	-	57	-	0.22
Carbazole	mg/kg	0.3	MCERTS	-	-	19	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	< 0.2	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	-	< 0.3	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	-	190	-	1.5
Pyrene	mg/kg	0.05	MCERTS	-	-	150	-	1.4
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	< 0.3	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	83	-	1.0
Chrysene	mg/kg	0.05	MCERTS	-	-	49	-	0.89
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	63	-	0.90
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	26	-	0.53
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	59	-	0.84
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	28	-	0.55
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	8.5	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	31	-	0.63

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992554	1992555	1992556	1992557	1992558
Sample Reference	TP02	TP02	TP02	TP02	TP03
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.80	1.50	2.50	3.30	2.30
Date Sampled	20/08/2021	20/08/2021	20/08/2021	20/08/2021	20/08/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
<b>SVOCs TICs</b>					
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	98	97
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	98	96
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	98	95
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	98	95
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	97	94
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	97	93
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	97	92
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	97	91
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	97	-
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992559	1992560	1992561	1992562	1992563			
Sample Reference	tp04	TP05	TP05	TP05	TP06			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.50	0.50	2.00	1.30	0.70			
Date Sampled	20/08/2021	20/08/2021	20/08/2021	20/08/2021	20/08/2021			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.9	12	29	7.8	8.2
Total mass of sample received	kg	0.001	NONE	1.0	1.0	0.90	1.0	1.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	-	Not-detected

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.8	-	-	-	8.6
Free Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.072	-	-	-	0.36
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.012	-	-	-	0.035

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	2.3
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	0.67
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	3.0
Pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	2.6
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	1.7
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	1.4
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	1.5
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	0.68
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	1.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	0.77
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	0.29
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	0.83

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	-	-	-	17.1
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	49	-	-	-	66
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	2.5	-	-	-	1.5
Boron (water soluble)	mg/kg	0.2	MCERTS	2.6	-	-	-	1.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	-	-	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	-	-	-	< 1.2
Chromium (III)	mg/kg	1	NONE	43	-	-	-	56
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	44	-	-	-	56
Copper (aqua regia extractable)	mg/kg	1	MCERTS	190	-	-	-	40
Lead (aqua regia extractable)	mg/kg	1	MCERTS	830	-	-	-	73
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	2.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	57	-	-	-	36
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	77	-	-	-	110
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	660	-	-	-	210



Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992559				1992560	1992561	1992562	1992563
Sample Reference	tp04				TP05	TP05	TP05	TP06
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.50				0.50	2.00	1.30	0.70
Date Sampled	20/08/2021				20/08/2021	20/08/2021	20/08/2021	20/08/2021
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

#### Monoaromatics & Oxygenates

Compound	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
Benzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
o-xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-

#### Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	1.3	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	5.3	9.5	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	26	16	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	200	310	-
TPH-CWG - Aliphatic >EC16 - EC35	mg/kg	10	MCERTS	-	< 10	220	330	-
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	-	< 8.4	79	130	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	230	340	-
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	-	< 10	310	480	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	< 2.0	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	18	12	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	97	120	-
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	-	< 8.4	34	70	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	120	130	-
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	-	< 10	150	200	-

TPH Total C5 - C44	mg/kg	10	NONE	-	< 10	460	680	-
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#### VOCs

Compound	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
Chloromethane	µg/kg	1	NONE	-	-	< 1.0	-	-
Chloroethane	µg/kg	1	NONE	-	-	< 1.0	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	< 1.0	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	< 1.0	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	< 1.0	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	< 1.0	-	-
Benzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number				1992559	1992560	1992561	1992562	1992563
Sample Reference				tp04	TP05	TP05	TP05	TP06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.50	2.00	1.30	0.70
Date Sampled				20/08/2021	20/08/2021	20/08/2021	20/08/2021	20/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Tetrachloromethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	< 1.0	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Styrene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Tribromomethane	µg/kg	1	NONE	-	-	< 1.0	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	< 1.0	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	< 1.0	-	-

#### VOCs TICs

VOCs TICs Compound Name		N/A	NONE	-	-	ND	-	-

#### SVOCs

Aniline	mg/kg	0.1	NONE	-	-	< 0.1	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	< 0.2	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number				1992559	1992560	1992561	1992562	1992563
Sample Reference				tp04	TP05	TP05	TP05	TP06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.50	2.00	1.30	0.70
Date Sampled				20/08/2021	20/08/2021	20/08/2021	20/08/2021	20/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	< 0.05	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	< 0.2	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	< 0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	< 0.1	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	< 0.1	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	< 0.3	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	0.46	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	0.66	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	0.67	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	< 0.3	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	0.89	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	0.69	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	0.54	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	0.23	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	0.46	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	-

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992559	1992560	1992561	1992562	1992563			
Sample Reference	tp04	TP05	TP05	TP05	TP06			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.50	0.50	2.00	1.30	0.70			
Date Sampled	20/08/2021	20/08/2021	20/08/2021	20/08/2021	20/08/2021			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
<b>SVOCs TICs</b>								
SVOCs TICs Compound Name		N/A	NONE	-	-	10,18-Bisnorabieta 5,7,9(10),11,13-pentaene	-	-
SVOC % Match	%	N/A	NONE	-	-	99	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	Heptadecane	-	-
SVOC % Match	%	N/A	NONE	-	-	98	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	Hexadecane, 1-iodo-	-	-
SVOC % Match	%	N/A	NONE	-	-	97	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	Heneicosane	-	-
SVOC % Match	%	N/A	NONE	-	-	97	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	10,18-Bisnorabieta 8,11,13-triene	-	-
SVOC % Match	%	N/A	NONE	-	-	96	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	1-Naphthalenamine, N-phenyl-	-	-
SVOC % Match	%	N/A	NONE	-	-	96	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	Eicosane	-	-
SVOC % Match	%	N/A	NONE	-	-	96	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	Octacosane	-	-
SVOC % Match	%	N/A	NONE	-	-	96	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	Hexadecane	-	-
SVOC % Match	%	N/A	NONE	-	-	95	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	6-Chloro-N-cyano-N-methoxymethyl-N',N'-dimethyl-1,3,5-triazine-2,4-diamine	-	-
SVOC % Match	%	N/A	NONE	-	-	95	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992564	1992565	1992566	1992567	1992568			
Sample Reference	TP07	TP07	WS01	WS02	WS02			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10	2.70	0.10	0.20	0.80			
Date Sampled	20/08/2021	20/08/2021	18/08/2021	18/08/2021	18/08/2021			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	21	16	8.0	4.6	10
Total mass of sample received	kg	0.001	NONE	1.0	1.0	1.0	1.0	1.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.0	7.8	8.1	8.1	8.1
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.95	1.4	0.066	0.023	0.018
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.032	0.018	0.033	0.052	0.0049

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	1.1	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.26	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.31	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.29	2.0	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	1.4	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.94	3.9	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.90	3.6	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.61	2.7	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.60	2.2	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.75	5.5	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.33	1.4	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.62	4.9	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.53	6.2	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	1.4	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.61	8.9	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	6.18	45.7	< 0.80
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	75	72	21	30	36
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	8.2	1.9	1.9	1.8	1.1
Boron (water soluble)	mg/kg	0.2	MCERTS	3.3	7.1	2.6	1.5	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (III)	mg/kg	1	NONE	72	55	29	39	38
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	72	55	29	40	38
Copper (aqua regia extractable)	mg/kg	1	MCERTS	780	42	28	75	12
Lead (aqua regia extractable)	mg/kg	1	MCERTS	430	83	69	280	19
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	88	44	19	64	26
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	160	100	50	82	72
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	570	210	150	280	89



Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992564				1992565	1992566	1992567	1992568
Sample Reference	TP07				TP07	WS01	WS02	WS02
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10				2.70	0.10	0.20	0.80
Date Sampled	20/08/2021				20/08/2021	18/08/2021	18/08/2021	18/08/2021
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

#### Monoaromatics & Oxygenates

Compound	µg/kg	Limit of detection	Accreditation Status	1992564	1992565	1992566	1992567	1992568
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-	-

#### Petroleum Hydrocarbons

Compound	mg/kg	Limit of detection	Accreditation Status	1992564	1992565	1992566	1992567	1992568
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	-	-	-
TPH-CWG - Aliphatic >EC16 - EC35	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	-	< 8.4	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	-	< 10	-	-	-

Compound	mg/kg	Limit of detection	Accreditation Status	1992564	1992565	1992566	1992567	1992568
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	-	< 8.4	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	-	< 10	-	-	-

TPH Total C5 - C44	mg/kg	10	NONE	-	< 10	-	-	-
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#### VOCs

Compound	µg/kg	Limit of detection	Accreditation Status	1992564	1992565	1992566	1992567	1992568
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number				1992564	1992565	1992566	1992567	1992568
Sample Reference				TP07	TP07	WS01	WS02	WS02
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	2.70	0.10	0.20	0.80
Date Sampled				20/08/2021	20/08/2021	18/08/2021	18/08/2021	18/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-

**VOCs TICs**

VOCs TICs Compound Name		N/A	NONE	-	-	-	-	-

**SVOCs**

Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number				1992564	1992565	1992566	1992567	1992568
Sample Reference				TP07	TP07	WS01	WS02	WS02
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	2.70	0.10	0.20	0.80
Date Sampled				20/08/2021	20/08/2021	18/08/2021	18/08/2021	18/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number				1992564	1992565	1992566	1992567	1992568
Sample Reference				TP07	TP07	WS01	WS02	WS02
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	2.70	0.10	0.20	0.80
Date Sampled				20/08/2021	20/08/2021	18/08/2021	18/08/2021	18/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
<b>SVOCs TICs</b>								
SVOCs TICs Compound Name		N/A	NONE	-	-	-	-	-
SVOC % Match	%	N/A	NONE	-	-	-	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	-	-	-
SVOC % Match	%	N/A	NONE	-	-	-	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	-	-	-
SVOC % Match	%	N/A	NONE	-	-	-	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	-	-	-
SVOC % Match	%	N/A	NONE	-	-	-	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	-	-	-
SVOC % Match	%	N/A	NONE	-	-	-	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	-	-	-
SVOC % Match	%	N/A	NONE	-	-	-	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	-	-	-
SVOC % Match	%	N/A	NONE	-	-	-	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	-	-	-
SVOC % Match	%	N/A	NONE	-	-	-	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-	-	-	-
SVOC % Match	%	N/A	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992569	1992570	1992571	1992572	1992573			
Sample Reference	WS03	WS04	WS05	WS05	WS06			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	1.00	2.50	2.90	3.80	1.80			
Date Sampled	18/08/2021	18/08/2021	18/08/2021	18/08/2021	19/08/2021			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	21	37	21	40
Total mass of sample received	kg	0.001	NONE	0.80	1.0	0.90	1.0	0.70

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	Not-detected	Not-detected	Not-detected

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	-	7.7	8.0	7.7
Free Cyanide	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	1.5	0.22	1.3
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	-	-	0.029	0.018	0.050

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	< 0.05	0.29	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	0.40
Fluorene	mg/kg	0.05	MCERTS	-	-	< 0.05	< 0.05	0.20
Phenanthrene	mg/kg	0.05	MCERTS	-	-	0.91	2.2	0.35
Anthracene	mg/kg	0.05	MCERTS	-	-	< 0.05	0.51	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	-	0.92	5.6	0.64
Pyrene	mg/kg	0.05	MCERTS	-	-	0.79	5.2	0.72
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	0.39	3.1	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	-	0.38	2.8	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	0.38	3.7	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	0.21	1.2	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	0.30	2.8	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	0.24	2.1	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	< 0.05	0.60	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	0.27	2.5	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	4.79	32.7	2.31
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	40	25	25
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	1.2	0.86	1.6
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	3.9	5.7	12
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	< 0.2	< 0.2	2.6
Chromium (hexavalent)	mg/kg	1.2	MCERTS	-	-	< 1.2	< 1.2	< 1.2
Chromium (III)	mg/kg	1	NONE	-	-	41	21	67
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	41	21	67
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	570	21	150
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	60	88	370
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	< 0.3	< 0.3	1.0
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	33	22	63
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	70	51	36
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	130	83	560



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 Project / Site name: Begbroke  
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Lab Sample Number	1992569				1992570	1992571	1992572	1992573
Sample Reference	WS03				WS04	WS05	WS05	WS06
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	1.00				2.50	2.90	3.80	1.80
Date Sampled	18/08/2021				18/08/2021	18/08/2021	18/08/2021	19/08/2021
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

#### Monoaromatics & Oxygenates

Compound	µg/kg	Limit of detection	Accreditation Status	1992569	1992570	1992571	1992572	1992573
Benzene	1	1	MCERTS	< 1.0	-	< 1.0	-	-
Toluene	1	1	MCERTS	< 1.0	-	< 1.0	-	-
Ethylbenzene	1	1	MCERTS	< 1.0	-	< 1.0	-	-
p & m-xylene	1	1	MCERTS	< 1.0	-	< 1.0	-	-
o-xylene	1	1	MCERTS	< 1.0	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	1	1	MCERTS	< 1.0	-	< 1.0	-	-

#### Petroleum Hydrocarbons

Compound	mg/kg	Limit of detection	Accreditation Status	1992569	1992570	1992571	1992572	1992573
TPH-CWG - Aliphatic >EC5 - EC6	0.001	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC6 - EC8	0.001	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC8 - EC10	0.001	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC10 - EC12	1	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	2	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21	8	8	MCERTS	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35	8	8	MCERTS	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC16 - EC35	10	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aliphatic > EC35 - EC44	8.4	8.4	NONE	< 8.4	-	< 8.4	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	10	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aliphatic (EC5 - EC44)	10	10	NONE	< 10	-	< 10	-	-

Compound	mg/kg	Limit of detection	Accreditation Status	1992569	1992570	1992571	1992572	1992573
TPH-CWG - Aromatic >EC5 - EC7	0.001	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC7 - EC8	0.001	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC8 - EC10	0.001	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC10 - EC12	1	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16	2	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21	10	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35	10	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aromatic > EC35 - EC44	8.4	8.4	NONE	< 8.4	-	< 8.4	-	-
TPH-CWG - Aromatic (EC5 - EC35)	10	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC44)	10	10	NONE	< 10	-	< 10	-	-

TPH Total C5 - C44	mg/kg	10	NONE	< 10	-	< 10	-	-
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#### VOCs

Compound	µg/kg	Limit of detection	Accreditation Status	1992569	1992570	1992571	1992572	1992573
Chloromethane	1	1	ISO 17025	-	< 1.0	-	-	< 1.0
Chloroethane	1	1	NONE	-	< 1.0	-	-	< 1.0
Bromomethane	1	1	ISO 17025	-	< 1.0	-	-	< 1.0
Vinyl Chloride	1	1	NONE	-	< 1.0	-	-	< 1.0
Trichlorofluoromethane	1	1	NONE	-	< 1.0	-	-	< 1.0
1,1-Dichloroethene	1	1	NONE	-	< 1.0	-	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	1	1	ISO 17025	-	< 1.0	-	-	< 1.0
Cis-1,2-dichloroethene	1	1	MCERTS	-	< 1.0	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	1	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1-Dichloroethane	1	1	MCERTS	-	< 1.0	-	-	< 1.0
2,2-Dichloropropane	1	1	MCERTS	-	< 1.0	-	-	< 1.0
Trichloromethane	1	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,1-Trichloroethane	1	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2-Dichloroethane	1	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1-Dichloropropene	1	1	MCERTS	-	< 1.0	-	-	< 1.0
Trans-1,2-dichloroethene	1	1	NONE	-	< 1.0	-	-	< 1.0
Benzene	1	1	MCERTS	-	< 1.0	-	-	< 1.0

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 Project / Site name: Begbroke  
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Lab Sample Number				1992569	1992570	1992571	1992572	1992573
Sample Reference				WS03	WS04	WS05	WS05	WS06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.50	2.90	3.80	1.80
Date Sampled				18/08/2021	18/08/2021	18/08/2021	18/08/2021	19/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Tetrachloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Styrene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Tribromomethane	µg/kg	1	NONE	-	< 1.0	-	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	-	-	< 1.0

**VOCs TICs**

VOCs TICs Compound Name		N/A	NONE	-	ND	-	-	ND

**SVOCs**

Aniline	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2	-	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3

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 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number				1992569	1992570	1992571	1992572	1992573
Sample Reference				WS03	WS04	WS05	WS05	WS06
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.50	2.90	3.80	1.80
Date Sampled				18/08/2021	18/08/2021	18/08/2021	18/08/2021	19/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Hexachloroethane	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2	-	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	< 0.1	-	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	0.40
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3	-	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	0.20
Azobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	0.35
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	< 0.3	-	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	0.64
Pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	0.72
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3	-	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992569	1992570	1992571	1992572	1992573
Sample Reference	WS03	WS04	WS05	WS05	WS06
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	1.00	2.50	2.90	3.80	1.80
Date Sampled	18/08/2021	18/08/2021	18/08/2021	18/08/2021	19/08/2021
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
<b>SVOCs TICs</b>					
SVOCs TICs Compound Name		N/A	NONE	-	Antra-9,10-quinone, 1-(3-hydroxy-3-phenyl-1-triazenyl)-
SVOC % Match	%	N/A	NONE	-	92
SVOCs TICs Compound Name		N/A	NONE	-	10,18-Bisnorabieta 5,7,9(10),11,13-pentaene
SVOC % Match	%	N/A	NONE	-	99
SVOCs TICs Compound Name		N/A	NONE	-	4b,8-Dimethyl-2-isopropylphenanthrene, 4b,5,6,7,8,8a,9,10-octahydro-
SVOC % Match	%	N/A	NONE	-	98
SVOCs TICs Compound Name		N/A	NONE	-	Phenanthrene, 1-methyl-7-(1-methylethyl)-
SVOC % Match	%	N/A	NONE	-	98
SVOCs TICs Compound Name		N/A	NONE	-	Octacosane
SVOC % Match	%	N/A	NONE	-	98
SVOCs TICs Compound Name		N/A	NONE	-	10,18-Bisnorabieta 8,11,13-triene
SVOC % Match	%	N/A	NONE	-	97
SVOCs TICs Compound Name		N/A	NONE	-	Octadecane
SVOC % Match	%	N/A	NONE	-	97
SVOCs TICs Compound Name		N/A	NONE	-	Heneicosane
SVOC % Match	%	N/A	NONE	-	97
SVOCs TICs Compound Name		N/A	NONE	-	Heptadecane
SVOC % Match	%	N/A	NONE	-	96
SVOCs TICs Compound Name		N/A	NONE	-	Hexadecane, 1-iodo-
SVOC % Match	%	N/A	NONE	-	96
SVOCs TICs Compound Name		N/A	NONE	-	Eicosane
SVOC % Match	%	N/A	NONE	-	96

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992574	1992575	1992576	1992577	1992578			
Sample Reference	WS07	WS08	WS09	WS09	WS09			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	2.30	3.40	2.50	3.00	3.80			
Date Sampled	19/08/2021	19/08/2021	19/08/2021	19/08/2021	19/08/2021			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	35	14	10	8.3	7.5
Total mass of sample received	kg	0.001	NONE	0.80	1.0	1.0	1.0	1.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	Amosite- Loose Fibres	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Detected	Not-detected

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	-	7.5	7.7	8.4
Free Cyanide	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	1.9	-	0.21	0.49	0.16
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.043	-	0.0094	0.011	0.0010

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.72	-	< 0.05	0.52	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.67	-	< 0.05	0.55	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.39	-	< 0.05	0.44	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.39	-	< 0.05	0.41	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.36	-	< 0.05	0.49	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.26	-	< 0.05	0.20	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.33	-	< 0.05	0.39	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	< 0.05

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	3.12	-	< 0.80	3.00	< 0.80
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#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	34	-	48	45	75
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.4	-	1.4	1.3	1.8
Boron (water soluble)	mg/kg	0.2	MCERTS	16	-	2.9	6.7	2.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	-	< 1.2	< 1.2	< 1.2
Chromium (III)	mg/kg	1	NONE	56	-	43	39	64
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	56	-	43	39	64
Copper (aqua regia extractable)	mg/kg	1	MCERTS	73	-	21	21	9.2
Lead (aqua regia extractable)	mg/kg	1	MCERTS	600	-	45	62	16
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	-	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	55	-	29	27	42
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	44	-	78	73	120
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	280	-	110	130	110



Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992574				1992575				1992576				1992577				1992578			
Sample Reference	WS07				WS08				WS09				WS09				WS09			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	2.30				3.40				2.50				3.00				3.80			
Date Sampled	19/08/2021				19/08/2021				19/08/2021				19/08/2021				19/08/2021			
Time Taken	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status																	

#### Monoaromatics & Oxygenates

Compound	Units	Limit of detection	Accreditation Status	1992574	1992575	1992576	1992577	1992578
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-

#### Petroleum Hydrocarbons

Compound	Units	Limit of detection	Accreditation Status	1992574	1992575	1992576	1992577	1992578
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	12	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	51	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic >EC16 - EC35	mg/kg	10	MCERTS	63	< 10	-	< 10	-
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	11	< 8.4	-	< 8.4	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	65	< 10	-	< 10	-
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	75	< 10	-	< 10	-

Compound	Units	Limit of detection	Accreditation Status	1992574	1992575	1992576	1992577	1992578
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	17	< 10	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	74	< 10	-	< 10	-
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	9.9	< 8.4	-	< 8.4	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	92	< 10	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	100	< 10	-	< 10	-

TPH Total C5 - C44	mg/kg	10	NONE	180	< 10	-	< 10	-
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#### VOCs

Compound	Units	Limit of detection	Accreditation Status	1992574	1992575	1992576	1992577	1992578
Chloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Chloroethane	µg/kg	1	NONE	< 1.0	< 1.0	-	-	< 1.0
Bromomethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Vinyl Chloride	µg/kg	1	NONE	< 1.0	< 1.0	-	-	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	< 1.0	-	-	< 1.0
1,1-Dichloroethane	µg/kg	1	NONE	< 1.0	< 1.0	-	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Cis-1,2-dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Trichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Trans-1,2-dichloroethane	µg/kg	1	NONE	< 1.0	< 1.0	-	-	< 1.0
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0

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 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number				1992574	1992575	1992576	1992577	1992578
Sample Reference				WS07	WS08	WS09	WS09	WS09
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.30	3.40	2.50	3.00	3.80
Date Sampled				19/08/2021	19/08/2021	19/08/2021	19/08/2021	19/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Tetrachloroethene	µg/kg	1	NONE	< 1.0	< 1.0	-	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Styrene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Tribromomethane	µg/kg	1	NONE	< 1.0	< 1.0	-	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	-	-	< 1.0

#### VOCs TICs

VOCs TICs Compound Name	N/A	NONE	ND	ND	-	-	ND

#### SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	-	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	-	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3

Analytical Report Number: 21-96277  
 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number				1992574	1992575	1992576	1992577	1992578
Sample Reference				WS07	WS08	WS09	WS09	WS09
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.30	3.40	2.50	3.00	3.80
Date Sampled				19/08/2021	19/08/2021	19/08/2021	19/08/2021	19/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	-	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	-	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	-	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	< 0.1	-	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	-	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	0.72	< 0.05	-	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.67	< 0.05	-	-	< 0.05
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	-	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.39	< 0.05	-	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.39	< 0.05	-	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.36	< 0.05	-	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.26	< 0.05	-	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.33	< 0.05	-	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	< 0.05

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Lab Sample Number	1992574	1992575	1992576	1992577	1992578			
Sample Reference	WS07	WS08	WS09	WS09	WS09			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	2.30	3.40	2.50	3.00	3.80			
Date Sampled	19/08/2021	19/08/2021	19/08/2021	19/08/2021	19/08/2021			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
<b>SVOCs TICs</b>								
SVOCs TICs Compound Name		N/A	NONE	10,18-Bisnorabieta 5,7,9(10),11,13-pentaene	Perylene	-	-	1-Naphthalenamine, N-phenyl-
SVOC % Match	%	N/A	NONE	99	95	-	-	93
SVOCs TICs Compound Name		N/A	NONE	Phenanthrene, 1-methyl-7-(1-methylethyl)-	Cyclopentasiloxane, decamethyl-	-	-	
SVOC % Match	%	N/A	NONE	98	91	-	-	
SVOCs TICs Compound Name		N/A	NONE	1-Naphthalenamine, N-phenyl-		-	-	
SVOC % Match	%	N/A	NONE	97		-	-	
SVOCs TICs Compound Name		N/A	NONE	Octacosane		-	-	
SVOC % Match	%	N/A	NONE	97		-	-	
SVOCs TICs Compound Name		N/A	NONE	10,18-Bisnorabieta 8,11,13-triene		-	-	
SVOC % Match	%	N/A	NONE	96		-	-	
SVOCs TICs Compound Name		N/A	NONE	Eicosane		-	-	
SVOC % Match	%	N/A	NONE	95		-	-	
SVOCs TICs Compound Name		N/A	NONE	Hexacosane		-	-	
SVOC % Match	%	N/A	NONE	95		-	-	
SVOCs TICs Compound Name		N/A	NONE	Nonadecane		-	-	
SVOC % Match	%	N/A	NONE	95		-	-	
SVOCs TICs Compound Name		N/A	NONE	Antra-9,10-quinone, 1-(3-hydroxy-3-phenyl-1-triazenyl)-		-	-	
SVOC % Match	%	N/A	NONE	95		-	-	
SVOCs TICs Compound Name		N/A	NONE	1-Chloroeicosane		-	-	
SVOC % Match	%	N/A	NONE	92		-	-	

U/S = Unsuitable Sample I/S = Insufficient Sample

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 Project / Site name: Begbroke  
 Your Order No: PO09383

Lab Sample Number	1992579	1992580			
Sample Reference	WS10	WS10			
Sample Number	None Supplied	None Supplied			
Depth (m)	0.20	0.60			
Date Sampled	18/08/2021	18/08/2021			
Time Taken	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.0	8.9
Total mass of sample received	kg	0.001	NONE	1.0	1.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile- Loose Fibres
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	8.1
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.032	0.022
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.016	0.018

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.66
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.47	2.0
Pyrene	mg/kg	0.05	MCERTS	0.53	2.0
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.33	1.4
Chrysene	mg/kg	0.05	MCERTS	0.39	0.94
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.44	1.4
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.29	0.75
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.27	1.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.67
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.77

#### Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	2.72	11.9

#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	31	47
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	< 0.06	1.5
Boron (water soluble)	mg/kg	0.2	MCERTS	1.2	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	MCERTS	< 1.2	< 1.2
Chromium (III)	mg/kg	1	NONE	< 1.0	34
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	34
Copper (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	98
Lead (aqua regia extractable)	mg/kg	1	MCERTS	31	280
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	1.0
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19	30
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	47	58
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	550



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Lab Sample Number				1992579	1992580
Sample Reference				WS10	WS10
Sample Number				None Supplied	None Supplied
Depth (m)				0.20	0.60
Date Sampled				18/08/2021	18/08/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

#### Monoaromatics & Oxygenates

Compound	µg/kg	Limit of detection	Accreditation Status	1992579	1992580
Benzene	µg/kg	1	MCERTS	-	-
Toluene	µg/kg	1	MCERTS	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-
o-xylene	µg/kg	1	MCERTS	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-

#### Petroleum Hydrocarbons

Compound	mg/kg	Limit of detection	Accreditation Status	1992579	1992580
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-
TPH-CWG - Aliphatic >EC16 - EC35	mg/kg	10	MCERTS	-	-
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	-	-

Compound	mg/kg	Limit of detection	Accreditation Status	1992579	1992580
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	-	-

TPH Total C5 - C44	mg/kg	10	NONE	-	-
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#### VOCs

Compound	µg/kg	Limit of detection	Accreditation Status	1992579	1992580
Chloromethane	µg/kg	1	ISO 17025	-	-
Chloroethane	µg/kg	1	NONE	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-
Benzene	µg/kg	1	MCERTS	-	-

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 Your Order No: PO09383

Lab Sample Number				1992579	1992580
Sample Reference				WS10	WS10
Sample Number				None Supplied	None Supplied
Depth (m)				0.20	0.60
Date Sampled				18/08/2021	18/08/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Tetrachloromethane	µg/kg	1	MCERTS	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-
Toluene	µg/kg	1	MCERTS	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-
Styrene	µg/kg	1	MCERTS	-	-
Tribromomethane	µg/kg	1	NONE	-	-
o-Xylene	µg/kg	1	MCERTS	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-

#### VOCs TICs

VOCs TICs Compound Name		N/A	NONE	-	-

#### SVOCs

Aniline	mg/kg	0.1	NONE	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-

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 Project / Site name: Begbroke  
 Your Order No: P009383

Lab Sample Number				1992579	1992580
Sample Reference				WS10	WS10
Sample Number				None Supplied	None Supplied
Depth (m)				0.20	0.60
Date Sampled				18/08/2021	18/08/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Hexachloroethane	mg/kg	0.05	MCERTS	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-



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 Project / Site name: Begbroke  
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Lab Sample Number				1992579	1992580
Sample Reference				WS10	WS10
Sample Number				None Supplied	None Supplied
Depth (m)				0.20	0.60
Date Sampled				18/08/2021	18/08/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
<b>SVOCs TICs</b>					
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	-	-
SVOCs TICs Compound Name		N/A	NONE	-	-
SVOC % Match	%	N/A	NONE	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample



**Analytical Report Number : 21-96277**  
**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1992549	BH01	None Supplied	2.5	Brown clay and loam with gravel and vegetation.
1992550	BH02	None Supplied	3	Brown clay and loam with gravel and vegetation.
1992551	BH02	None Supplied	1.5	Brown clay and loam with gravel and plastic.
1992552	BH03	None Supplied	1	Brown clay and loam with gravel and plastic.
1992553	TP01	None Supplied	1	Brown clay and loam with metal and glass.
1992554	TP02	None Supplied	0.8	Brown loam and clay with gravel and brick.
1992555	TP02	None Supplied	1.5	Brown clay and loam with gravel.
1992556	TP02	None Supplied	2.5	Brown clay and loam with gravel.
1992557	TP02	None Supplied	3.3	Brown clay and sand with gravel.
1992558	TP03	None Supplied	2.3	Brown loam and clay with gravel and vegetation.
1992559	tp04	None Supplied	0.5	Brown loam and sand with gravel and vegetation.
1992560	TP05	None Supplied	0.5	Brown loam and clay with gravel and vegetation.
1992561	TP05	None Supplied	2	Brown clay and loam with gravel and vegetation.
1992562	TP05	None Supplied	1.3	Brown sandy clay with gravel.
1992563	TP06	None Supplied	0.7	Brown loam with gravel and vegetation.
1992564	TP07	None Supplied	0.1	Brown loam and clay with gravel and plastic.
1992565	TP07	None Supplied	2.7	Brown loam and clay with gravel and vegetation.
1992566	WS01	None Supplied	0.1	Brown loam with gravel and vegetation.
1992567	WS02	None Supplied	0.2	Brown loam with gravel and vegetation.
1992568	WS02	None Supplied	0.8	Brown clay and sand with gravel.
1992569	WS03	None Supplied	1	Brown loam with gravel and plastic.
1992570	WS04	None Supplied	2.5	Brown clay and loam with gravel.
1992571	WS05	None Supplied	2.9	Brown clay and sand with gravel and paper.
1992572	WS05	None Supplied	3.8	Brown clay and sand with gravel.
1992573	WS06	None Supplied	1.8	Brown clay and loam with gravel and plastic.
1992574	WS07	None Supplied	2.3	Brown clay and loam with gravel and paper.
1992575	WS08	None Supplied	3.4	Brown clay and sand with gravel.
1992576	WS09	None Supplied	2.5	Brown clay and loam with gravel.
1992577	WS09	None Supplied	3	Brown clay and loam with gravel and brick.
1992578	WS09	None Supplied	3.8	Brown loam and clay with gravel and vegetation.
1992579	WS10	None Supplied	0.2	Brown loam and clay with gravel and vegetation.
1992580	WS10	None Supplied	0.6	Brown loam and clay with gravel and vegetation.



**Analytical Report Number : 21-96277**  
**Project / Site name: Begbroke**

**Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Tentatively identified compounds (SVOC) in soil	Determination of semi-volatile organic compounds total ion count in soil by extraction with dichloromethane and hexane followed by GC-MS followed by a full library scan.	In-house method based on USEPA 8270	L064-PL	D	NONE
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Tentatively identified compounds (VOC) in soil	Determination of volatile organic compounds total ion count in soil by headspace GC-MS followed by a full library scan.	In-house method based on USEPA8260	L073-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH Chromatogram in Soil	TPH Chromatogram in Soil.	In-house method	L064-PL	D	NONE

Analytical Report Number : 21-96277  
 Project / Site name: Begbroke

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

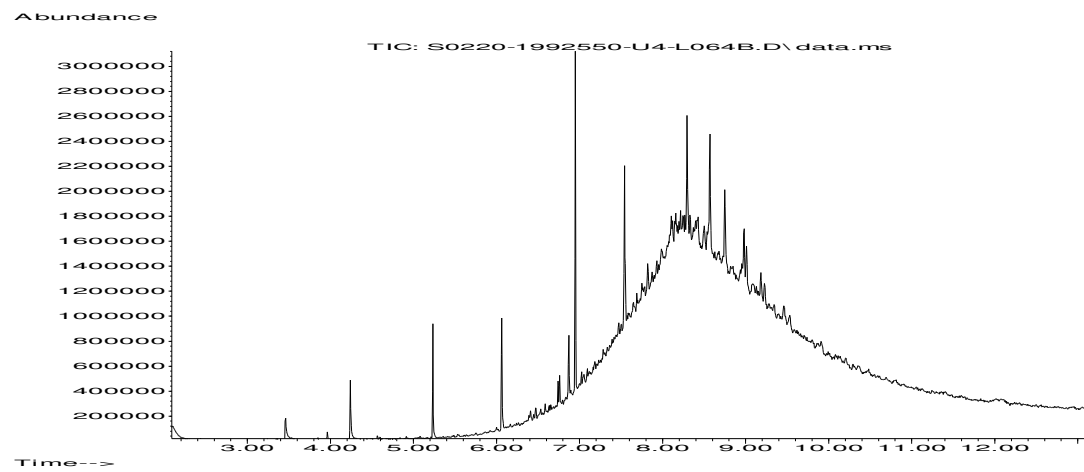
Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Cr (III) in soil	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Fraction Organic Carbon FOC Automated	Determination of fraction of organic carbon in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method	L009	D	MCERTS

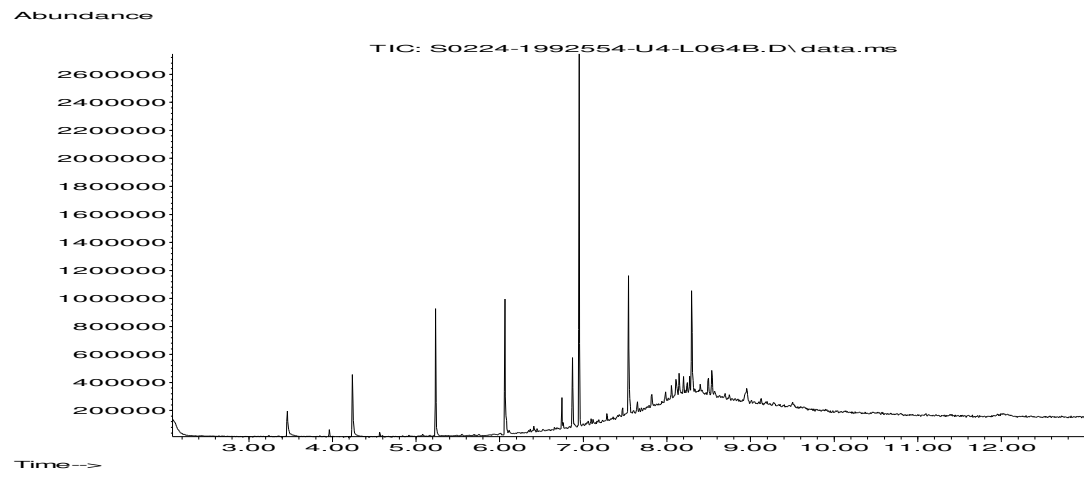
For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

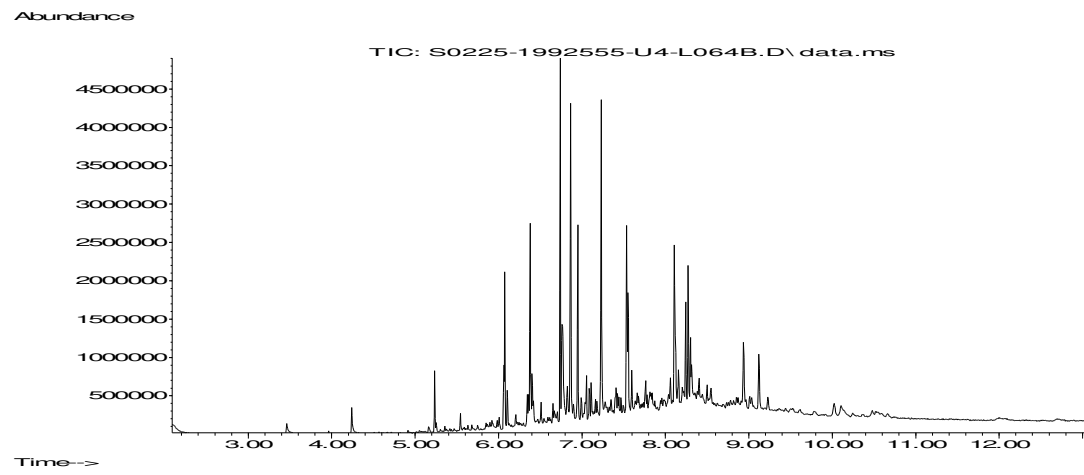
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



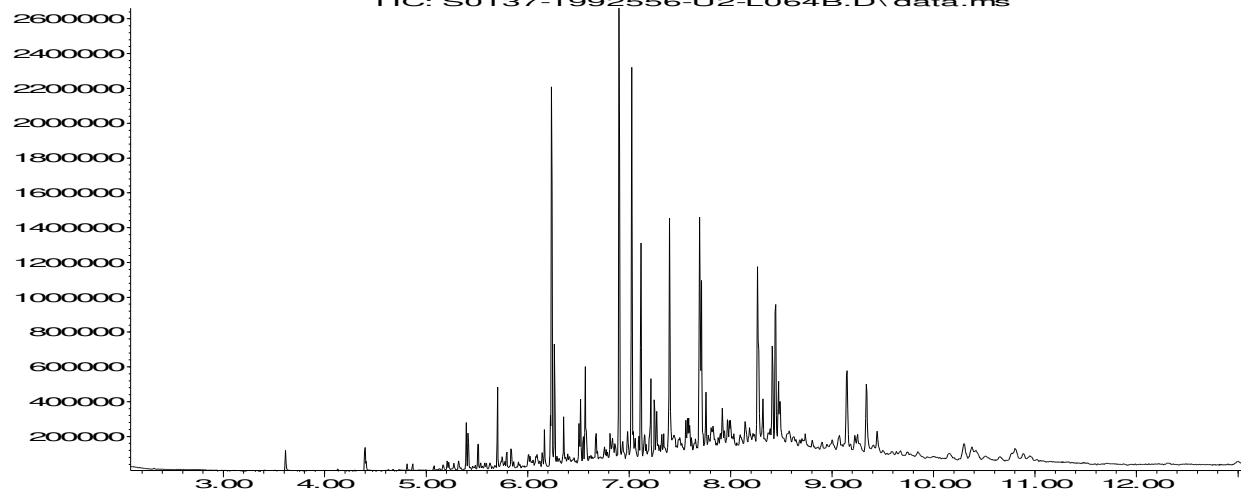




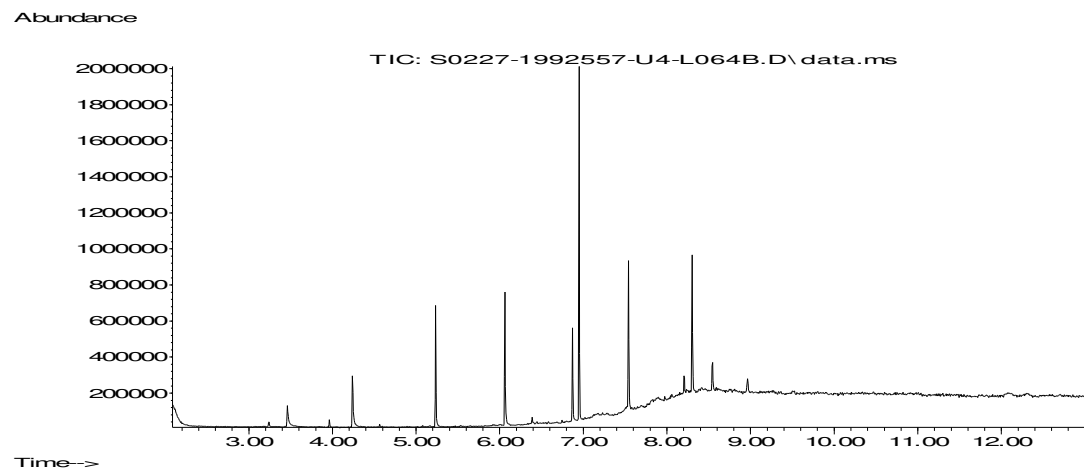


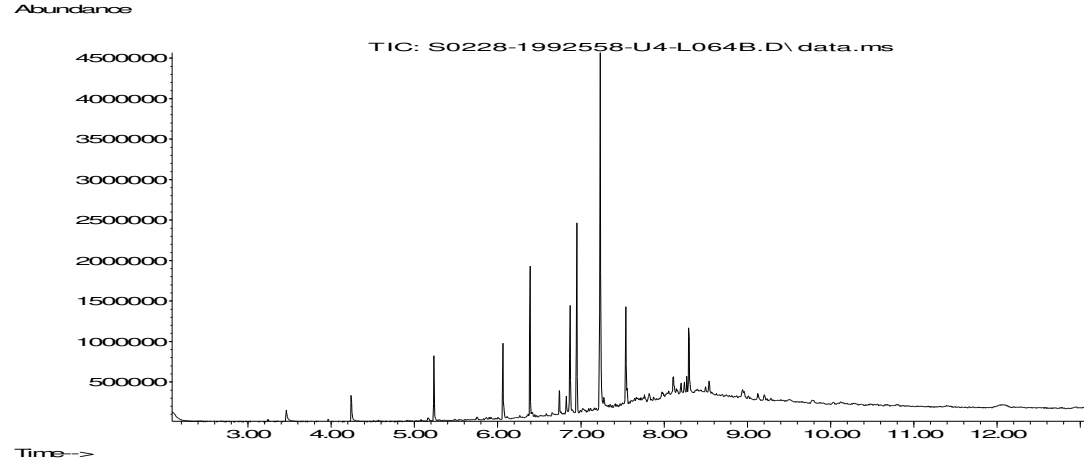
Abundance

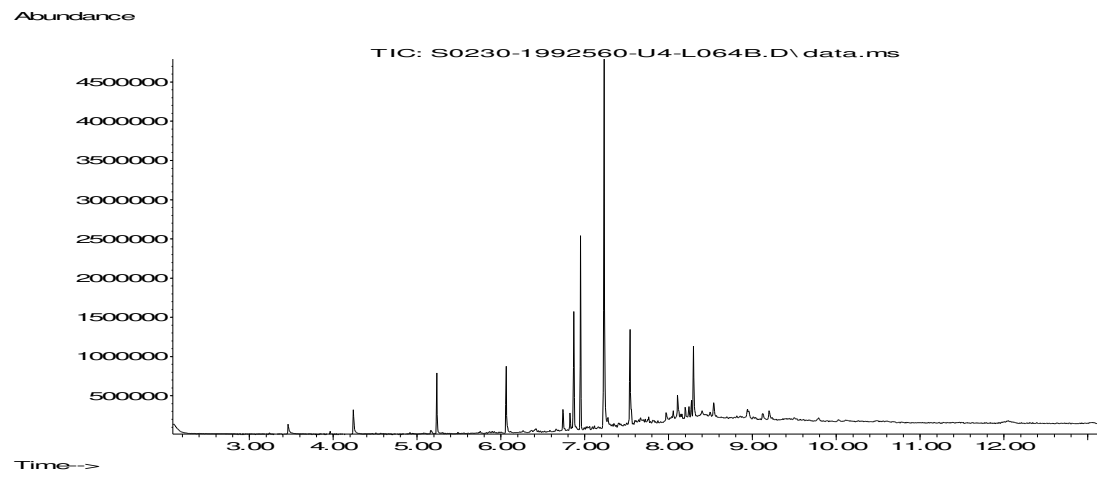
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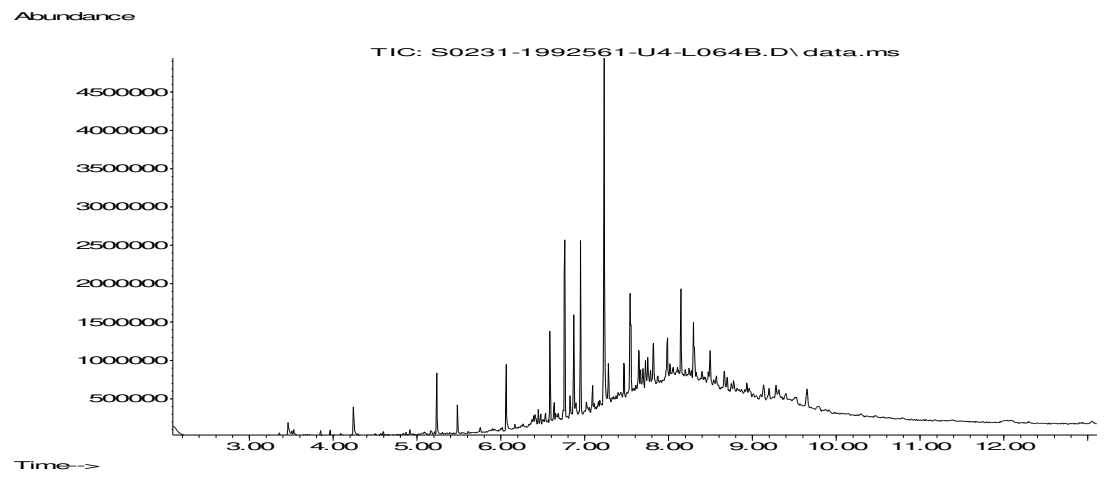


Time-->

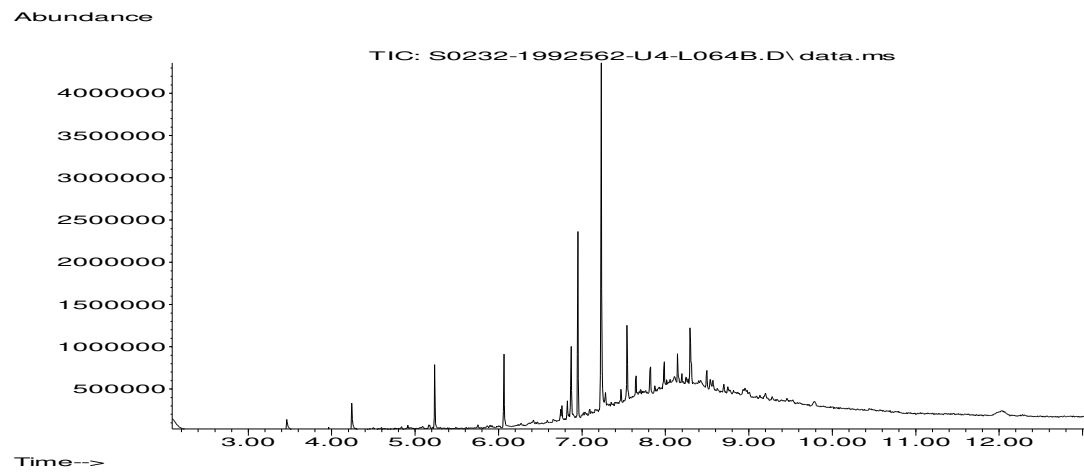


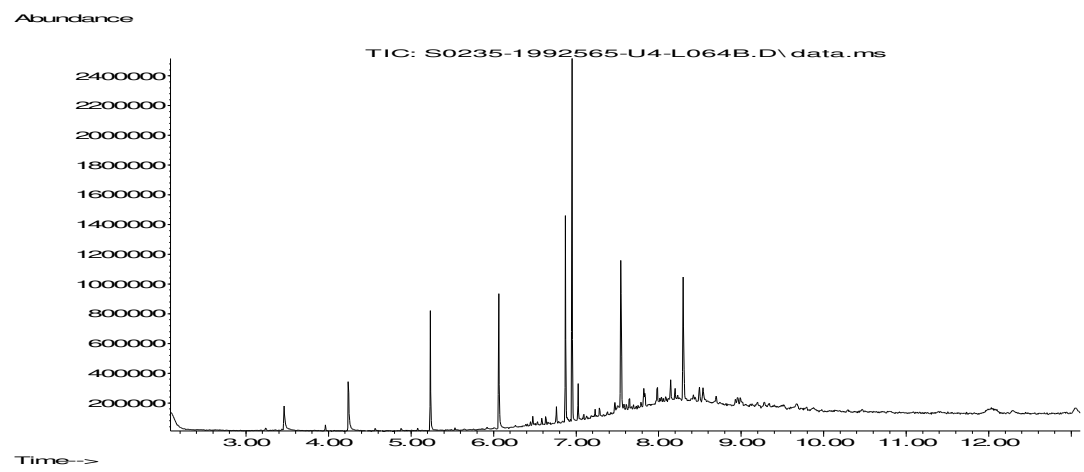


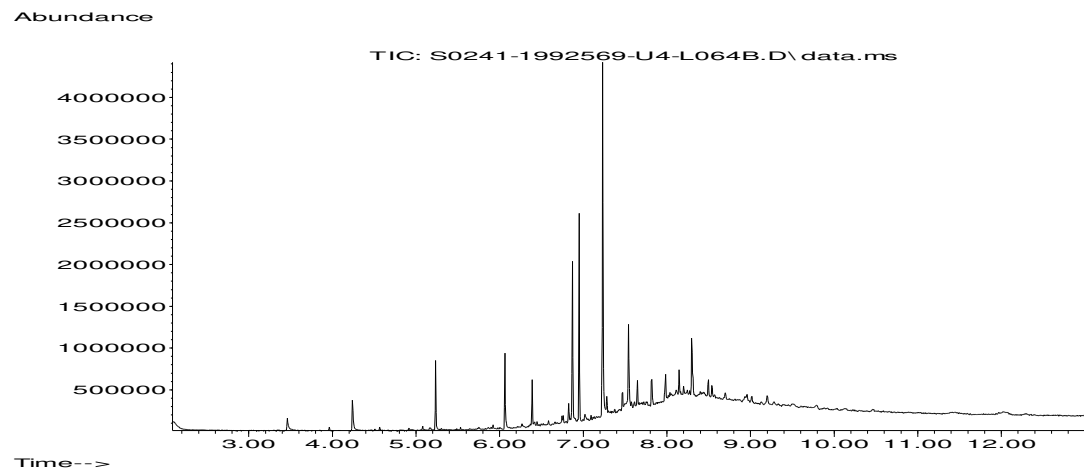


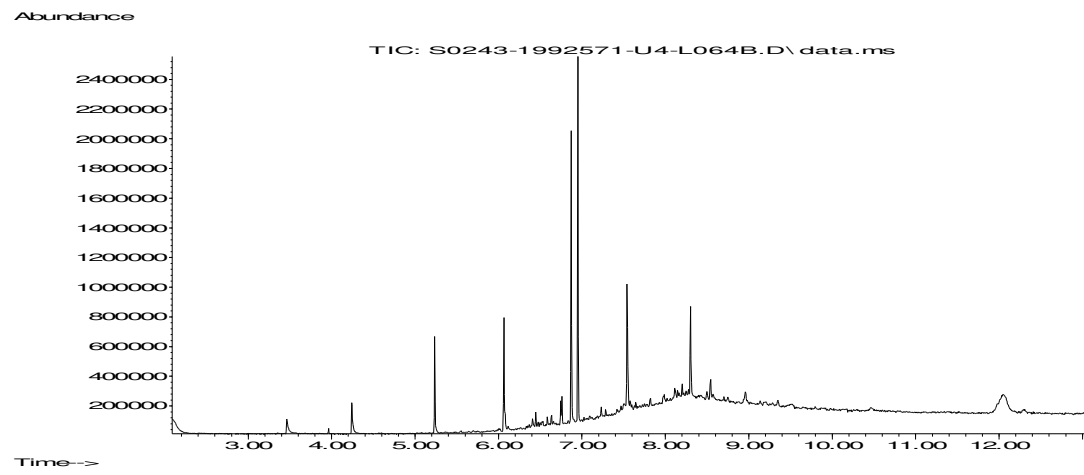


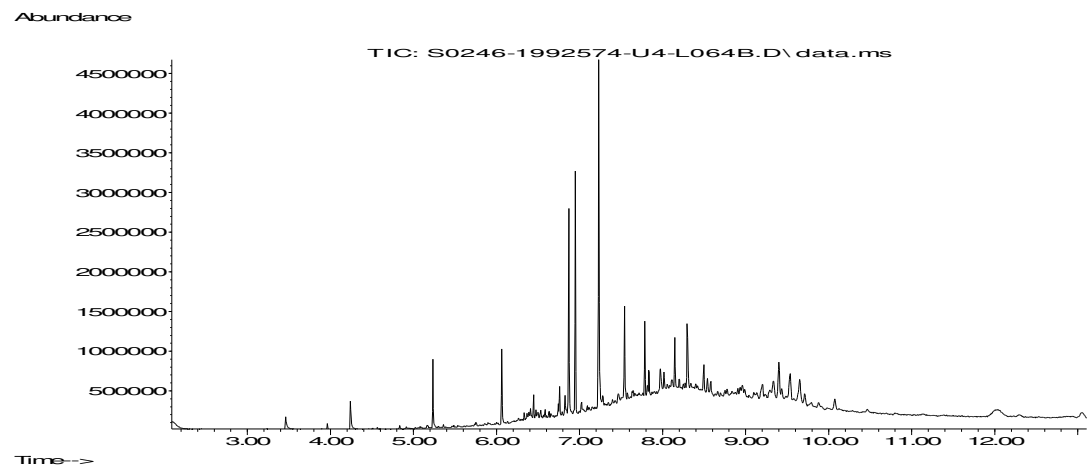




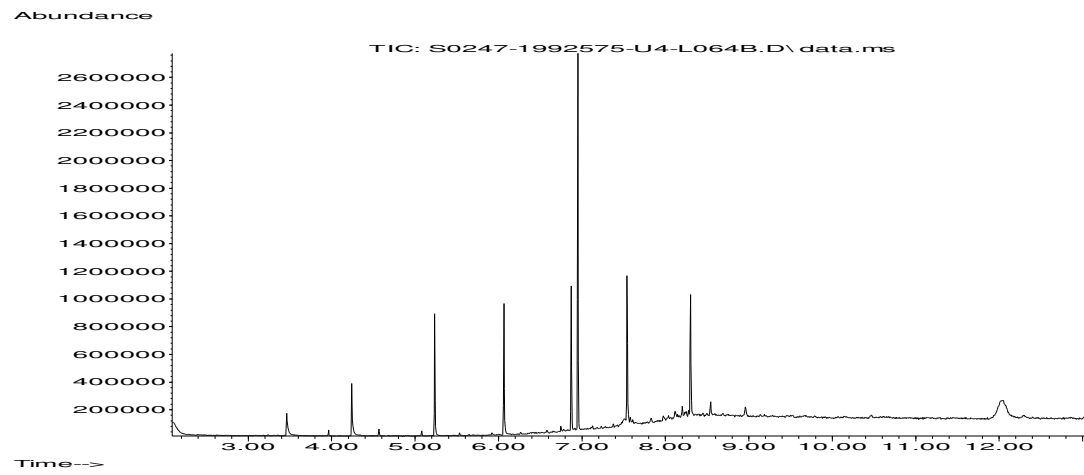


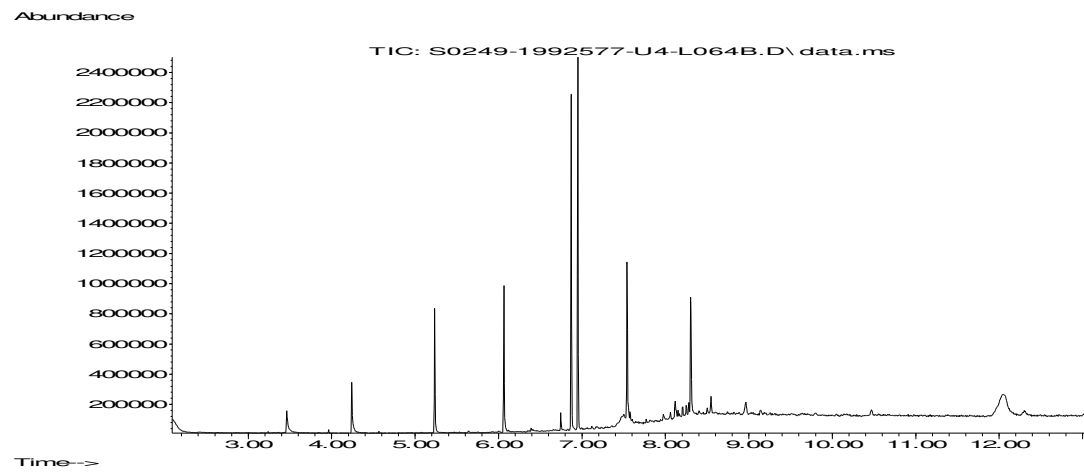












## Sample Deviation Report



**Analytical Report Number : 21-96277**

**Project / Site name: Begbroke**

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BH01	None Supplied	S	1992549	c	Free cyanide in soil	L080-PL	c
BH01	None Supplied	S	1992549	c	Fraction Organic Carbon FOC Automated	L009	c
BH02	None Supplied	S	1992550	c	Free cyanide in soil	L080-PL	c
BH02	None Supplied	S	1992550	c	Fraction Organic Carbon FOC Automated	L009	c
BH02	None Supplied	S	1992551	c	Free cyanide in soil	L080-PL	c
BH02	None Supplied	S	1992551	c	Fraction Organic Carbon FOC Automated	L009	c
BH03	None Supplied	S	1992552	c	Free cyanide in soil	L080-PL	c
BH03	None Supplied	S	1992552	c	Fraction Organic Carbon FOC Automated	L009	c
TP01	None Supplied	S	1992553	c	Free cyanide in soil	L080-PL	c
TP01	None Supplied	S	1992553	c	Fraction Organic Carbon FOC Automated	L009	c
TP01	None Supplied	S	1992553	c	Tentatively identified compounds (VOC) in soil	L073-PL	c
TP01	None Supplied	S	1992553	c	Volatile organic compounds in soil	L073B-PL	c
TP02	None Supplied	S	1992554	c	Free cyanide in soil	L080-PL	c
TP02	None Supplied	S	1992554	c	Fraction Organic Carbon FOC Automated	L009	c
TP02	None Supplied	S	1992555	c	Free cyanide in soil	L080-PL	c
TP02	None Supplied	S	1992555	c	Fraction Organic Carbon FOC Automated	L009	c
TP02	None Supplied	S	1992557	c	Free cyanide in soil	L080-PL	c
TP02	None Supplied	S	1992557	c	Fraction Organic Carbon FOC Automated	L009	c
TP03	None Supplied	S	1992558	c	Free cyanide in soil	L080-PL	c
TP03	None Supplied	S	1992558	c	Fraction Organic Carbon FOC Automated	L009	c
TP06	None Supplied	S	1992563	c	Free cyanide in soil	L080-PL	c
TP06	None Supplied	S	1992563	c	Fraction Organic Carbon FOC Automated	L009	c
TP07	None Supplied	S	1992564	c	Free cyanide in soil	L080-PL	c
TP07	None Supplied	S	1992564	c	Fraction Organic Carbon FOC Automated	L009	c
TP07	None Supplied	S	1992565	c	Free cyanide in soil	L080-PL	c
TP07	None Supplied	S	1992565	c	Fraction Organic Carbon FOC Automated	L009	c
WS01	None Supplied	S	1992566	c	Free cyanide in soil	L080-PL	c
WS01	None Supplied	S	1992566	c	Fraction Organic Carbon FOC Automated	L009	c
WS02	None Supplied	S	1992567	c	Free cyanide in soil	L080-PL	c
WS02	None Supplied	S	1992567	c	Fraction Organic Carbon FOC Automated	L009	c
WS02	None Supplied	S	1992568	c	Free cyanide in soil	L080-PL	c
WS02	None Supplied	S	1992568	c	Fraction Organic Carbon FOC Automated	L009	c
WS05	None Supplied	S	1992571	c	Free cyanide in soil	L080-PL	c
WS05	None Supplied	S	1992571	c	Fraction Organic Carbon FOC Automated	L009	c
WS05	None Supplied	S	1992572	c	Free cyanide in soil	L080-PL	c
WS05	None Supplied	S	1992572	c	Fraction Organic Carbon FOC Automated	L009	c
WS06	None Supplied	S	1992573	c	Free cyanide in soil	L080-PL	c
WS06	None Supplied	S	1992573	c	Fraction Organic Carbon FOC Automated	L009	c
WS07	None Supplied	S	1992574	c	Free cyanide in soil	L080-PL	c
WS07	None Supplied	S	1992574	c	Fraction Organic Carbon FOC Automated	L009	c
WS09	None Supplied	S	1992576	c	Free cyanide in soil	L080-PL	c
WS09	None Supplied	S	1992576	c	Fraction Organic Carbon FOC Automated	L009	c
WS09	None Supplied	S	1992577	c	Free cyanide in soil	L080-PL	c
WS09	None Supplied	S	1992577	c	Fraction Organic Carbon FOC Automated	L009	c
WS09	None Supplied	S	1992578	c	Free cyanide in soil	L080-PL	c
WS09	None Supplied	S	1992578	c	Fraction Organic Carbon FOC Automated	L009	c
WS10	None Supplied	S	1992579	c	Free cyanide in soil	L080-PL	c
WS10	None Supplied	S	1992579	c	Fraction Organic Carbon FOC Automated	L009	c
WS10	None Supplied	S	1992580	c	Free cyanide in soil	L080-PL	c
WS10	None Supplied	S	1992580	c	Fraction Organic Carbon FOC Automated	L009	c
tp04	None Supplied	S	1992559	c	Free cyanide in soil	L080-PL	c
tp04	None Supplied	S	1992559	c	Fraction Organic Carbon FOC Automated	L009	c

## *GAC derivation*

### **Background**

Initially, the Hydrock GAC were derived following the publishing of soil guideline values (SGV), toxicological (TOX) reports and associated publications by the Environment Agency (EA) in 2009 referenced under Science Report SC050021 (EA, 2009a, b, c, d). The Hydrock GAC have then been periodically updated following publication of new information on toxicological, physico-chemical, land use or receptor parameters, namely:

- LQM/CIEH, 2009. LQM/CIEH Generic Assessment Criteria for Human Health Risk Assessment, second edition. Nathaniel, C. P., McCaffrey, C., Ashmore, M., Cheng, Y., Gillet, A. G., Ogden, R. C. and Scott, D.
- CL:AIRE, 2010. 'The EIC/AGS/CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment'. Environmental Industries Commission, The Association of Geotechnical and Geoenvironmental Specialists and Contaminated Land: Applications in Real Environment.
- CL:AIRE, 2014. 'Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination', Revision 2, DEFRA research project SP1010. Contaminated Land: Applications in Real Environment.
- LQM/CIEH, 2015. 'The LQM/CIEH S4ULs for Human Health Risk Assessment'. Nathaniel, C. P., McCaffrey, C., Gillet, A. G., Ogden, R. C. and Nathaniel, J. F.
- CL:AIRE, 2021. 'C4SL Phase 2 Technical Reports'. Contaminated Land: Applications in Real Environment.

### **Land Use Scenarios**

Hydrock has derived generic assessment criteria (GAC) for human health based on the six exposure scenarios defined in CL:AIRE (2014) using generic default assumptions from published guidance. GAC for each exposure scenario have been derived for three soil organic matter (SOM) contents, 1%, 2.5% and 6%.

All GAC have been rounded to two significant figures.

### **Exposure Parameters**

The exposure parameters used for the Hydrock GAC are the default parameters stated in SR3, unless updated in CL:AIRE (2014) where the CL:AIRE (2014) values have been adopted.

### **Approach to Consumption Rates**

Hydrock have adopted the 90<sup>th</sup> percentile consumption rates from Table 3.4 of CL:AIRE (2014) for all produce types. This is noted to be more conservative than the "top two" approach taken in the derivation of C4SLs.

### **Approach to plant uptake for GAC omitted in CL:AIRE (2010)**

Plant uptake factors were not identified in CL:AIRE (2010) for antimony, barium and molybdenum. Hydrock has sourced the required parameter values from ORNL (1984) in order to derive GAC that are inclusive of the homegrown produce exposure pathway.

## Chemical and Toxicity Parameters

The chemical and toxicity parameters have been adopted based on the following documents:

- IRIS, 2016. 'Toxicological Review of Trimethylbenzenes'. Integrated Risk Information System, National Centre for Environmental Assessment, office of Research and Development, U.S. Environmental Protection Agency.
- LQM/CIEH, 2015.
- ORNL, 1984. 'ORNL-5786. A Review and Analysis of Parameters for Assessing Transport of Environmentally released Radionuclides through Agriculture'. Oak Ridge National Laboratory.
- CL:AIRE, 2010.
- RIVM, 2001. RIVM Report 711701 025 'HCV Re-evaluation of human-toxicological maximum-permissible risk levels'. National Institute of Public Health and the Environment.
- LQM/CIEH, 2009.
- EA, 2009a.

### Approach to Cyanide GAC

The Hydrock GAC for free cyanide have been derived based on ingestion of a bolus of contaminated soil. The GAC are derived for acute exposure of a child (0-6 years old) for all land uses except commercial, where the GAC are derived for acute exposure of an adult (16-65 years old). For the purpose of GQRA, the child value may be adopted for all land use scenarios.

For complex cyanide, the GAC have been derived based on chronic exposure, using the default exposure scenarios but excluding the consumption of homegrown produce, soil attached to homegrown produce, indoor vapour and outdoor vapour pathways. The chronic health criteria value (HCV) for complex cyanide is based on the EA (2009a) HCV for free cyanide and the ratio of toxicity between free and complex cyanide proposed by RIVM (2001).

### Approach to Phenol GAC

In accordance with the EA Science Report SC050021 / Phenol SGV, a  $GAC_{ing/inh}$  has been derived for ingested and inhaled phenol using the CLEA model, with a  $GAC_{derm}$  derived for dermal contact using Equation 5.7 within SR3. The lower of the  $GAC_{ing/inh}$  and  $GAC_{derm}$  has been adopted as the final GAC.

### Approach to PCB GAC

GAC for assessing the non-dioxin-like risk from PCBs have been based on the "Dutch 7". As the TDI used by the authors of the Dutch guidance is for the sum of the 7 individual congeners, the TDI has been divided by 7 to create a TDI for each congener. The non-dioxin-like risk from PCBs is therefore assessed using a Hazard Index approach as for total petroleum hydrocarbons (TPH).

### Sub-surface soil to indoor air correction factors

Reflecting the approach taken by the Environment Agency in the development of revised SGV in 2009 for BTEX, a sub-surface soil to indoor air correction factor of 10 has been applied for petroleum hydrocarbons in order to account for over-prediction of vapour intrusion into building using the Johnson and Ettinger approach.

The correction factor of 10 has been applied to the following petroleum hydrocarbons (it makes negligible difference to less volatile TPH and PAH compounds):



- TPHCWG fractions, namely aliphatic EC>5-44 and aromatic EC>6-44;
- PAHs (acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene), benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenz(a,h,)anthracene, fluoranthene, fluorene, indeno(1,2,3-c,d)pyrene, naphthalene, phenanthrene, pyrene);
- BTEX;
- Isopropylbenzene;
- Propylbenzene;
- 1,2,4- and 1,3,5-trimethylbenzene; and
- Styrene.

## Approach to Saturation Limits

The CLEA model includes a traffic light colour system to highlight when saturated soil conditions have potentially been exceeded for the vapour pathways during calculation of assessment criteria. The colours represent:

- Green: the assessment criteria do not exceed the saturated soil concentration.
- Amber: the assessment criteria exceed the saturated soil concentration but the contribution of the indoor and outdoor vapour pathway to total exposure is less than 10% and will not significantly affect the assessment criteria.
- Red: the assessment criteria exceed the saturated soil concentration and the contribution of the indoor and outdoor vapour pathway to total exposure is greater than 10% and will significantly affect the assessment criteria.

Hydrock have not applied any further calculations or assessment in relation to saturation limits during GAC derivation, with the CLEA-modelled GAC being presented as the GAC. Consideration of saturation limits is undertaken during the data assessment stage.

## References

CL:AIRE, 2010. 'The EIC/AGS/CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment'. Environmental Industries Commission, The Association of Geotechnical and Geoenvironmental Specialists and Contaminated Land: Applications in Real Environment.

CL:AIRE, 2014. 'Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination', Revision 2, DEFRA research project SP1010. Contaminated Land: Applications in Real Environment

CL:AIRE, 2021. C4SL Phase 2 Technical Reports for tetrachloroethene, trichloroethene and vinyl chloride. Contaminated Land: Applications in Real Environment.

EA, 2009a. 'Science Reports SC050021 – SGV and TOX reports for: benzene, toluene, ethylbenzene, xylene, arsenic, nickel, mercury, selenium, cadmium, inorganic cyanide, phenol, dioxins, furans and dioxin-like PCBs'; 'Supplementary information for the derivation of SGV for: benzene, toluene, ethylbenzene, xylene, arsenic, nickel, mercury, selenium, cadmium, inorganic cyanide, phenol, dioxins, furans and dioxin-like PCBs', and 'Contaminants in soil: updated collation of toxicological data and intake values for humans: benzene, toluene,

ethylbenzene, xylene, arsenic, nickel, mercury, selenium, cadmium, inorganic cyanide, phenol, dioxins, furans and dioxin-like PCBs'. Environment Agency.

EA, 2009b. 'Science Report – SC050021/SR2. Human health toxicological assessment of contaminants in soil'. Environment Agency.

EA, 2009c. 'Science Report – SC050021/SR3. Updated technical background to the CLEA model'. Environment Agency.

EA, 2009d. 'Science Report – SC050021/SR4. CLEA Software (version 1.05) Handbook'. Environment Agency.

IRIS, 2016. 'Toxicological Review of Trimethylbenzenes'. Integrated Risk Information System, National Centre for Environmental Assessment, office of Research and Development, U.S. Environmental Protection Agency.

LQM/CIEH, 2009. LQM/CIEH Generic Assessment Criteria for Human Health Risk Assessment, second edition. Nathaniel, C. P., McCaffrey, C., Ashmore, M., Cheng, Y., Gillet, A. G., Ogden, R. C. and Scott, D.

LQM/CIEH, 2015. 'The LQM/CIEH S4ULs for Human Health Risk Assessment'. Nathaniel, C. P., McCaffrey, C., Gillet, A. G., Ogden, R. C. and Nathaniel, J. F.

ORNL, 1984. 'ORNL-5786. A Review and Analysis of Parameters for Assessing Transport of Environmentally released Radionuclides through Agriculture'. Oak Ridge National Laboratory.

RIVM, 2001. RIVM Report 711701 025 'HCV Re-evaluation of human-toxicological maximum-permissible risk levels'. National Institute of Public Health and the Environment.

*Human Health GQRA*

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)				
<b>Client:</b>	Oxford University Developments Ltd		<b>Data Filters</b>		
<b>Site:</b>	Begbroke Science Park		Zone	S	
<b>Job no.:</b>	19114		Strata	TS	
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372		Depth Min (m bgl)	0.1	
			Depth Max (m bgl)	3.8	
All values in mg/kg unless otherwise stated			Dataset mean SOM%	3.31	
			Scenario SOM%	1	



CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	Date	30/08/22	31/08/22	02/09/22	03/08/22	01/09/22	14/09/22	
														Zone	S	S	S	S	S		
														Location	BH201	BH202	BH203	BH204	BH205	HP201	
														Depth (m bgl)	0.2	0.1	0.1	0.2	0.1	0.1	
														Strata	TS	TS	TS	TS	TS	TS	
-	<b>Asbestos</b>																				
P1020	Asbestos Identified	Y/N	Y/N	74	-	-	-	-	No. of detects:	0	-	-	-	N	N	N	N	N	N	N	N
-	<b>Hydrock Default Suite - FOC / SOM / pH</b>																				
P1085	FOC (dimensionless)	[]	0.001	78	0.003	0.050	0.019	0.018	0.01		-	-	-	0.011	0.0057	0.012	0.0033	0.017	0.035		
-	SOM (calculated)	%	0.1724	78	0.57	8.62	3.31	3.10	1.50		-	-	-	1.8964	0.98268	2.0688	0.56892	2.9308	6.034		
P1334	pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-	-	6.6	8	7.1	8	7.6	7.8		
-	<b>Hydrock Default Suite - Metals &amp; PAH</b>																				
7440-38-2	Arsenic	mg/kg	1	78	13.00	71.00	34.19	30.00	15.82	29	NR	37	C4SL - CL:AIRE 2014	45	29	29	24	24	25		
7440-41-7	Beryllium	mg/kg	0.06	78	0.64	1.90	1.18	1.15	0.27	3	NR	1.7	Hydrock Derived	1.2	1	0.98	0.85	1.2	1.1		
7440-42-8	Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	NR	300	Hydrock Derived	0.7	0.4	0.9	0.4	2	2		
7440-43-9	Cadmium	mg/kg	0.2	78	0.20	1.20	0.21	0.20	0.11	0	NR	22	C4SL - CL:AIRE 2014	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
16065-83-1	Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	NR	890	Hydrock Derived	43	34	33	31	42	30		
18540-29-9	Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	NR	21	C4SL - CL:AIRE 2014	<1.8	<1.8	<1.8	<1.8	<1.8	2		
7440-47-3	Chromium (Total)	mg/kg	1	78	25.00	70.00	42.28	41.00	9.55		-	-		43	34	34	31	42	32		
7440-50-8	Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	NR	2500	Hydrock Derived	13	11	13	12	15	21		
7439-92-1	Lead	mg/kg	1	78	14.00	160.00	30.96	27.50	18.53	0	NR	200	C4SL - CL:AIRE 2014	29	20	27	14	32	38		
7439-97-6	Mercury, inorganic	mg/kg	0.3	78	0.30	0.30	0.30	0.30	0.00	0	NR	40	Hydrock Derived	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3		
7440-02-0	Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	NR	130	Hydrock Derived	29	23	23	21	29	25		
7782-49-2	Selenium	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	<1	<1	<1	<1	<1	<1		
7440-62-2	Vanadium	mg/kg	1	78	41.00	250.00	72.46	68.00	27.93	0	NR	410	Hydrock Derived	80	64	59	53	64	51		
7440-66-6	Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	NR	3900	Hydrock Derived	76	71	73	66	88	130		
P1095	Cyanide (free)	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	<1	<1	<1	<1		
P1186	Total Phenols (Monohydric)	mg/kg	1	78	1.00	1.30	1.00	1.00	0.03	0	24237	120	Hydrock Derived	<1	<1	<1	<1	<1	<1		
83-32-9	Acenaphthene	mg/kg	0.05	78	0.05	0.66	0.06	0.05	0.07	0	57	230	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
208-96-8	Acenaphthylene	mg/kg	0.05	78	0.05	2.50	0.08	0.05	0.28	0	86	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
120-12-7	Anthracene	mg/kg	0.05	78	0.05	1.70	0.08	0.05	0.21	0	1.17	2400	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.2	
56-55-3	Benz(a)anthracene	mg/kg	0.05	78	0.05	2.30	0.12	0.05	0.33	0	1.71	8.9	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.56	
50-32-8	Benzo(a)pyrene	mg/kg	0.05	78	0.05	1.80	0.10	0.05	0.23	0	0.91	5	C4SL - CL:AIRE 2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.51	
205-99-2	Benzo(b)fluoranthene	mg/kg	0.05	78	0.05	2.00	0.10	0.05	0.26	0	1.22	2.6	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.67	
191-24-2	Benzo(ghi)perylene	mg/kg	0.05	78	0.05	1.60	0.09	0.05	0.20	0	0.02	320	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.51	
207-08-9	Benzo(k)fluoranthene	mg/kg	0.05	78	0.05	1.50	0.08	0.05	0.18	0	0.69	78	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.27	
218-01-9	Chrysene	mg/kg	0.05	78	0.05	1.70	0.10	0.05	0.24	0	0.44	15	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.53	
53-70-3	Dibenz(ah)anthracene	mg/kg	0.05	78	0.05	0.38	0.05	0.05	0.04	1	0.004	0.25	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
206-44-0	Fluoranthene	mg/kg	0.05	78	0.05	4.80	0.18	0.05	0.65	0	19	290	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.79	
86-73-7	Fluorene	mg/kg	0.05	78	0.05	2.00	0.08	0.05	0.22	0	31	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
193-39-5	Indeno(123cd)pyrene	mg/kg	0.05	78	0.05	1.20	0.08	0.05	0.14	0	0.06	28	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.33	
91-20-3	Naphthalene	mg/kg	0.05	78	0.05	1.60	0.08	0.05	0.19	0	76	13	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
85-01-8	Phenanthrene	mg/kg	0.05	78	0.05	7.40	0.21	0.05	0.88	0	36	98	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.59	
129-00-0	Pyrene	mg/kg	0.05	78	0.05	4.50	0.18	0.05	0.61	0	2.2	620	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.68	

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park		
<b>Job no.:</b>	19114		
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372		
	<b>Data Filters</b>		
	Zone	S	
	Strata	TS	
	Depth Min (m bgl)	0.1	
	Depth Max (m bgl)	3.8	
All values in mg/kg unless otherwise stated		Dataset mean SOM%	3.31
		Scenario SOM%	1



Date	30/08/22	31/08/22	02/09/22	03/08/22	01/09/22	14/09/22
Zone	S	S	S	S	S	S
Location	BH201	BH202	BH203	BH204	BH205	HP201
Depth (m bgl)	0.2	0.1	0.1	0.2	0.1	0.1

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	Strata	TS	TS	TS	TS	TS	TS	
P1310	PAH 16 Total	mg/kg	0.8	4	0.80	0.80	0.80	0.80	0.00			-									
-	<b>TPH fractions</b>																				
P1407	TPH ali >EC05-EC06	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	304	42	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	
P1408	TPH ali >EC06-EC08	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	144	100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	
P1409	TPH ali >EC08-EC10	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	78	27	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	
P1410	TPH ali >EC10-EC12	mg/kg	1	14	1.00	1.00	1.00	1.00	0.00	0	48	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<1	
P1411	TPH ali >EC12-EC16	mg/kg	2	14	2.00	2.50	2.04	2.00	0.13	0	24	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<2	
P1412	TPH ali >EC16-EC21	mg/kg	8	4	8.00	8.00	8.00	8.00	0.00			-									
P1413	TPH ali >EC21-EC35	mg/kg	8	4	8.00	8.00	8.00	8.00	0.00			-									
P1938	TPH ali >EC16-EC35	mg/kg	10	14	10.00	10.00	10.00	10.00	0.00	0	8	65000	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<10	
P1415	TPH ali >EC35-EC44	mg/kg	8.4	14	8.40	8.40	8.40	8.40	0.00	0	8	65000	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<8.4	
P1418	TPH ali >EC5-EC35	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-									
P1420	TPH ali >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-									
P1441	TPH aro EC05-EC07	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	1218	73	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	
P1355	TPH aro >EC07-EC08	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	
P1356	TPH aro >EC08-EC10	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	613	35	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	
P1357	TPH aro >EC10-EC12	mg/kg	1	14	1.00	1.00	1.00	1.00	0.00	0	364	75	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<1	
P1358	TPH aro >EC12-EC16	mg/kg	2	14	2.00	2.00	2.00	2.00	0.00	0	169	140	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<2	
P1359	TPH aro >EC16-EC21	mg/kg	10	14	10.00	18.00	10.57	10.00	2.14	0	54	260	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<10	
P1360	TPH aro >EC21-EC35	mg/kg	10	14	10.00	44.00	12.43	10.00	9.09	0	5	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<10	
P1362	TPH aro >EC35-EC44	mg/kg	8.4	14	8.40	8.40	8.40	8.40	0.00	0	5	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<8.4	
P1365	TPH aro >EC5-EC35	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-									
P1941	TPH aro >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-									
P1373	Total TPH >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-									
-	<b>VOCs - BTEX &amp; MTBE</b>																				
71-43-2	Benzene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	1218	0.2	C45L - CL:AIRE 2014	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	
108-88-3	Toluene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	
100-41-4	Ethylbenzene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	518	47	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	
95-47-6	Xylene, o-	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	478	61	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	
1330-20-7	Xylene, p- (use this for combined m & p)	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	576	57	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	
1634-04-4	MTBE	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	20358	62	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001
<b>TPH Additivity Check</b>														<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>							
														Aliphatics >EC5-EC6							2.381E-05
														Aliphatics >EC6-EC8							0.00001
														Aliphatics >EC8-EC10							3.704E-05
														Aliphatics >EC10-EC12							0.0076923
														Aliphatics >EC12-EC16							0.0018182
														Aliphatics >EC16-EC35							0.0001538
														Aliphatics >EC35-EC44							0.0001292

Considered additive



# Assessment of Chemicals of Potential Concern to Human Health



**Risk parameter:** Default - Human Health - residential with home-grown produce (1%SOM)

**Client:** Oxford University Developments Ltd

**Site:** Begbroke Science Park

**Job no.:** 19114

**Lab. report no(s).:** 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372

**Data Filters**

Zone **S**

Strata **TS**

Depth Min (m bgl) **0.1**

Depth Max (m bgl) **3.8**

Hydrock

All values in mg/kg unless otherwise stated

Dataset mean SOM% **3.31**

Scenario SOM% **1**

Date	30/08/22	31/08/22	02/09/22	03/08/22	01/09/22	14/09/22
<b>Zone</b>	S	S	S	S	S	S
<b>Location</b>	BH201	BH202	BH203	BH204	BH205	HP201
<b>Depth (m bgl)</b>	0.2	0.1	0.1	0.2	0.1	0.1
<b>Strata</b>	TS	TS	TS	TS	TS	TS
Aromatics EC5-EC7						1.37E-05
Aromatics >EC7-EC8						7.692E-06
Aromatics >EC8-EC10						2.857E-05
Aromatics >EC10-EC12						0.0133333
Aromatics >EC12-EC16						0.0142857
Aromatics >EC16-EC21						0.0384615
Aromatics >EC21-EC35						0.0090909
Aromatics >EC35-EC44						0.0076364
<b>Hazard Index for all&gt;C8-C16</b>						<b>0.009548</b>
<b>Hazard Index for aro&gt;C8-C16</b>						<b>0.027648</b>
<b>Hazard Index for aro&gt;C16-C35</b>						<b>0.047552</b>

Considered additive

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Considered additive

Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source

**Legend:**

MG	Made Ground	<0.02	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
HH	Hole Heath Sand and Gravel		
XX	XX Other Codes	0.02	Value greater than, or equal to, the generic assessment criterion (GAC).
TS	Topsoil	*<10	Value excluded from statistical analysis
NAT	Natural	Y	Text result
		-	Represents a determinand that was not tested.
		+	represents a data point that is not included in the current filter settings

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	
<b>Job no.:</b>	19114	Zone	S
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata	TS
		Depth Min (m bgl)	0.1
		Depth Max (m bgl)	3.8

All values in mg/kg unless otherwise stated	Dataset mean SOM%	3.31	
	Scenario SOM%	1	

14/09/22	14/09/22	14/09/22	14/09/22	14/09/22	06/09/22	09/09/22	08/09/22	09/09/22	06/09/22
S	S	S	S	S	S	S	S	S	S
HP202	HP203	HP204	HP205	HP206	TP204	TP205	TP206	TP211	TP213
0.1	0.1	0.1	0.1	0.1	0.2	0.15	0.2	0.15	0.2

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	TS	TS	TS	TS	TS	TS	TS	TS	TS	
<b>Asbestos</b>																						
Asbestos Identified	Y/N		74	-	-	-	-	No. of detects:	0	-	-	-	N	N	N	N	N	N	N	N	N	
<b>Hydrock Default Suite - FOC / SOM / pH</b>																						
FOC (dimensionless)	]	0.001	78	0.003	0.050	0.019	0.018	0.01		-	-	-	0.05	0.021	0.02	0.042	0.022	0.018	0.02	0.016	0.012	0.013
SOM (calculated)	%	0.1724	78	0.57	8.62	3.31	3.10	1.50		-	-	-	8.62	3.6204	3.448	7.2408	3.7928	3.1032	3.448	2.7584	2.0688	2.2412
pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-	-	7.1	7.7	7.9	7.5	7.5	8	7.8	7.8	7.9	7.9
<b>Hydrock Default Suite - Metals &amp; PAH</b>																						
Arsenic	mg/kg	1	78	13.00	71.00	34.19	30.00	15.82	29	NR	37	C4SL - CL:AIRE 2014	30	23	18	21	32	71	54	59	39	31
Beryllium	mg/kg	0.06	78	0.64	1.90	1.18	1.15	0.27	3	NR	1.7	Hydrock Derived	1.2	1.1	0.98	0.85	1.1	1.5	1.5	1.5	1.1	0.94
Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	NR	300	Hydrock Derived	3.9	1.4	2.3	3.9	2.4	0.7	0.5	0.4	0.7	0.3
Cadmium	mg/kg	0.2	78	0.20	1.20	0.21	0.20	0.11	0	NR	22	C4SL - CL:AIRE 2014	<0.2	1.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	NR	890	Hydrock Derived	39	36	30	26	31	69	53	55	40	37
Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	NR	21	C4SL - CL:AIRE 2014	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Chromium (Total)	mg/kg	1	78	25.00	70.00	42.28	41.00	9.55		-	-	-	39	36	30	26	32	69	54	56	41	38
Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	NR	2500	Hydrock Derived	30	23	21	22	25	24	22	18	16	18
Lead	mg/kg	1	78	14.00	160.00	30.96	27.50	18.53	0	NR	200	C4SL - CL:AIRE 2014	50	44	30	47	44	46	31	26	32	28
Mercury, inorganic	mg/kg	0.3	78	0.30	0.30	0.30	0.30	0.00	0	NR	40	Hydrock Derived	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	NR	130	Hydrock Derived	27	27	26	23	27	44	35	34	25	23
Selenium	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1	78	41.00	250.00	72.46	68.00	27.93	0	NR	410	Hydrock Derived	55	54	44	42	51	100	97	100	75	62
Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	NR	3900	Hydrock Derived	260	130	110	150	130	110	100	99	70	70
Cyanide (free)	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Phenols (Monohydric)	mg/kg	1	78	1.00	1.30	1.00	1.00	0.03	0	24237	120	Hydrock Derived	1.3	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acenaphthene	mg/kg	0.05	78	0.05	0.66	0.06	0.05	0.07	0	57	230	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	0.66	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	mg/kg	0.05	78	0.05	2.50	0.08	0.05	0.28	0	86	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	2.5	<0.05	<0.05	<0.05	<0.05
Anthracene	mg/kg	0.05	78	0.05	1.70	0.08	0.05	0.21	0	1.17	2400	Hydrock Derived	0.81	<0.05	<0.05	<0.05	<0.05	1.7	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	mg/kg	0.05	78	0.05	2.30	0.12	0.05	0.33	0	1.71	8.9	Hydrock Derived	2.3	0.18	0.25	<0.05	0.38	1.8	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	mg/kg	0.05	78	0.05	1.80	0.10	0.05	0.23	0	0.91	5	C4SL - CL:AIRE 2014	1.8	0.24	<0.05	<0.05	0.37	0.98	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	78	0.05	2.00	0.10	0.05	0.26	0	1.22	2.6	Hydrock Derived	2	0.27	<0.05	<0.05	0.48	1.1	<0.05	<0.05	<0.05	<0.05
Benzo(ghi)perylene	mg/kg	0.05	78	0.05	1.60	0.09	0.05	0.20	0	0.02	320	Hydrock Derived	1.6	<0.05	<0.05	<0.05	0.33	0.82	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05	78	0.05	1.50	0.08	0.05	0.18	0	0.69	78	Hydrock Derived	1.5	0.14	<0.05	<0.05	0.16	0.75	<0.05	<0.05	<0.05	<0.05
Chrysene	mg/kg	0.05	78	0.05	1.70	0.10	0.05	0.24	0	0.44	15	Hydrock Derived	1.7	0.23	0.25	<0.05	0.33	1.3	<0.05	<0.05	<0.05	<0.05
Dibenz(ah)anthracene	mg/kg	0.05	78	0.05	0.38	0.05	0.05	0.04	1	0.004	0.25	Hydrock Derived	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	78	0.05	4.80	0.18	0.05	0.65	0	19	290	Hydrock Derived	3.2	0.27	0.28	<0.05	0.51	4.8	<0.05	<0.05	<0.05	0.44
Fluorene	mg/kg	0.05	78	0.05	2.00	0.08	0.05	0.22	0	31	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	2	<0.05	<0.05	<0.05	0.2
Indeno(123cd)pyrene	mg/kg	0.05	78	0.05	1.20	0.08	0.05	0.14	0	0.06	28	Hydrock Derived	1.2	<0.05	<0.05	<0.05	<0.05	0.23	0.51	<0.05	<0.05	<0.05
Naphthalene	mg/kg	0.05	78	0.05	1.60	0.08	0.05	0.19	0	76	13	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	1.6	<0.05	<0.05	<0.05	0.81
Phenanthrene	mg/kg	0.05	78	0.05	7.40	0.21	0.05	0.88	0	36	98	Hydrock Derived	2.6	<0.05	<0.05	<0.05	0.28	7.4	<0.05	<0.05	<0.05	0.87
Pyrene	mg/kg	0.05	78	0.05	4.50	0.18	0.05	0.61	0	2.2	620	Hydrock Derived	3.1	0.25	0.25	<0.05	0.46	4.5	<0.05	<0.05	<0.05	0.46

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	
<b>Job no.:</b>	19114	Zone	S
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata	TS
		Depth Min (m bgl)	0.1
		Depth Max (m bgl)	3.8

All values in mg/kg unless otherwise stated										Dataset mean SOM%		3.31	
										Scenario SOM%		1	

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	14/09/22	14/09/22	14/09/22	14/09/22	14/09/22	06/09/22	09/09/22	08/09/22	09/09/22	06/09/22		
													S	S	S	S	S	S	S	S	S	S	S	
PAH 16 Total	mg/kg	0.8	4	0.80	0.80	0.80	0.80	0.00			-													
<b>TPH fractions</b>																								
TPH ali EC05-EC06	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	304	42	Hydrock Derived	<0.001	<0.001	<0.001	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A		
TPH ali >EC06-EC08	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	144	100	Hydrock Derived	<0.001	<0.001	<0.001	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A		
TPH ali >EC08-EC10	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	78	27	Hydrock Derived	<0.001	<0.001	<0.001	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A		
TPH ali >EC10-EC12	mg/kg	1	14	1.00	1.00	1.00	1.00	0.00	0	48	130	Hydrock Derived	<1	<1	<1	<1	<1	N/A	N/A	N/A	N/A	N/A		
TPH ali >EC12-EC16	mg/kg	2	14	2.00	2.50	2.04	2.00	0.13	0	24	1100	Hydrock Derived	<2	<2	2.5	<2	<2	N/A	N/A	N/A	N/A	N/A		
TPH ali >EC16-EC21	mg/kg	8	4	8.00	8.00	8.00	8.00	0.00			-													
TPH ali >EC21-EC35	mg/kg	8	4	8.00	8.00	8.00	8.00	0.00			-													
TPH ali >EC16-EC35	mg/kg	10	14	10.00	10.00	10.00	10.00	0.00	0	8	65000	Hydrock Derived	<10	<10	<10	<10	<10	N/A	N/A	N/A	N/A	N/A		
TPH ali >EC35-EC44	mg/kg	8.4	14	8.40	8.40	8.40	8.40	0.00	0	8	65000	Hydrock Derived	<8.4	<8.4	<8.4	<8.4	<8.4	N/A	N/A	N/A	N/A	N/A		
TPH ali >EC5-EC35	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-													
TPH ali >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-													
TPH aro EC05-EC07	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	1218	73	Hydrock Derived	<0.001	<0.001	<0.001	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A		
TPH aro >EC07-EC08	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	<0.001	<0.001	<0.001	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A		
TPH aro >EC08-EC10	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	613	35	Hydrock Derived	<0.001	<0.001	<0.001	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A		
TPH aro >EC10-EC12	mg/kg	1	14	1.00	1.00	1.00	1.00	0.00	0	364	75	Hydrock Derived	<1	<1	<1	<1	<1	N/A	N/A	N/A	N/A	N/A		
TPH aro >EC12-EC16	mg/kg	2	14	2.00	2.00	2.00	2.00	0.00	0	169	140	Hydrock Derived	<2	<2	<2	<2	<2	N/A	N/A	N/A	N/A	N/A		
TPH aro >EC16-EC21	mg/kg	10	14	10.00	18.00	10.57	10.00	2.14	0	54	260	Hydrock Derived	18	<10	<10	<10	<10	N/A	N/A	N/A	N/A	N/A		
TPH aro >EC21-EC35	mg/kg	10	14	10.00	44.00	12.43	10.00	9.09	0	5	1100	Hydrock Derived	44	<10	<10	<10	<10	N/A	N/A	N/A	N/A	N/A		
TPH aro >EC35-EC44	mg/kg	8.4	14	8.40	8.40	8.40	8.40	0.00	0	5	1100	Hydrock Derived	<8.4	<8.4	<8.4	<8.4	<8.4	N/A	N/A	N/A	N/A	N/A		
TPH aro >EC5-EC35	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-													
TPH aro >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-													
Total TPH >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-													
<b>VOCs - BTEX &amp; MTBE</b>																								
Benzene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	1218	0.2	C4SL - CL:AIRE 2014	<0.001	<0.001	<0.001	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A		
Toluene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	869	130	Hydrock Derived	<0.001	<0.001	<0.001	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A		
Ethylbenzene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	518	47	Hydrock Derived	<0.001	<0.001	<0.001	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A		
Xylene, o-	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	478	61	Hydrock Derived	<0.001	<0.001	<0.001	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A		
Xylene, p- (use this for combined m & p)	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	576	57	Hydrock Derived	<0.001	<0.001	<0.001	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A		
MTBE	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	20358	62	Hydrock Derived	<0.001	<0.001	<0.001	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A		
<b>TPH Additivity Check</b>																								
<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>																								
													2.381E-05	2.381E-05	2.381E-05	2.381E-05	2.381E-05							
													0.00001	0.00001	0.00001	0.00001	0.00001							
													3.704E-05	3.704E-05	3.704E-05	3.704E-05	3.704E-05							
Considered additive													0.0076923	0.0076923	0.0076923	0.0076923	0.0076923							
													0.0018182	0.0018182	0.0022727	0.0018182	0.0018182							
													0.0001538	0.0001538	0.0001538	0.0001538	0.0001538							
													0.0001292	0.0001292	0.0001292	0.0001292	0.0001292							

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)			
<b>Client:</b>	Oxford University Developments Ltd			
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>		
<b>Job no.:</b>	19114	Zone		S
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata		TS
		Depth Min (m bgl)		0.1
		Depth Max (m bgl)	3.8	
All values in mg/kg unless otherwise stated		Dataset mean SOM%	3.31	
		Scenario SOM%	1	

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	14/09/22	14/09/22	14/09/22	14/09/22	14/09/22	06/09/22	09/09/22	08/09/22	09/09/22	06/09/22	
													S	S	S	S	S	S	S	S	S	S	S
													1.37E-05	1.37E-05	1.37E-05	1.37E-05	1.37E-05						
													7.692E-06	7.692E-06	7.692E-06	7.692E-06	7.692E-06						
													2.857E-05	2.857E-05	2.857E-05	2.857E-05	2.857E-05						
													A 0.0133333	0.0133333	0.0133333	0.0133333	0.0133333						
													A 0.0142857	0.0142857	0.0142857	0.0142857	0.0142857						
													A 0.0692308	0.0384615	0.0384615	0.0384615	0.0384615						
													A 0.04	0.0090909	0.0090909	0.0090909	0.0090909						
													A 0.0076364	0.0076364	0.0076364	0.0076364	0.0076364						
													<b>Hazard I</b>	<b>0.009548</b>	<b>0.009548</b>	<b>0.010002</b>	<b>0.009548</b>	<b>0.009548</b>					
													<b>Hazard I</b>	<b>0.027648</b>	<b>0.027648</b>	<b>0.027648</b>	<b>0.027648</b>	<b>0.027648</b>					
													<b>Hazard I</b>	<b>0.109231</b>	<b>0.047552</b>	<b>0.047552</b>	<b>0.047552</b>	<b>0.047552</b>					

Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.

<b>Legend:</b>	MG	Made Ground	<b>&lt;0.02</b>	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
	HH	Hole Heath Sand and Gravel	<b>0.02</b>	Value greater than, or equal to, the generic assessment criterion (GAC).
	XX	XX Other Codes	<b>*&lt;10</b>	Value excluded from statistical analysis
	TS	Topsoil	<b>Y</b>	Text result
	NAT	Natural	<b>-</b>	Represents a determinand that was not tested.
			<b>+</b>	represents a data point that is not included in the current filter settings

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)									
<b>Client:</b>	Oxford University Developments Ltd									
<b>Site:</b>	Begbroke Science Park									
<b>Job no.:</b>	19114									
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372									
										<b>Data Filters</b>
										Zone <b>S</b>
										Strata <b>TS</b>
										Depth Min (m bgl) <b>0.1</b>
										Depth Max (m bgl) <b>3.8</b>
All values in mg/kg unless otherwise stated										Dataset mean SOM% <b>3.31</b>
										Scenario SOM% <b>1</b>



08/09/22	08/09/22	05/09/22	08/09/22	05/09/22	05/09/22	07/09/22	07/09/22	07/09/22	07/09/22
S	S	S	S	S	S	S	S	S	S
TP218	TP219	TP221	TP223	TP226	TP227	TP230	TP231	TP232	TP234
0.15	0.25	0.2	0.15	0.2	0.2	0.2	0.2	0.2	0.2

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	TS	TS	TS	TS	TS	TS	TS	TS	TS	
<b>Asbestos</b>																						
Asbestos Identified	Y/N		74	-	-	-	-	No. of detects:	0	-	-	-	N	N	N	N	N	N	N	N	N	
<b>Hydrock Default Suite - FOC / SOM / pH</b>																						
FOC (dimensionless)	]	0.001	78	0.003	0.050	0.019	0.018	0.01		-	-	-	0.016	0.022	0.012	0.013	0.019	0.013	0.022	0.028	0.029	0.022
SOM (calculated)	%	0.1724	78	0.57	8.62	3.31	3.10	1.50		-	-	-	2.7584	3.7928	2.0688	2.2412	3.2756	2.2412	3.7928	4.8272	4.9996	3.7928
pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-	-	7	7.7	7.5	7.7	8	8.1	7.7	7.9	7.6	7.3
<b>Hydrock Default Suite - Metals &amp; PAH</b>																						
Arsenic	mg/kg	1	78	13.00	<b>71.00</b>	34.19	30.00	15.82	<b>29</b>	NR	37	C4SL - CL:AIRE 2014	41	51	41	18	39	36	14	15	20	15
Beryllium	mg/kg	0.06	78	0.64	<b>1.90</b>	1.18	1.15	0.27	<b>3</b>	NR	1.7	Hydrock Derived	1.1	1.4	1.2	0.79	1.2	1	0.8	0.88	1.3	0.96
Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	NR	300	Hydrock Derived	0.5	0.4	0.5	0.6	1	1.1	0.3	1.3	2	1.1
Cadmium	mg/kg	0.2	78	0.20	1.20	0.21	0.20	0.11	0	NR	22	C4SL - CL:AIRE 2014	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	NR	890	Hydrock Derived	38	50	43	28	43	38	31	36	42	38
Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	NR	21	C4SL - CL:AIRE 2014	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Chromium (Total)	mg/kg	1	78	25.00	70.00	42.28	41.00	9.55		-	-	-	39	50	43	29	45	39	32	36	44	39
Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	NR	2500	Hydrock Derived	20	20	20	16	21	16	11	14	19	12
Lead	mg/kg	1	78	14.00	160.00	30.96	27.50	18.53	0	NR	200	C4SL - CL:AIRE 2014	27	27	34	25	30	20	19	22	33	22
Mercury, inorganic	mg/kg	0.3	78	0.30	0.30	0.30	0.30	0.00	0	NR	40	Hydrock Derived	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	NR	130	Hydrock Derived	25	34	28	18	31	25	17	17	25	18
Selenium	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1	78	41.00	250.00	72.46	68.00	27.93	0	NR	410	Hydrock Derived	68	97	74	45	78	72	46	49	61	53
Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	NR	3900	Hydrock Derived	83	110	91	56	110	89	53	61	92	58
Cyanide (free)	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Phenols (Monohydric)	mg/kg	1	78	1.00	1.30	1.00	1.00	0.03	0	24237	120	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acenaphthene	mg/kg	0.05	78	0.05	0.66	0.06	0.05	0.07	0	57	230	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	mg/kg	0.05	78	0.05	2.50	0.08	0.05	0.28	0	86	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	mg/kg	0.05	78	0.05	1.70	0.08	0.05	0.21	0	1.17	2400	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	mg/kg	0.05	78	0.05	2.30	0.12	0.05	0.33	0	1.71	8.9	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	mg/kg	0.05	78	0.05	1.80	0.10	0.05	0.23	0	0.91	5	C4SL - CL:AIRE 2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	78	0.05	2.00	0.10	0.05	0.26	0	1.22	2.6	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(ghi)perylene	mg/kg	0.05	78	0.05	1.60	0.09	0.05	0.20	0	0.02	320	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05	78	0.05	1.50	0.08	0.05	0.18	0	0.69	78	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	mg/kg	0.05	78	0.05	1.70	0.10	0.05	0.24	0	0.44	15	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(ah)anthracene	mg/kg	0.05	78	0.05	<b>0.38</b>	0.05	0.05	0.04	<b>1</b>	0.004	0.25	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	78	0.05	4.80	0.18	0.05	0.65	0	19	290	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	0.23	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	78	0.05	2.00	0.08	0.05	0.22	0	31	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(123cd)pyrene	mg/kg	0.05	78	0.05	1.20	0.08	0.05	0.14	0	0.06	28	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	mg/kg	0.05	78	0.05	1.60	0.08	0.05	0.19	0	76	13	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	78	0.05	7.40	0.21	0.05	0.88	0	36	98	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	0.41	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	mg/kg	0.05	78	0.05	4.50	0.18	0.05	0.61	0	2.2	620	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	0.3	<0.05	<0.05	<0.05	<0.05	<0.05



# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	
<b>Job no.:</b>	19114	Zone	S
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata	TS
		Depth Min (m bgl)	0.1
		Depth Max (m bgl)	3.8

All values in mg/kg unless otherwise stated										Dataset mean SOM%		3.31	
										Scenario SOM%		1	

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	08/09/22	08/09/22	05/09/22	08/09/22	05/09/22	05/09/22	07/09/22	07/09/22	07/09/22	07/09/22	
													S	S	S	S	S	S	S	S	S	S	S
PAH 16 Total	mg/kg	0.8	4	0.80	0.80	0.80	0.80	0.00			-												
<b>TPH fractions</b>																							
TPH ali EC05-EC06	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	304	42	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A	N/A
TPH ali >EC06-EC08	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	144	100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A	N/A
TPH ali >EC08-EC10	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	78	27	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A	N/A
TPH ali >EC10-EC12	mg/kg	1	14	1.00	1.00	1.00	1.00	0.00	0	48	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
TPH ali >EC12-EC16	mg/kg	2	14	2.00	2.50	2.04	2.00	0.13	0	24	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A	N/A
TPH ali >EC16-EC21	mg/kg	8	4	8.00	8.00	8.00	8.00	0.00			-												
TPH ali >EC21-EC35	mg/kg	8	4	8.00	8.00	8.00	8.00	0.00			-												
TPH ali >EC16-EC35	mg/kg	10	14	10.00	10.00	10.00	10.00	0.00	0	8	65000	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	N/A	N/A
TPH ali >EC35-EC44	mg/kg	8.4	14	8.40	8.40	8.40	8.40	0.00	0	8	65000	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<8.4	N/A	N/A	N/A
TPH ali >EC5-EC35	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-												
TPH ali >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-												
TPH aro EC05-EC07	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	1218	73	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A	N/A
TPH aro >EC07-EC08	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A	N/A
TPH aro >EC08-EC10	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	613	35	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A	N/A
TPH aro >EC10-EC12	mg/kg	1	14	1.00	1.00	1.00	1.00	0.00	0	364	75	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
TPH aro >EC12-EC16	mg/kg	2	14	2.00	2.00	2.00	2.00	0.00	0	169	140	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A	N/A
TPH aro >EC16-EC21	mg/kg	10	14	10.00	18.00	10.57	10.00	2.14	0	54	260	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	N/A	N/A
TPH aro >EC21-EC35	mg/kg	10	14	10.00	44.00	12.43	10.00	9.09	0	5	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	N/A	N/A
TPH aro >EC35-EC44	mg/kg	8.4	14	8.40	8.40	8.40	8.40	0.00	0	5	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<8.4	N/A	N/A	N/A
TPH aro >EC5-EC35	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-												
TPH aro >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-												
Total TPH >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-												
<b>VOCs - BTEX &amp; MTBE</b>																							
Benzene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	1218	0.2	C4SL - CL:AIRE 2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A	N/A
Toluene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A	N/A
Ethylbenzene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	518	47	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A	N/A
Xylene, o-	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	478	61	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A	N/A
Xylene, p- (use this for combined m & p)	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	576	57	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A	N/A
MTBE	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	20358	62	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A	N/A
<b>TPH Additivity Check</b>																							
<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>																							
																			2.381E-05				
																			0.00001				
																			3.704E-05				
																			0.0076923				
																			0.0018182				
																			0.0001538				
																			0.0001292				

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	
<b>Job no.:</b>	19114	Zone	S
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata	TS
		Depth Min (m bgl)	0.1
		Depth Max (m bgl)	3.8
		Dataset mean SOM%	3.31
		Scenario SOM%	1

All values in mg/kg unless otherwise stated



08/09/22	08/09/22	05/09/22	08/09/22	05/09/22	05/09/22	07/09/22	07/09/22	07/09/22	07/09/22
S	S	S	S	S	S	S	S	S	S
TP218	TP219	TP221	TP223	TP226	TP227	TP230	TP231	TP232	TP234
0.15	0.25	0.2	0.15	0.2	0.2	0.2	0.2	0.2	0.2

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	TS	TS	TS	TS	TS	TS	TS	TS	
																					1.37E-05
																					7.692E-06
																					2.857E-05
																					0.0133333
																					0.0142857
																					0.0384615
																					0.0090909
																					0.0076364
																					<b>Hazard I</b>
																					<b>0.009548</b>
																					<b>Hazard In</b>
																					<b>0.027648</b>
																					<b>Hazard Ind</b>
																					<b>0.047552</b>

Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.

<b>Legend:</b>	MG	Made Ground	<b>&lt;0.02</b>	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
	HH	Hole Heath Sand and Gravel	<b>0.02</b>	Value greater than, or equal to, the generic assessment criterion (GAC).
	XX	XX Other Codes	<b>*&lt;10</b>	Value excluded from statistical analysis
	TS	Topsoil	<b>Y</b>	Text result
	NAT	Natural	<b>-</b>	Represents a determinand that was not tested.
			<b>+</b>	represents a data point that is not included in the current filter settings

# Assessment of Chemicals of Potential Concern to Human Health



Risk parameter: Default - Human Health - residential with home-grown produce (1%SOM)																						
Client: Oxford University Developments Ltd											Data Filters											
Site: Begbroke Science Park											Zone S											
Job no.: 19114											Strata TS											
Lab. report no(s): 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372											Depth Min (m bgl) 0.1											
											Depth Max (m bgl) 3.8											
All values in mg/kg unless otherwise stated											Dataset mean SOM% 3.31											
											Scenario SOM% 1											
Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS
<b>Asbestos</b>																						
Asbestos Identified	Y/N		74	-	-	-	-	No. of detects:	0	-	-	-	N	N	N	N	N	N	N	N	N	N
<b>Hydrock Default Suite - FOC / SOM / pH</b>																						
FOC (dimensionless)	]	0.001	78	0.003	0.050	0.019	0.018	0.01		-	-	-	0.0057	0.011	0.02	0.027	0.023	0.023	0.03	0.04	0.031	0.03
SOM (calculated)	%	0.1724	78	0.57	8.62	3.31	3.10	1.50		-	-	-	0.98268	1.8964	3.448	4.6548	3.9652	3.9652	5.172	6.896	5.3444	5.172
pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-	-	8.4	7.9	7.7	7.9	7.9	7.7	7.6	7.3	7.4	7.3
<b>Hydrock Default Suite - Metals &amp; PAH</b>																						
Arsenic	mg/kg	1	78	13.00	71.00	34.19	30.00	15.82	29	NR	37	C4SL - CL:AIRE 2014	19	28	52	67	35	64	29	36	36	26
Beryllium	mg/kg	0.06	78	0.64	1.90	1.18	1.15	0.27	3	NR	1.7	Hydrock Derived	1.6	1.3	1.4	1.6	1.6	1.4	1.5	1.8	1.1	1.7
Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	NR	300	Hydrock Derived	1.3	1.6	0.9	2.4	0.9	2.7	0.9	1	0.8	2.9
Cadmium	mg/kg	0.2	78	0.20	1.20	0.21	0.20	0.11	0	NR	22	C4SL - CL:AIRE 2014	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	NR	890	Hydrock Derived	43	46	48	56	49	52	47	54	38	55
Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	NR	21	C4SL - CL:AIRE 2014	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Chromium (Total)	mg/kg	1	78	25.00	70.00	42.28	41.00	9.55		-	-	-	44	46	49	57	50	53	48	55	38	56
Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	NR	2500	Hydrock Derived	21	15	14	19	19	16	17	23	17	18
Lead	mg/kg	1	78	14.00	160.00	30.96	27.50	18.53	0	NR	200	C4SL - CL:AIRE 2014	20	21	35	55	40	36	28	36	31	31
Mercury, inorganic	mg/kg	0.3	78	0.30	0.30	0.30	0.30	0.00	0	NR	40	Hydrock Derived	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	NR	130	Hydrock Derived	32	29	31	39	35	34	31	37	25	33
Selenium	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1	78	41.00	250.00	72.46	68.00	27.93	0	NR	410	Hydrock Derived	65	73	90	100	83	110	78	86	68	81
Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	NR	3900	Hydrock Derived	88	81	86	96	120	110	82	93	95	94
Cyanide (free)	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Phenols (Monohydric)	mg/kg	1	78	1.00	1.30	1.00	1.00	0.03	0	24237	120	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acenaphthene	mg/kg	0.05	78	0.05	0.66	0.06	0.05	0.07	0	57	230	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	mg/kg	0.05	78	0.05	2.50	0.08	0.05	0.28	0	86	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	mg/kg	0.05	78	0.05	1.70	0.08	0.05	0.21	0	1.17	2400	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	mg/kg	0.05	78	0.05	2.30	0.12	0.05	0.33	0	1.71	8.9	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	0.2	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	mg/kg	0.05	78	0.05	1.80	0.10	0.05	0.23	0	0.91	5	C4SL - CL:AIRE 2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	78	0.05	2.00	0.10	0.05	0.26	0	1.22	2.6	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(ghi)perylene	mg/kg	0.05	78	0.05	1.60	0.09	0.05	0.20	0	0.02	320	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05	78	0.05	1.50	0.08	0.05	0.18	0	0.69	78	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	mg/kg	0.05	78	0.05	1.70	0.10	0.05	0.24	0	0.44	15	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	0.18	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(ah)anthracene	mg/kg	0.05	78	0.05	0.38	0.05	0.05	0.04	1	0.004	0.25	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	78	0.05	4.80	0.18	0.05	0.65	0	19	290	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	0.25	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	78	0.05	2.00	0.08	0.05	0.22	0	31	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(123cd)pyrene	mg/kg	0.05	78	0.05	1.20	0.08	0.05	0.14	0	0.06	28	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	mg/kg	0.05	78	0.05	1.60	0.08	0.05	0.19	0	76	13	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	78	0.05	7.40	0.21	0.05	0.88	0	36	98	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	mg/kg	0.05	78	0.05	4.50	0.18	0.05	0.61	0	2.2	620	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	0.28	<0.05	<0.05	<0.05	<0.05	<0.05



# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)			
<b>Client:</b>	Oxford University Developments Ltd			
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>		
<b>Job no.:</b>	19114	Zone		S
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata		TS
		Depth Min (m bgl)		0.1
		Depth Max (m bgl)	3.8	
All values in mg/kg unless otherwise stated		Dataset mean SOM%	3.31	
		Scenario SOM%	1	

30/08/22	30/08/22	23/08/22	23/08/22	22/08/22	24/08/22	25/08/22	25/08/22	22/08/22	22/08/22
S	S	S	S	S	S	S	S	S	S
WS201	WS202	WS203	WS204	WS205	WS206	WS207	WS208	WS209	WS210
0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.3	0.1

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	TS	TS	TS	TS	TS	TS	TS	TS	TS		
				</																			









# Assessment of Chemicals of Potential Concern to Human Health



Risk parameter: Default - Human Health - residential with home-grown produce (1%SOM)																																																														
Client: Oxford University Developments Ltd																																																														
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													<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid gray; padding: 2px;"> <b>Data Filters</b>                      Zone <b>S</b>                      Strata <b>TS</b>                      Depth Min (m bgl) <b>0.1</b>                      Depth Max (m bgl) <b>3.8</b> </div> <div style="font-size: 2em; font-weight: bold; color: white;">Hydrock</div> </div>																																																	
All values in mg/kg unless otherwise stated																																																														
													Dataset mean SOM% <b>3.31</b> Scenario SOM% <b>1</b>																																																	
													<table border="1" style="width: 100%; border-collapse: collapse; font-size: 0.8em;"> <tr> <td>01/09/22</td><td>25/08/22</td><td>24/08/22</td><td>08/09/22</td><td>31/08/22</td><td>23/08/22</td><td>23/08/22</td><td>05/09/22</td><td>02/09/22</td><td>31/08/22</td> </tr> <tr> <td>S</td><td>S</td><td>S</td><td>S</td><td>S</td><td>S</td><td>S</td><td>S</td><td>S</td><td>S</td> </tr> <tr> <td>WS221</td><td>WS222</td><td>WS223</td><td>WS224</td><td>WS225</td><td>WS226</td><td>WS227</td><td>WS228</td><td>WS229</td><td>WS230</td> </tr> <tr> <td>0.2</td><td>0.2</td><td>0.1</td><td>0.1</td><td>0.2</td><td>0.2</td><td>0.3</td><td>0.2</td><td>0.1</td><td>0.2</td> </tr> </table>										01/09/22	25/08/22	24/08/22	08/09/22	31/08/22	23/08/22	23/08/22	05/09/22	02/09/22	31/08/22	S	S	S	S	S	S	S	S	S	S	WS221	WS222	WS223	WS224	WS225	WS226	WS227	WS228	WS229	WS230	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.2
01/09/22	25/08/22	24/08/22	08/09/22	31/08/22	23/08/22	23/08/22	05/09/22	02/09/22	31/08/22																																																					
S	S	S	S	S	S	S	S	S	S																																																					
WS221	WS222	WS223	WS224	WS225	WS226	WS227	WS228	WS229	WS230																																																					
0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.2																																																					
Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	TS	TS	TS	TS	TS	TS	TS	TS	TS																																									
<b>Asbestos</b>																																																														
Asbestos Identified	Y/N		74	-	-	-	-	No. of detects:	0	-	-	-	N	N	N	N	N	N	N	N	N																																									
<b>Hydrock Default Suite - FOC / SOM / pH</b>																																																														
FOC (dimensionless)	]	0.001	78	0.003	0.050	0.019	0.018	0.01		-	-	-	0.023	0.014	0.02	0.026	0.013	0.018	0.017	0.0073	0.0095	0.017																																								
SOM (calculated)	%	0.1724	78	0.57	8.62	3.31	3.10	1.50		-	-	-	3.9652	2.4136	3.448	4.4824	2.2412	3.1032	2.9308	1.25852	1.6378	2.9308																																								
pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-	-	7.9	7.9	7.5	8.6	8	7.7	7.3	7.5	7.5	7.6																																								
<b>Hydrock Default Suite - Metals &amp; PAH</b>																																																														
Arsenic	mg/kg	1	78	13.00	<b>71.00</b>	34.19	30.00	15.82	<b>29</b>	NR	37	C4SL - CL:AIRE 2014	31	41	59	25	27	57	43	48	48	44																																								
Beryllium	mg/kg	0.06	78	0.64	<b>1.90</b>	1.18	1.15	0.27	<b>3</b>	NR	1.7	Hydrock Derived	1.2	1.1	1.5	0.88	0.89	1.5	1.1	1.3	1.4	1.3																																								
Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	NR	300	Hydrock Derived	2.4	0.3	1.8	0.6	1.1	0.2	0.7	0.4	0.7	1.3																																								
Cadmium	mg/kg	0.2	78	0.20	1.20	0.21	0.20	0.11	0	NR	22	C4SL - CL:AIRE 2014	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2																																								
Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	NR	890	Hydrock Derived	41	39	53	32	31	55	40	49	48	44																																								
Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	NR	21	C4SL - CL:AIRE 2014	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8																																								
Chromium (Total)	mg/kg	1	78	25.00	70.00	42.28	41.00	9.55		-	-	-	41	40	54	32	32	56	41	50	49	46																																								
Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	NR	2500	Hydrock Derived	14	14	17	15	13	17	11	18	15	14																																								
Lead	mg/kg	1	78	14.00	160.00	30.96	27.50	18.53	0	NR	200	C4SL - CL:AIRE 2014	21	27	28	23	94	32	31	20	28	26																																								
Mercury, inorganic	mg/kg	0.3	78	0.30	0.30	0.30	0.30	0.00	0	NR	40	Hydrock Derived	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3																																								
Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	NR	130	Hydrock Derived	24	27	35	20	24	36	27	35	33	30																																								
Selenium	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1																																								
Vanadium	mg/kg	1	78	41.00	250.00	72.46	68.00	27.93	0	NR	410	Hydrock Derived	69	73	97	52	63	96	81	91	120	83																																								
Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	NR	3900	Hydrock Derived	75	77	120	64	67	92	76	77	90	89																																								
Cyanide (free)	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1																																								
Total Phenols (Monohydric)	mg/kg	1	78	1.00	1.30	1.00	1.00	0.03	0	24237	120	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1																																								
Acenaphthene	mg/kg	0.05	78	0.05	0.66	0.06	0.05	0.07	0	57	230	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Acenaphthylene	mg/kg	0.05	78	0.05	2.50	0.08	0.05	0.28	0	86	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Anthracene	mg/kg	0.05	78	0.05	1.70	0.08	0.05	0.21	0	1.17	2400	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Benz(a)anthracene	mg/kg	0.05	78	0.05	2.30	0.12	0.05	0.33	0	1.71	8.9	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Benzo(a)pyrene	mg/kg	0.05	78	0.05	1.80	0.10	0.05	0.23	0	0.91	5	C4SL - CL:AIRE 2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Benzo(b)fluoranthene	mg/kg	0.05	78	0.05	2.00	0.10	0.05	0.26	0	1.22	2.6	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Benzo(ghi)perylene	mg/kg	0.05	78	0.05	1.60	0.09	0.05	0.20	0	0.02	320	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Benzo(k)fluoranthene	mg/kg	0.05	78	0.05	1.50	0.08	0.05	0.18	0	0.69	78	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Chrysene	mg/kg	0.05	78	0.05	1.70	0.10	0.05	0.24	0	0.44	15	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Dibenz(ah)anthracene	mg/kg	0.05	78	0.05	<b>0.38</b>	0.05	0.05	0.04	<b>1</b>	0.004	0.25	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Fluoranthene	mg/kg	0.05	78	0.05	4.80	0.18	0.05	0.65	0	19	290	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Fluorene	mg/kg	0.05	78	0.05	2.00	0.08	0.05	0.22	0	31	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Indeno(123cd)pyrene	mg/kg	0.05	78	0.05	1.20	0.08	0.05	0.14	0	0.06	28	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Naphthalene	mg/kg	0.05	78	0.05	1.60	0.08	0.05	0.19	0	76	13	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Phenanthrene	mg/kg	0.05	78	0.05	7.40	0.21	0.05	0.88	0	36	98	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								
Pyrene	mg/kg	0.05	78	0.05	4.50	0.18	0.05	0.61	0	2.2	620	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																								

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	
<b>Job no.:</b>	19114	Zone	S
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata	TS
		Depth Min (m bgl)	0.1
		Depth Max (m bgl)	3.8

All values in mg/kg unless otherwise stated	Dataset mean SOM%	3.31	
	Scenario SOM%	1	

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	01/09/22	25/08/22	24/08/22	08/09/22	31/08/22	23/08/22	23/08/22	05/09/22	02/09/22	31/08/22		
													S	S	S	S	S	S	S	S	S	S	S	
PAH 16 Total	mg/kg	0.8	4	0.80	0.80	0.80	0.80	0.00			-													
<b>TPH fractions</b>																								
TPH ali EC05-EC06	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	304	42	Hydrock Derived	N/A	N/A	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH ali >EC06-EC08	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	144	100	Hydrock Derived	N/A	N/A	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH ali >EC08-EC10	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	78	27	Hydrock Derived	N/A	N/A	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH ali >EC10-EC12	mg/kg	1	14	1.00	1.00	1.00	1.00	0.00	0	48	130	Hydrock Derived	N/A	N/A	<1	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH ali >EC12-EC16	mg/kg	2	14	2.00	2.50	2.04	2.00	0.13	0	24	1100	Hydrock Derived	N/A	N/A	<2	<2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH ali >EC16-EC21	mg/kg	8	4	8.00	8.00	8.00	8.00	0.00			-													
TPH ali >EC21-EC35	mg/kg	8	4	8.00	8.00	8.00	8.00	0.00			-													
TPH ali >EC16-EC35	mg/kg	10	14	10.00	10.00	10.00	10.00	0.00	0	8	65000	Hydrock Derived	N/A	N/A	<10	<10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH ali >EC35-EC44	mg/kg	8.4	14	8.40	8.40	8.40	8.40	0.00	0	8	65000	Hydrock Derived	N/A	N/A	<8.4	<8.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH ali >EC5-EC35	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-													
TPH ali >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-													
TPH aro EC05-EC07	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	1218	73	Hydrock Derived	N/A	N/A	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH aro >EC07-EC08	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	N/A	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH aro >EC08-EC10	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	613	35	Hydrock Derived	N/A	N/A	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH aro >EC10-EC12	mg/kg	1	14	1.00	1.00	1.00	1.00	0.00	0	364	75	Hydrock Derived	N/A	N/A	<1	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH aro >EC12-EC16	mg/kg	2	14	2.00	2.00	2.00	2.00	0.00	0	169	140	Hydrock Derived	N/A	N/A	<2	<2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH aro >EC16-EC21	mg/kg	10	14	10.00	18.00	10.57	10.00	2.14	0	54	260	Hydrock Derived	N/A	N/A	<10	<10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH aro >EC21-EC35	mg/kg	10	14	10.00	44.00	12.43	10.00	9.09	0	5	1100	Hydrock Derived	N/A	N/A	<10	<10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH aro >EC35-EC44	mg/kg	8.4	14	8.40	8.40	8.40	8.40	0.00	0	5	1100	Hydrock Derived	N/A	N/A	<8.4	<8.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TPH aro >EC5-EC35	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-													
TPH aro >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-													
Total TPH >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-													
<b>VOCs - BTEX &amp; MTBE</b>																								
Benzene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	1218	0.2	C4SL - CL:AIRE 2014	N/A	N/A	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Toluene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	N/A	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Ethylbenzene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	518	47	Hydrock Derived	N/A	N/A	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Xylene, o-	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	478	61	Hydrock Derived	N/A	N/A	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Xylene, p- (use this for combined m & p)	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	576	57	Hydrock Derived	N/A	N/A	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
MTBE	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	20358	62	Hydrock Derived	N/A	N/A	<0.001	<0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>TPH Additivity Check</b>																								
<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>																								
															2.381E-05	2.381E-05								
															0.00001	0.00001								
															3.704E-05	3.704E-05								
													A		0.0076923	0.0076923								
													A		0.0018182	0.0018182								
													A		0.0001538	0.0001538								
													A		0.0001292	0.0001292								





# Assessment of Chemicals of Potential Concern to Human Health



Risk parameter: Default - Human Health - residential with home-grown produce (1%SOM)																																																													
Client: Oxford University Developments Ltd																																																													
Site: Begbroke Science Park																																																													
Job no.: 19114																																																													
Lab. report no(s).: 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372																																																													
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												Dataset mean SOM% 3.31																																																	
												Scenario SOM% 1																																																	
												Hydrock																																																	
												<table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr> <th>31/08/22</th><th>26/08/22</th><th>08/09/22</th><th>02/09/22</th><th>31/08/22</th><th>06/09/22</th><th>01/09/22</th><th>05/09/22</th><th>02/09/22</th><th>01/09/22</th> </tr> <tr> <th>S</th><th>S</th><th>S</th><th>S</th><th>S</th><th>S</th><th>S</th><th>S</th><th>S</th><th>S</th> </tr> </thead> <tbody> <tr> <td>WS231</td><td>WS232</td><td>WS234</td><td>WS237</td><td>WS238</td><td>WS239</td><td>WS241</td><td>WS242</td><td>WS243</td><td>WS244</td> </tr> <tr> <td>0.2</td><td>0.2</td><td>0.1</td><td>0.2</td><td>0.2</td><td>0.1</td><td>0.2</td><td>0.2</td><td>0.2</td><td>0.2</td> </tr> </tbody> </table>										31/08/22	26/08/22	08/09/22	02/09/22	31/08/22	06/09/22	01/09/22	05/09/22	02/09/22	01/09/22	S	S	S	S	S	S	S	S	S	S	WS231	WS232	WS234	WS237	WS238	WS239	WS241	WS242	WS243	WS244	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2
31/08/22	26/08/22	08/09/22	02/09/22	31/08/22	06/09/22	01/09/22	05/09/22	02/09/22	01/09/22																																																				
S	S	S	S	S	S	S	S	S	S																																																				
WS231	WS232	WS234	WS237	WS238	WS239	WS241	WS242	WS243	WS244																																																				
0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2																																																				
Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	TS	TS	TS	TS	TS	TS	TS	TS	TS																																								
<b>Asbestos</b>																																																													
Asbestos Identified	Y/N		74	-	-	-	-	No. of detects:	0	-	-	-	N	N	N	N	N	N	N	N	N																																								
<b>Hydrock Default Suite - FOC / SOM / pH</b>																																																													
FOC (dimensionless)	]	0.001	78	0.003	0.050	0.019	0.018	0.01		-	-	-	0.0066	0.011	0.021	0.011	0.019	0.021	0.026	0.014	0.024	0.012																																							
SOM (calculated)	%	0.1724	78	0.57	8.62	3.31	3.10	1.50		-	-	-	1.13784	1.8964	3.6204	1.8964	3.2756	3.6204	4.4824	2.4136	4.1376	2.0688																																							
pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-	-	7.9	8	8.3	7.6	7.8	8	7.8	7.7	7.9	7.6																																							
<b>Hydrock Default Suite - Metals &amp; PAH</b>																																																													
Arsenic	mg/kg	1	78	13.00	71.00	34.19	30.00	15.82	29	NR	37	C4SL - CL:AIRE 2014	30	20	16	48	48	13	18	24	52	20																																							
Beryllium	mg/kg	0.06	78	0.64	1.90	1.18	1.15	0.27	3	NR	1.7	Hydrock Derived	0.88	0.87	0.99	1.3	1.3	0.64	1	1.1	1.3	0.93																																							
Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	NR	300	Hydrock Derived	0.7	0.9	1.9	0.9	2	1	3.5	0.6	1.4	0.4																																							
Cadmium	mg/kg	0.2	78	0.20	1.20	0.21	0.20	0.11	0	NR	22	C4SL - CL:AIRE 2014	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2																																							
Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	NR	890	Hydrock Derived	29	32	37	45	47	23	36	34	46	34																																							
Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	NR	21	C4SL - CL:AIRE 2014	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8																																							
Chromium (Total)	mg/kg	1	78	25.00	70.00	42.28	41.00	9.55		-	-	-	30	33	38	46	48	25	37	35	47	35																																							
Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	NR	2500	Hydrock Derived	14	13	16	15	16	11	21	18	21	16																																							
Lead	mg/kg	1	78	14.00	160.00	30.96	27.50	18.53	0	NR	200	C4SL - CL:AIRE 2014	21	25	22	31	22	23	33	26	29	23																																							
Mercury, inorganic	mg/kg	0.3	78	0.30	0.30	0.30	0.30	0.00	0	NR	40	Hydrock Derived	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3																																							
Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	NR	130	Hydrock Derived	27	19	23	29	34	15	24	34	34	21																																							
Selenium	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1																																							
Vanadium	mg/kg	1	78	41.00	250.00	72.46	68.00	27.93	0	NR	410	Hydrock Derived	51	52	51	83	94	41	55	56	84	52																																							
Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	NR	3900	Hydrock Derived	65	59	72	86	94	48	91	89	120	64																																							
Cyanide (free)	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1																																							
Total Phenols (Monohydric)	mg/kg	1	78	1.00	1.30	1.00	1.00	0.03	0	24237	120	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1																																							
Acenaphthene	mg/kg	0.05	78	0.05	0.66	0.06	0.05	0.07	0	57	230	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Acenaphthylene	mg/kg	0.05	78	0.05	2.50	0.08	0.05	0.28	0	86	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Anthracene	mg/kg	0.05	78	0.05	1.70	0.08	0.05	0.21	0	1.17	2400	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Benz(a)anthracene	mg/kg	0.05	78	0.05	2.30	0.12	0.05	0.33	0	1.71	8.9	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Benzo(a)pyrene	mg/kg	0.05	78	0.05	1.80	0.10	0.05	0.23	0	0.91	5	C4SL - CL:AIRE 2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Benzo(b)fluoranthene	mg/kg	0.05	78	0.05	2.00	0.10	0.05	0.26	0	1.22	2.6	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Benzo(ghi)perylene	mg/kg	0.05	78	0.05	1.60	0.09	0.05	0.20	0	0.02	320	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Benzo(k)fluoranthene	mg/kg	0.05	78	0.05	1.50	0.08	0.05	0.18	0	0.69	78	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Chrysene	mg/kg	0.05	78	0.05	1.70	0.10	0.05	0.24	0	0.44	15	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Dibenz(ah)anthracene	mg/kg	0.05	78	0.05	0.38	0.05	0.05	0.04	1	0.004	0.25	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Fluoranthene	mg/kg	0.05	78	0.05	4.80	0.18	0.05	0.65	0	19	290	Hydrock Derived	<0.05	<0.05	0.21	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Fluorene	mg/kg	0.05	78	0.05	2.00	0.08	0.05	0.22	0	31	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Indeno(123cd)pyrene	mg/kg	0.05	78	0.05	1.20	0.08	0.05	0.14	0	0.06	28	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Naphthalene	mg/kg	0.05	78	0.05	1.60	0.08	0.05	0.19	0	76	13	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Phenanthrene	mg/kg	0.05	78	0.05	7.40	0.21	0.05	0.88	0	36	98	Hydrock Derived	<0.05	<0.05	0.36	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							
Pyrene	mg/kg	0.05	78	0.05	4.50	0.18	0.05	0.61	0	2.2	620	Hydrock Derived	<0.05	<0.05	0.27	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																																							

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	
<b>Job no.:</b>	19114	Zone	S
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata	TS
		Depth Min (m bgl)	0.1
		Depth Max (m bgl)	3.8

All values in mg/kg unless otherwise stated										Dataset mean SOM%		3.31	
										Scenario SOM%		1	

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	31/08/22	26/08/22	08/09/22	02/09/22	31/08/22	06/09/22	01/09/22	05/09/22	02/09/22	01/09/22	
													S	S	S	S	S	S	S	S	S	S	S
PAH 16 Total	mg/kg	0.8	4	0.80	0.80	0.80	0.80	0.00			-												
<b>TPH fractions</b>																							
TPH ali EC05-EC06	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	304	42	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A
TPH ali >EC06-EC08	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	144	100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A
TPH ali >EC08-EC10	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	78	27	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A
TPH ali >EC10-EC12	mg/kg	1	14	1.00	1.00	1.00	1.00	0.00	0	48	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A
TPH ali >EC12-EC16	mg/kg	2	14	2.00	2.50	2.04	2.00	0.13	0	24	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A
TPH ali >EC16-EC21	mg/kg	8	4	8.00	8.00	8.00	8.00	0.00			-												
TPH ali >EC21-EC35	mg/kg	8	4	8.00	8.00	8.00	8.00	0.00			-												
TPH ali >EC16-EC35	mg/kg	10	14	10.00	10.00	10.00	10.00	0.00	0	8	65000	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	N/A
TPH ali >EC35-EC44	mg/kg	8.4	14	8.40	8.40	8.40	8.40	0.00	0	8	65000	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<8.4	N/A	N/A
TPH ali >EC5-EC35	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-												
TPH ali >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-												
TPH aro EC05-EC07	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	1218	73	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A
TPH aro >EC07-EC08	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A
TPH aro >EC08-EC10	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	613	35	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A
TPH aro >EC10-EC12	mg/kg	1	14	1.00	1.00	1.00	1.00	0.00	0	364	75	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A
TPH aro >EC12-EC16	mg/kg	2	14	2.00	2.00	2.00	2.00	0.00	0	169	140	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A
TPH aro >EC16-EC21	mg/kg	10	14	10.00	18.00	10.57	10.00	2.14	0	54	260	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	N/A
TPH aro >EC21-EC35	mg/kg	10	14	10.00	44.00	12.43	10.00	9.09	0	5	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	N/A
TPH aro >EC35-EC44	mg/kg	8.4	14	8.40	8.40	8.40	8.40	0.00	0	5	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<8.4	N/A	N/A
TPH aro >EC5-EC35	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-												
TPH aro >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-												
Total TPH >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-												
<b>VOCs - BTEX &amp; MTBE</b>																							
Benzene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	1218	0.2	C4SL - CL:AIRE 2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A
Toluene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A
Ethylbenzene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	518	47	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A
Xylene, o-	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	478	61	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A
Xylene, p- (use this for combined m & p)	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	576	57	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A
MTBE	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	20358	62	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	N/A	N/A
<b>TPH Additivity Check</b>																							
<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>																							
																				2.381E-05			
																				0.00001			
																				3.704E-05			
																				0.0076923			
																				0.0018182			
																				0.0001538			
																				0.0001292			

Considered additive



# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)	<b>Data Filters</b>	
<b>Client:</b>	Oxford University Developments Ltd	<b>Zone</b>	S
<b>Site:</b>	Begbroke Science Park	<b>Strata</b>	TS
<b>Job no.:</b>	19114	<b>Depth Min (m bgl)</b>	0.1
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	<b>Depth Max (m bgl)</b>	3.8

	02/09/22	02/09/22	01/09/22	06/09/22	06/09/22	01/09/22	01/09/22	06/09/22	02/02/2023	02/02/2023
	S	S	S	S	S	S	S	S	S	S
	WS245	WS246	WS247	WS248	WS249	WS250	WS251	WS252	TP317	TP303
	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1

All values in mg/kg unless otherwise stated      Dataset mean SOM% **3.31**      Scenario SOM% **1**

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	TS	TS	TS	TS	TS	TS	TS	TS	TS	
<b>Asbestos</b>																						
Asbestos Identified	Y/N		74	-	-	-	-	No. of detects:	0	-	-	-	N	N	N	N	N	N	N	N	N	N
<b>Hydrock Default Suite - FOC / SOM / pH</b>																						
FOC (dimensionless)	]	0.001	78	0.003	0.050	0.019	0.018	0.01		-	-	-	0.014	0.011	0.018	0.026	0.015	0.019	0.016	0.025	0.033	0.015
SOM (calculated)	%	0.1724	78	0.57	8.62	3.31	3.10	1.50		-	-	-	2.4136	1.8964	3.1032	4.4824	2.586	3.2756	2.7584	4.31	5.6892	2.586
pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-	-	7.9	7.6	7.7	6.8	6.9	7.7	8.1	7.9	7.8	8
<b>Hydrock Default Suite - Metals &amp; PAH</b>																						
Arsenic	mg/kg	1	78	13.00	<b>71.00</b>	34.19	30.00	15.82	<b>29</b>	NR	37	C4SL - CL:AIRE 2014	18	23	30	14	18	17	16	24	15	35
Beryllium	mg/kg	0.06	78	0.64	<b>1.90</b>	1.18	1.15	0.27	<b>3</b>	NR	1.7	Hydrock Derived	1.1	1.2	1.2	0.86	0.81	0.99	1.3	1.2	0.93	1.1
Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	NR	300	Hydrock Derived	1.4	1.6	0.8	0.5	0.5	1.7	1	1.8	0.4	0.8
Cadmium	mg/kg	0.2	78	0.20	1.20	0.21	0.20	0.11	0	NR	22	C4SL - CL:AIRE 2014	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	NR	890	Hydrock Derived	37	44	44	33	32	38	45	44	32	40
Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	NR	21	C4SL - CL:AIRE 2014	<1.8	<1.8	<1.8	<1.8	<1.8	1.9	<1.8	<1.8	<1.8	<1.8
Chromium (Total)	mg/kg	1	78	25.00	70.00	42.28	41.00	9.55		-	-	-	37	44	44	34	32	40	45	45	33	41
Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	NR	2500	Hydrock Derived	11	17	9.5	13	8.9	11	11	14	13	19
Lead	mg/kg	1	78	14.00	160.00	30.96	27.50	18.53	0	NR	200	C4SL - CL:AIRE 2014	19	20	22	55	15	22	20	23	22	160
Mercury, inorganic	mg/kg	0.3	78	0.30	0.30	0.30	0.30	0.00	0	NR	40	Hydrock Derived	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	NR	130	Hydrock Derived	24	27	24	17	16	21	25	26	17	28
Selenium	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1	78	41.00	250.00	72.46	68.00	27.93	0	NR	410	Hydrock Derived	55	64	74	49	51	57	64	68	49	70
Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	NR	3900	Hydrock Derived	71	97	77	52	40	66	64	76	58	65
Cyanide (free)	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Phenols (Monohydric)	mg/kg	1	78	1.00	1.30	1.00	1.00	0.03	0	24237	120	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acenaphthene	mg/kg	0.05	78	0.05	0.66	0.06	0.05	0.07	0	57	230	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	mg/kg	0.05	78	0.05	2.50	0.08	0.05	0.28	0	86	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	mg/kg	0.05	78	0.05	1.70	0.08	0.05	0.21	0	1.17	2400	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	mg/kg	0.05	78	0.05	2.30	0.12	0.05	0.33	0	1.71	8.9	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	mg/kg	0.05	78	0.05	1.80	0.10	0.05	0.23	0	0.91	5	C4SL - CL:AIRE 2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	78	0.05	2.00	0.10	0.05	0.26	0	1.22	2.6	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(ghi)perylene	mg/kg	0.05	78	0.05	1.60	0.09	0.05	0.20	0	0.02	320	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05	78	0.05	1.50	0.08	0.05	0.18	0	0.69	78	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	mg/kg	0.05	78	0.05	1.70	0.10	0.05	0.24	0	0.44	15	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(ah)anthracene	mg/kg	0.05	78	0.05	<b>0.38</b>	0.05	0.05	0.04	<b>1</b>	0.004	0.25	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	78	0.05	4.80	0.18	0.05	0.65	0	19	290	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	78	0.05	2.00	0.08	0.05	0.22	0	31	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(123cd)pyrene	mg/kg	0.05	78	0.05	1.20	0.08	0.05	0.14	0	0.06	28	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	mg/kg	0.05	78	0.05	1.60	0.08	0.05	0.19	0	76	13	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	78	0.05	7.40	0.21	0.05	0.88	0	36	98	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	mg/kg	0.05	78	0.05	4.50	0.18	0.05	0.61	0	2.2	620	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05



# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	
<b>Job no.:</b>	19114	Zone	S
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata	TS
		Depth Min (m bgl)	0.1
		Depth Max (m bgl)	3.8

All values in mg/kg unless otherwise stated										Dataset mean SOM%		3.31	
										Scenario SOM%		1	

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	02/09/22	02/09/22	01/09/22	06/09/22	06/09/22	01/09/22	01/09/22	06/09/22	02/02/2023	02/02/2023		
													S	S	S	S	S	S	S	S	S	S	S	
PAH 16 Total	mg/kg	0.8	4	0.80	0.80	0.80	0.80	0.00			-											<0.8	<0.8	
<b>TPH fractions</b>																								
TPH ali EC05-EC06	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	304	42	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	<0.001
TPH ali >EC06-EC08	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	144	100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	<0.001
TPH ali >EC08-EC10	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	78	27	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	<0.001
TPH ali >EC10-EC12	mg/kg	1	14	1.00	1.00	1.00	1.00	0.00	0	48	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1
TPH ali >EC12-EC16	mg/kg	2	14	2.00	2.50	2.04	2.00	0.13	0	24	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	<2
TPH ali >EC16-EC21	mg/kg	8	4	8.00	8.00	8.00	8.00	0.00			-											<8	<8	
TPH ali >EC21-EC35	mg/kg	8	4	8.00	8.00	8.00	8.00	0.00			-											<8	<8	
TPH ali >EC16-EC35	mg/kg	10	14	10.00	10.00	10.00	10.00	0.00	0	8	65000	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	<10
TPH ali >EC35-EC44	mg/kg	8.4	14	8.40	8.40	8.40	8.40	0.00	0	8	65000	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<8.4	<8.4
TPH ali >EC5-EC35	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-											<10	<10	
TPH ali >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-											<10	<10	
TPH aro EC05-EC07	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	1218	73	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	<0.001
TPH aro >EC07-EC08	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	<0.001
TPH aro >EC08-EC10	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	613	35	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.001	<0.001
TPH aro >EC10-EC12	mg/kg	1	14	1.00	1.00	1.00	1.00	0.00	0	364	75	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1
TPH aro >EC12-EC16	mg/kg	2	14	2.00	2.00	2.00	2.00	0.00	0	169	140	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	<2
TPH aro >EC16-EC21	mg/kg	10	14	10.00	18.00	10.57	10.00	2.14	0	54	260	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	<10
TPH aro >EC21-EC35	mg/kg	10	14	10.00	44.00	12.43	10.00	9.09	0	5	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	<10
TPH aro >EC35-EC44	mg/kg	8.4	14	8.40	8.40	8.40	8.40	0.00	0	5	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<8.4	<8.4
TPH aro >EC5-EC35	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-											<10	<10	
TPH aro >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-											<10	<10	
Total TPH >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-											<10	<10	
<b>VOCs - BTEX &amp; MTBE</b>																								
Benzene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	1218	0.2	C4SL - CL:AIRE 2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.005	<0.005
Toluene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	518	47	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.005	<0.005
Xylene, o-	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	478	61	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.005	<0.005
Xylene, p- (use this for combined m & p)	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	576	57	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.005	<0.005
MTBE	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	20358	62	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.005	<0.005
<b>TPH Additivity Check</b>																								
<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>																								
																					2.381E-05	2.381E-05		
																					0.00001	0.00001		
																					3.704E-05	3.704E-05		
																					0.0076923	0.0076923		
																					0.0018182	0.0018182		
																					0.0001538	0.0001538		
																					0.0001292	0.0001292		

Considered additive

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	
<b>Job no.:</b>	19114	Zone	S
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata	TS
		Depth Min (m bgl)	0.1
		Depth Max (m bgl)	3.8
		Dataset mean SOM%	3.31
		Scenario SOM%	1

All values in mg/kg unless otherwise stated



02/09/22	02/09/22	01/09/22	06/09/22	06/09/22	01/09/22	01/09/22	06/09/22	02/02/2023	02/02/2023
S	S	S	S	S	S	S	S	S	S
WS245	WS246	WS247	WS248	WS249	WS250	WS251	WS252	TP317	TP303
0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	TS	TS	TS	TS	TS	TS	TS	TS			
																					1.37E-05	1.37E-05	
																						7.692E-06	7.692E-06
																						2.857E-05	2.857E-05
																						0.0133333	0.0133333
																						0.0142857	0.0142857
																						0.0384615	0.0384615
																						0.0090909	0.0090909
																						0.0076364	0.0076364
																						0.009548	0.009548
																						0.027648	0.027648
																						0.047552	0.047552

Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.

<b>Legend:</b>	MG	Made Ground	<span style="background-color: #e0e0e0; padding: 2px;">&lt;0.02</span>	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
	HH	Hole Heath Sand and Gravel	<span style="background-color: #ffcc99; padding: 2px;">0.02</span>	Value greater than, or equal to, the generic assessment criterion (GAC).
	XX	XX Other Codes	<span style="background-color: #ffcc99; padding: 2px;">*&lt;10</span>	Value excluded from statistical analysis
	TS	Topsoil	<span style="color: blue; font-weight: bold;">Y</span>	Text result
	NAT	Natural	-	Represents a determinand that was not tested.
			+	represents a data point that is not included in the current filter settings

# Assessment of Chemicals of Potential Concern to Human Health



Risk parameter: <b>Default - Human Health - residential with home-grown produce (1%SOM)</b>														
Client: Oxford University Developments Ltd														
Site: Begbroke Science Park														
Job no.: 19114														
Lab. report no(s): 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372														
Data Filters														
Zone <b>S</b>														
Strata <b>TS</b>														
Depth Min (m bgl) <b>0.1</b>														
Depth Max (m bgl) <b>3.8</b>														
All values in mg/kg unless otherwise stated														
Dataset mean SOM% <b>3.31</b>														
Scenario SOM% <b>1</b>														
06/02/2023 06/02/2023														
S S														
TP309 TP312														
0.1 0.1														
Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	TS	TS
<b>Asbestos</b>														
Asbestos Identified	Y/N	Y/N	74	-	-	-	-	No. of detects:	0	-	-	-		
<b>Hydrock Default Suite - FOC / SOM / pH</b>														
FOC (dimensionless)	]	0.001	78	0.003	0.050	0.019	0.018	0.01		-	-	-	0.031	0.026
SOM (calculated)	%	0.1724	78	0.57	8.62	3.31	3.10	1.50		-	-	-	5.3444	4.4824
pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-	-	7	7.6
<b>Hydrock Default Suite - Metals &amp; PAH</b>														
Arsenic	mg/kg	1	78	13.00	<b>71.00</b>	34.19	30.00	15.82	<b>29</b>	NR	37	C4SL - CL:AIRE 2014	21	17
Beryllium	mg/kg	0.06	78	0.64	<b>1.90</b>	1.18	1.15	0.27	<b>3</b>	NR	1.7	Hydrock Derived	0.95	1
Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	NR	300	Hydrock Derived	1	1.6
Cadmium	mg/kg	0.2	78	0.20	1.20	0.21	0.20	0.11	0	NR	22	C4SL - CL:AIRE 2014	<0.2	<0.2
Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	NR	890	Hydrock Derived	34	34
Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	NR	21	C4SL - CL:AIRE 2014	<1.8	<1.8
Chromium (Total)	mg/kg	1	78	25.00	70.00	42.28	41.00	9.55		-	-	-	34	35
Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	NR	2500	Hydrock Derived	15	14
Lead	mg/kg	1	78	14.00	160.00	30.96	27.50	18.53	0	NR	200	C4SL - CL:AIRE 2014	21	22
Mercury, inorganic	mg/kg	0.3	78	0.30	0.30	0.30	0.30	0.00	0	NR	40	Hydrock Derived	<0.3	<0.3
Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	NR	130	Hydrock Derived	19	19
Selenium	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	<1	<1
Vanadium	mg/kg	1	78	41.00	250.00	72.46	68.00	27.93	0	NR	410	Hydrock Derived	51	53
Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	NR	3900	Hydrock Derived	55	57
Cyanide (free)	mg/kg	1	78	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1
Total Phenols (Monohydric)	mg/kg	1	78	1.00	1.30	1.00	1.00	0.03	0	24237	120	Hydrock Derived	<1	<1
Acenaphthene	mg/kg	0.05	78	0.05	0.66	0.06	0.05	0.07	0	57	230	Hydrock Derived	<0.05	<0.05
Acenaphthylene	mg/kg	0.05	78	0.05	2.50	0.08	0.05	0.28	0	86	180	Hydrock Derived	<0.05	<0.05
Anthracene	mg/kg	0.05	78	0.05	1.70	0.08	0.05	0.21	0	1.17	2400	Hydrock Derived	<0.05	<0.05
Benz(a)anthracene	mg/kg	0.05	78	0.05	2.30	0.12	0.05	0.33	0	1.71	8.9	Hydrock Derived	<0.05	<0.05
Benzo(a)pyrene	mg/kg	0.05	78	0.05	1.80	0.10	0.05	0.23	0	0.91	5	C4SL - CL:AIRE 2014	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	78	0.05	2.00	0.10	0.05	0.26	0	1.22	2.6	Hydrock Derived	<0.05	<0.05
Benzo(ghi)perylene	mg/kg	0.05	78	0.05	1.60	0.09	0.05	0.20	0	0.02	320	Hydrock Derived	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05	78	0.05	1.50	0.08	0.05	0.18	0	0.69	78	Hydrock Derived	<0.05	<0.05
Chrysene	mg/kg	0.05	78	0.05	1.70	0.10	0.05	0.24	0	0.44	15	Hydrock Derived	<0.05	<0.05
Dibenz(ah)anthracene	mg/kg	0.05	78	0.05	<b>0.38</b>	0.05	0.05	0.04	<b>1</b>	0.004	0.25	Hydrock Derived	<0.05	<0.05
Fluoranthene	mg/kg	0.05	78	0.05	4.80	0.18	0.05	0.65	0	19	290	Hydrock Derived	<0.05	<0.05
Fluorene	mg/kg	0.05	78	0.05	2.00	0.08	0.05	0.22	0	31	180	Hydrock Derived	<0.05	<0.05
Indeno(123cd)pyrene	mg/kg	0.05	78	0.05	1.20	0.08	0.05	0.14	0	0.06	28	Hydrock Derived	<0.05	<0.05
Naphthalene	mg/kg	0.05	78	0.05	1.60	0.08	0.05	0.19	0	76	13	Hydrock Derived	<0.05	<0.05
Phenanthrene	mg/kg	0.05	78	0.05	7.40	0.21	0.05	0.88	0	36	98	Hydrock Derived	<0.05	<0.05
Pyrene	mg/kg	0.05	78	0.05	4.50	0.18	0.05	0.61	0	2.2	620	Hydrock Derived	<0.05	<0.05

## Assessment of Chemicals of Potential Concern to Human Health



Risk parameter: Default - Human Health - residential with home-grown produce (1%SOM)														
Client: Oxford University Developments Ltd														
Site: Begbroke Science Park														
Job no.: 19114														
Lab. report no(s): 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372														
Data Filters														
Zone S														
Strata TS														
Depth Min (m bgl) 0.1														
Depth Max (m bgl) 3.8														
All values in mg/kg unless otherwise stated														
Dataset mean SOM% 3.31														
Scenario SOM% 1														
Hydrock														
06/02/2023 06/02/2023														
S S														
TP309 TP312														
0.1 0.1														
Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	TS	TS
PAH 16 Total	mg/kg	0.8	4	0.80	0.80	0.80	0.80	0.00			-		<0.8	<0.8
<b>TPH fractions</b>														
TPH ali EC05-EC06	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	304	42	Hydrock Derived	<0.001	<0.001
TPH ali >EC06-EC08	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	144	100	Hydrock Derived	<0.001	<0.001
TPH ali >EC08-EC10	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.000	0	78	27	Hydrock Derived	<0.001	<0.001
TPH ali >EC10-EC12	mg/kg	1	14	1.00	1.00	1.00	1.00	0.00	0	48	130	Hydrock Derived	<1	<1
TPH ali >EC12-EC16	mg/kg	2	14	2.00	2.50	2.04	2.00	0.13	0	24	1100	Hydrock Derived	<2	<2
TPH ali >EC16-EC21	mg/kg	8	4	8.00	8.00	8.00	8.00	0.00			-		<8	<8
TPH ali >EC21-EC35	mg/kg	8	4	8.00	8.00	8.00	8.00	0.00			-		<8	<8
TPH ali >EC16-EC35	mg/kg	10	14	10.00	10.00	10.00	10.00	0.00	0	8	65000	Hydrock Derived	<10	<10
TPH ali >EC35-EC44	mg/kg	8.4	14	8.40	8.40	8.40	8.40	0.00	0	8	65000	Hydrock Derived	<8.4	<8.4
TPH ali >EC5-EC35	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-		<10	<10
TPH ali >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-		<10	<10
TPH aro EC05-EC07	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	1218	73	Hydrock Derived	<0.001	<0.001
TPH aro >EC07-EC08	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	<0.001	<0.001
TPH aro >EC08-EC10	mg/kg	0.001	14	0.00	0.00	0.00	0.00	0.00	0	613	35	Hydrock Derived	<0.001	<0.001
TPH aro >EC10-EC12	mg/kg	1	14	1.00	1.00	1.00	1.00	0.00	0	364	75	Hydrock Derived	<1	<1
TPH aro >EC12-EC16	mg/kg	2	14	2.00	2.00	2.00	2.00	0.00	0	169	140	Hydrock Derived	<2	<2
TPH aro >EC16-EC21	mg/kg	10	14	10.00	18.00	10.57	10.00	2.14	0	54	260	Hydrock Derived	<10	<10
TPH aro >EC21-EC35	mg/kg	10	14	10.00	44.00	12.43	10.00	9.09	0	5	1100	Hydrock Derived	<10	<10
TPH aro >EC35-EC44	mg/kg	8.4	14	8.40	8.40	8.40	8.40	0.00	0	5	1100	Hydrock Derived	<8.4	<8.4
TPH aro >EC5-EC35	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-		<10	<10
TPH aro >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-		<10	<10
Total TPH >EC5-EC44	mg/kg	10	4	10.00	10.00	10.00	10.00	0.00			-		<10	<10
<b>VOCs - BTEX &amp; MTBE</b>														
Benzene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	1218	0.2	C4SL - CL:AIRE 2014	<0.005	<0.005
Toluene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	869	130	Hydrock Derived	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	518	47	Hydrock Derived	<0.005	<0.005
Xylene, o-	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	478	61	Hydrock Derived	<0.005	<0.005
Xylene, p- (use this for combined m & p)	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	576	57	Hydrock Derived	<0.005	<0.005
MTBE	mg/kg	0.001	14	0.00	0.01	0.00	0.00	0.00	0	20358	62	Hydrock Derived	<0.005	<0.005
<b>TPH Additivity Check</b>														
<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>														
													2.381E-05	2.381E-05
													0.00001	0.00001
													3.704E-05	3.704E-05
Considered additive													A 0.0076923	0.0076923
													A 0.0018182	0.0018182
													A 0.0001538	0.0001538
													A 0.0001292	0.0001292

## Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b> Default - Human Health - residential with home-grown produce (1%SOM)																										
<b>Client:</b> Oxford University Developments Ltd																										
<b>Site:</b> Begbroke Science Park		<b>Data Filters</b> Zone: S Strata: TS Depth Min (m bgl): 0.1 Depth Max (m bgl): 3.8																								
<b>Job no.:</b> 19114		Hydrock																								
<b>Lab. report no(s).:</b> 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372																										
All values in mg/kg unless otherwise stated										Dataset mean SOM%: 3.31 Scenario SOM%: 1		06/02/2023 S TP309 0.1		06/02/2023 S TP312 0.1												
Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	TS	TS												
													1.37E-05	1.37E-05												
													7.692E-06	7.692E-06												
													2.857E-05	2.857E-05												
													A 0.0133333	0.0133333												
													A 0.0142857	0.0142857												
													A 0.0384615	0.0384615												
													A 0.0090909	0.0090909												
													A 0.0076364	0.0076364												
Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.												Hazard I: 0.009548	0.009548													
												Hazard In: 0.027648	0.027648													
												Hazard Ind: 0.047552	0.047552													
<b>Legend:</b>		MG Made Ground HH Hole Heath Sand and Gravel XX XX Other Codes TS Topsoil NAT Natural		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; padding: 2px;"><span style="color: blue;">&lt;0.02</span></td> <td style="padding: 2px;">Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.</td> </tr> <tr> <td style="padding: 2px;"><span style="background-color: orange; color: white; padding: 2px;">0.02</span></td> <td style="padding: 2px;">Value greater than, or equal to, the generic assessment criterion (GAC).</td> </tr> <tr> <td style="padding: 2px;"><span style="color: blue;">* &lt;10</span></td> <td style="padding: 2px;">Value excluded from statistical analysis</td> </tr> <tr> <td style="padding: 2px;"><span style="color: blue;">Y</span></td> <td style="padding: 2px;">Text result</td> </tr> <tr> <td style="padding: 2px;">-</td> <td style="padding: 2px;">Represents a determinand that was not tested.</td> </tr> <tr> <td style="padding: 2px;">+</td> <td style="padding: 2px;">represents a data point that is not included in the current filter settings</td> </tr> </table>											<span style="color: blue;">&lt;0.02</span>	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.	<span style="background-color: orange; color: white; padding: 2px;">0.02</span>	Value greater than, or equal to, the generic assessment criterion (GAC).	<span style="color: blue;">* &lt;10</span>	Value excluded from statistical analysis	<span style="color: blue;">Y</span>	Text result	-	Represents a determinand that was not tested.	+	represents a data point that is not included in the current filter settings
<span style="color: blue;">&lt;0.02</span>	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.																									
<span style="background-color: orange; color: white; padding: 2px;">0.02</span>	Value greater than, or equal to, the generic assessment criterion (GAC).																									
<span style="color: blue;">* &lt;10</span>	Value excluded from statistical analysis																									
<span style="color: blue;">Y</span>	Text result																									
-	Represents a determinand that was not tested.																									
+	represents a data point that is not included in the current filter settings																									





# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)				
<b>Client:</b>	Oxford University Developments Ltd		<b>Data Filters</b>		
<b>Site:</b>	Begbroke Science Park		Zone	S	
<b>Job no.:</b>	19114		Strata	MG	
<b>Lab. report no(s):</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372		Depth Min (m bgl)	0.1	
			Depth Max (m bgl)	3.8	

<b>Date</b>	25/08/22	25/08/22	25/08/22	25/08/22	05/09/22	05/09/22
<b>Zone</b>	S	S	S	S	S	S
<b>Location</b>	HP207	HP208	HP209	HP210	WS235	WS236
<b>Depth (m bgl)</b>	0.7	0.3	0.3	0.2	0.2	0.2

All values in mg/kg unless otherwise stated      Dataset mean SOM% **2.74**      Scenario SOM% **1**

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	Strata	MG	MG	MG	MG	MG	MG
<b>TPH fractions</b>																				
P1407	TPH ali EC05-EC06	mg/kg	0.001	4	0.00	0.00	0.00	0.00	0.000	0	304	42	Hydrock Derived	N/A	<0.001	<0.001	<0.001	<0.001	N/A	<0.001
P1408	TPH ali >EC06-EC08	mg/kg	0.001	4	0.00	0.00	0.00	0.00	0.000	0	144	100	Hydrock Derived	N/A	<0.001	<0.001	<0.001	<0.001	N/A	<0.001
P1409	TPH ali >EC08-EC10	mg/kg	0.001	4	0.00	0.00	0.00	0.00	0.000	0	78	27	Hydrock Derived	N/A	<0.001	<0.001	<0.001	<0.001	N/A	<0.001
P1410	TPH ali >EC10-EC12	mg/kg	1	4	1.00	1.00	1.00	1.00	0.00	0	48	130	Hydrock Derived	N/A	<1	<1	<1	<1	N/A	<1
P1411	TPH ali >EC12-EC16	mg/kg	2	4	2.00	12.00	4.50	2.00	5.00	0	24	1100	Hydrock Derived	N/A	<2	<2	<2	<2	N/A	12
P1938	TPH ali >EC16-EC35	mg/kg	10	4	10.00	270.00	75.00	10.00	130.00	0	8	65000	Hydrock Derived	N/A	<10	<10	<10	<10	N/A	270
P1415	TPH ali >EC35-EC44	mg/kg	8.4	4	8.40	470.00	123.80	8.40	230.80	0	8	65000	Hydrock Derived	N/A	<8.4	<8.4	<8.4	<8.4	N/A	470
P1441	TPH aro EC05-EC07	mg/kg	0.001	4	0.00	0.00	0.00	0.00	0.00	0	1218	73	Hydrock Derived	N/A	<0.001	<0.001	<0.001	<0.001	N/A	<0.001
P1355	TPH aro >EC07-EC08	mg/kg	0.001	4	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	<0.001	<0.001	<0.001	<0.001	N/A	<0.001
P1356	TPH aro >EC08-EC10	mg/kg	0.001	4	0.00	0.00	0.00	0.00	0.00	0	613	35	Hydrock Derived	N/A	<0.001	<0.001	<0.001	<0.001	N/A	<0.001
P1357	TPH aro >EC10-EC12	mg/kg	1	4	1.00	1.00	1.00	1.00	0.00	0	364	75	Hydrock Derived	N/A	<1	<1	<1	<1	N/A	<1
P1358	TPH aro >EC12-EC16	mg/kg	2	4	2.00	9.70	3.93	2.00	3.85	0	169	140	Hydrock Derived	N/A	<2	<2	<2	<2	N/A	9.7
P1359	TPH aro >EC16-EC21	mg/kg	10	4	10.00	13.00	10.75	10.00	1.50	0	54	260	Hydrock Derived	N/A	<10	<10	<10	<10	N/A	13
P1360	TPH aro >EC21-EC35	mg/kg	10	4	10.00	440.00	117.50	10.00	215.00	0	5	1100	Hydrock Derived	N/A	<10	<10	<10	<10	N/A	440
P1362	TPH aro >EC35-EC44	mg/kg	8.4	4	8.40	990.00	253.80	8.40	490.80	0	5	1100	Hydrock Derived	N/A	<8.4	<8.4	<8.4	<8.4	N/A	990
<b>VOCs - BTEX &amp; MTBE</b>																				
71-43-2	Benzene	mg/kg	0.001	4	0.00	0.00	0.00	0.00	0.00	0	1218	0.2	C4SL - CL:AIRE 2014	N/A	<0.001	<0.001	<0.001	<0.001	N/A	<0.001
108-88-3	Toluene	mg/kg	0.001	4	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	<0.001	<0.001	<0.001	<0.001	N/A	<0.001
100-41-4	Ethylbenzene	mg/kg	0.001	4	0.00	0.00	0.00	0.00	0.00	0	518	47	Hydrock Derived	N/A	<0.001	<0.001	<0.001	<0.001	N/A	<0.001
95-47-6	Xylene, o-	mg/kg	0.001	4	0.00	0.00	0.00	0.00	0.00	0	478	61	Hydrock Derived	N/A	<0.001	<0.001	<0.001	<0.001	N/A	<0.001
1330-20-7	Xylene, p- (use this for combined m & p)	mg/kg	0.001	4	0.00	0.00	0.00	0.00	0.00	0	576	57	Hydrock Derived	N/A	<0.001	<0.001	<0.001	<0.001	N/A	<0.001
1634-04-4	MTBE	mg/kg	0.001	4	0.00	0.00	0.00	0.00	0.00	0	20358	62	Hydrock Derived	N/A	<0.001	<0.001	<0.001	<0.001	N/A	<0.001

TPH Additivity Check		HAZARD QUOTIENTS FOR EACH FRACTION																			
		Aliphatics >EC5-EC6		2.381E-05	2.381E-05	2.381E-05		2.381E-05													
		Aliphatics >EC6-EC8		0.00001	0.00001	0.00001		0.00001													
	Considered additive	Aliphatics >EC8-EC10		3.704E-05	3.704E-05	3.704E-05		3.704E-05													
		Aliphatics >EC10-EC12		0.0076923	0.0076923	0.0076923		0.0076923													
		Aliphatics >EC12-EC16		0.0018182	0.0018182	0.0018182		0.0018182													
		Aliphatics >EC16-EC35		0.0001538	0.0001538	0.0001538		0.0001538													
		Aliphatics >EC35-EC44		0.0001292	0.0001292	0.0001292		0.0001292													
		Aromatics EC5-EC7		1.37E-05	1.37E-05	1.37E-05		1.37E-05													
		Aromatics >EC7-EC8		7.692E-06	7.692E-06	7.692E-06		7.692E-06													
	Considered additive	Aromatics >EC8-EC10		2.857E-05	2.857E-05	2.857E-05		2.857E-05													
		Aromatics >EC10-EC12		0.0133333	0.0133333	0.0133333		0.0133333													
		Aromatics >EC12-EC16		0.0142857	0.0142857	0.0142857		0.0142857													
		Aromatics >EC16-EC21		0.0384615	0.0384615	0.0384615		0.0384615													
		Aromatics >EC21-EC35		0.0090909	0.0090909	0.0090909		0.0090909													
		Aromatics >EC35-EC44		0.0076364	0.0076364	0.0076364		0.0076364													

# Assessment of Chemicals of Potential Concern to Human Health



**Risk parameter:** Default - Human Health - residential with home-grown produce (1%SOM)

**Client:** Oxford University Developments Ltd

**Site:** Begbroke Science Park

**Job no.:** 19114

**Lab. report no(s).:** 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372

**Data Filters**

Zone **S**

Strata **MG**

Depth Min (m bgl) **0.1**

Depth Max (m bgl) **3.8**

All values in mg/kg unless otherwise stated

Dataset mean SOM% **2.74**

Scenario SOM% **1**

Date	25/08/22	25/08/22	25/08/22	25/08/22	05/09/22	05/09/22
<b>Zone</b>	S	S	S	S	S	S
<b>Location</b>	HP207	HP208	HP209	HP210	WS235	WS236
<b>Depth (m bgl)</b>	0.7	0.3	0.3	0.2	0.2	0.2

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	Strata	MG	MG	MG	MG	MG	MG														
Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.																																		
														Hazard Index for all>C8-C16		0.009548	0.009548	0.009548															0.018638	
														Hazard Index for aro>C8-C16		0.027648	0.027648	0.027648																0.082648
														Hazard Index for aro>C16-C35		0.047552	0.047552	0.047552																0.45

**Legend:**

MG	Made Ground	<0.02	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
HH	Hole Heath Sand and Gravel	0.02	Value greater than, or equal to, the generic assessment criterion (GAC).
XX	XX Other Codes	* < 10	Value excluded from statistical analysis
TS	Topsoil	Y	Text result
NAT	Natural	-	Represents a determinand that was not tested.
		+	represents a data point that is not included in the current filter settings

# Assessment of Chemicals of Potential Concern to Human Health



Risk parameter: <b>Default - Human Health - residential with home-grown produce (1%SOM)</b>																					
Client: Oxford University Developments Ltd																					
Site: Begbroke Science Park																					
Job no.: 19114																					
Lab. report no(s): 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372																					
														Data Filters Zone <b>S</b> Strata <b>NAT</b> Depth Min (m bgl) <b>0.1</b> Depth Max (m bgl) <b>3.8</b>							
														Dataset mean SOM% <b>1.17</b> Scenario SOM% <b>1</b>							
														All values in mg/kg unless otherwise stated							
														Hydrock							
														Date Zone Location Depth (m bgl)							
														02/09/22   01/09/22   25/08/22   09/09/22   08/09/22   08/09/22   08/09/22							
														S   S   S   S   S   S   S							
														BH203   BH205   HP208   TP201   TP214   TP217   TP224							
														0.5   0.4   0.8   0.7   0.5   0.4   0.5							
CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	Strata	NAT	NAT	NAT	NAT	NAT	NAT	NAT
-	<b>Asbestos</b>																				
P1020	Asbestos Identified	Y/N	Y/N	21	-	-	-	-	No. of detects:	0	-	-	-		N	N	N	N	N	N	N
-	<b>Hydrock Default Suite - FOC / SOM / pH</b>																				
P1085	FOC (dimensionless)	[ ]	0.001	25	0.001	0.029	0.007	0.006	0.01		-	-	-		0.0078	0.0019	0.029	0.0027	0.0018	0.0037	0.0087
-	SOM (calculated)	%	0.1724	25	0.17	5.00	1.17	0.98	1.02		-	-	-		1.34472	0.32756	4.9996	0.46548	0.31032	0.63788	1.49988
P1334	pH (su)	pH Units	0	25	7.50	8.50	8.02	8.00	0.25		-	-	-		7.5	8.5	7.8	8.4	7.9	8.3	7.9
-	<b>Hydrock Default Suite - Metals &amp; PAH</b>																				
7440-38-2	Arsenic	mg/kg	1	25	16.00	<b>93.00</b>	<b>48.28</b>	<b>48.00</b>	20.54	16	NR	37	C4SL - CL:AIRE 2014	31	49	27	83	64	78	29	
7440-41-7	Beryllium	mg/kg	0.06	25	0.81	<b>2.50</b>	1.43	1.40	0.40	5	NR	1.7	Hydrock Derived	1.1	1.4	0.81	1.8	1.7	1.5	1.1	
7440-42-8	Boron	mg/kg	0.2	25	0.20	2.00	0.66	0.50	0.53	0	NR	300	Hydrock Derived	1.1	0.6	0.7	0.2	0.3	0.2	0.8	
7440-43-9	Cadmium	mg/kg	0.2	25	0.20	0.20	0.20	0.20	0.00	0	NR	22	C4SL - CL:AIRE 2014	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
16065-83-1	Chromium (III)	mg/kg	1	25	20.00	100.00	50.32	49.00	15.14	0	NR	890	Hydrock Derived	38	49	20	66	64	55	45	
18540-29-9	Chromium (VI)	mg/kg	1.2	25	1.80	5.50	1.95	1.80	0.74	0	NR	21	C4SL - CL:AIRE 2014	<1.8	<1.8	5.5	<1.8	<1.8	<1.8	<1.8	
7440-47-3	Chromium (Total)	mg/kg	1	25	26.00	100.00	50.96	50.00	14.69		-			38	50	26	66	64	56	45	
7440-50-8	Copper	mg/kg	1	25	8.50	25.00	14.92	15.00	4.56	0	NR	2500	Hydrock Derived	10	15	22	17	21	12	16	
7439-92-1	Lead	mg/kg	1	25	10.00	65.00	20.48	18.00	10.97	0	NR	200	C4SL - CL:AIRE 2014	18	16	65	18	17	15	19	
7439-97-6	Mercury, inorganic	mg/kg	0.3	25	0.30	0.30	0.30	0.30	0.00	0	NR	40	Hydrock Derived	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	
7440-02-0	Nickel	mg/kg	1	25	20.00	58.00	36.28	37.00	11.21	0	NR	130	Hydrock Derived	25	42	24	48	41	30	23	
7782-49-2	Selenium	mg/kg	1	25	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	
7440-62-2	Vanadium	mg/kg	1	25	46.00	190.00	89.60	85.00	30.35	0	NR	410	Hydrock Derived	71	85	46	130	120	110	69	
7440-66-6	Zinc	mg/kg	1	25	41.00	130.00	81.88	83.00	26.25	0	NR	3900	Hydrock Derived	74	73	120	130	94	80	62	
P1095	Cyanide (free)	mg/kg	1	25	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	<1	<1	<1	<1	<1	
P1186	Total Phenols (Monohydric)	mg/kg	1	25	1.00	1.00	1.00	1.00	0.00	0	24237	120	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	
83-32-9	Acenaphthene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	57	230	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
208-96-8	Acenaphthylene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	86	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
120-12-7	Anthracene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	1.17	2400	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
56-55-3	Benzo(a)anthracene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	1.71	8.9	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
50-32-8	Benzo(a)pyrene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	0.91	5	C4SL - CL:AIRE 2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
205-99-2	Benzo(b)fluoranthene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	1.22	2.6	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
191-24-2	Benzo(ghi)perylene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	0.02	320	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
207-08-9	Benzo(k)fluoranthene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	0.69	78	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
218-01-9	Chrysene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	0.44	15	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
53-70-3	Dibenz(ah)anthracene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	0.004	0.25	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
206-44-0	Fluoranthene	mg/kg	0.05	25	0.05	0.27	0.06	0.05	0.04	0	19	290	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
86-73-7	Fluorene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	31	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
193-39-5	Indeno(123cd)pyrene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	0.06	28	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
91-20-3	Naphthalene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	76	13	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
85-01-8	Phenanthrene	mg/kg	0.05	25	0.05	0.49	0.07	0.05	0.09	0	36	98	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
129-00-0	Pyrene	mg/kg	0.05	25	0.05	0.32	0.06	0.05	0.05	0	2.2	620	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park		
<b>Job no.:</b>	19114		
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372		
	<b>Data Filters</b>	Zone	S
		Strata	NAT
		Depth Min (m bgl)	0.1
		Depth Max (m bgl)	3.8
All values in mg/kg unless otherwise stated		Dataset mean SOM%	1.17
		Scenario SOM%	1



Date	02/09/22	01/09/22	25/08/22	09/09/22	08/09/22	08/09/22	08/09/22
<b>Zone</b>	S	S	S	S	S	S	S
<b>Location</b>	BH203	BH205	HP208	TP201	TP214	TP217	TP224
<b>Depth (m bgl)</b>	0.5	0.4	0.8	0.7	0.5	0.4	0.5

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	Strata	NAT	NAT	NAT	NAT	NAT	NAT	NAT
P1310	PAH 16 Total	mg/kg	0.8	4	0.80	0.80	0.80	0.80	0.00			-									
-	<b>TPH fractions</b>																				
P1407	TPH ali EC05-EC06	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	304	42	Hydrock Derived	N/A	N/A	<0.001	N/A	N/A	N/A	N/A	N/A
P1408	TPH ali >EC06-EC08	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	144	100	Hydrock Derived	N/A	N/A	<0.001	N/A	N/A	N/A	N/A	N/A
P1409	TPH ali >EC08-EC10	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	78	27	Hydrock Derived	N/A	N/A	<0.001	N/A	N/A	N/A	N/A	N/A
P1410	TPH ali >EC10-EC12	mg/kg	1	2	1.00	1.00	1.00	1.00	0.00	0	48	130	Hydrock Derived	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A
P1411	TPH ali >EC12-EC16	mg/kg	2	2	2.00	2.00	2.00	2.00	0.00	0	24	1100	Hydrock Derived	N/A	N/A	<2	N/A	N/A	N/A	N/A	N/A
P1938	TPH ali >EC16-EC35	mg/kg	10	2	10.00	10.00	10.00	10.00	0.00	0	8	65000	Hydrock Derived	N/A	N/A	<10	N/A	N/A	N/A	N/A	N/A
P1415	TPH ali >EC35-EC44	mg/kg	8.4	2	8.40	8.40	8.40	8.40	0.00	0	8	65000	Hydrock Derived	N/A	N/A	<8.4	N/A	N/A	N/A	N/A	N/A
P1441	TPH aro EC05-EC07	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	1218	73	Hydrock Derived	N/A	N/A	<0.001	N/A	N/A	N/A	N/A	N/A
P1355	TPH aro >EC07-EC08	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	N/A	<0.001	N/A	N/A	N/A	N/A	N/A
P1356	TPH aro >EC08-EC10	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	613	35	Hydrock Derived	N/A	N/A	<0.001	N/A	N/A	N/A	N/A	N/A
P1357	TPH aro >EC10-EC12	mg/kg	1	2	1.00	1.00	1.00	1.00	0.00	0	364	75	Hydrock Derived	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A
P1358	TPH aro >EC12-EC16	mg/kg	2	2	2.00	2.00	2.00	2.00	0.00	0	169	140	Hydrock Derived	N/A	N/A	<2	N/A	N/A	N/A	N/A	N/A
P1359	TPH aro >EC16-EC21	mg/kg	10	2	10.00	10.00	10.00	10.00	0.00	0	54	260	Hydrock Derived	N/A	N/A	<10	N/A	N/A	N/A	N/A	N/A
P1360	TPH aro >EC21-EC35	mg/kg	10	2	10.00	10.00	10.00	10.00	0.00	0	5	1100	Hydrock Derived	N/A	N/A	<10	N/A	N/A	N/A	N/A	N/A
P1362	TPH aro >EC35-EC44	mg/kg	8.4	2	8.40	8.40	8.40	8.40	0.00	0	5	1100	Hydrock Derived	N/A	N/A	<8.4	N/A	N/A	N/A	N/A	N/A
-	<b>VOCs - BTEX &amp; MTBE</b>																				
71-43-2	Benzene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	1218	0.2	C4SL - CL:AIRE 2014	N/A	N/A	<0.001	N/A	N/A	N/A	N/A	N/A
108-88-3	Toluene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	N/A	<0.001	N/A	N/A	N/A	N/A	N/A
100-41-4	Ethylbenzene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	518	47	Hydrock Derived	N/A	N/A	<0.001	N/A	N/A	N/A	N/A	N/A
95-47-6	Xylene, o-	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	478	61	Hydrock Derived	N/A	N/A	<0.001	N/A	N/A	N/A	N/A	N/A
1330-20-7	Xylene, p- (use this for combined m & p)	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	576	57	Hydrock Derived	N/A	N/A	<0.001	N/A	N/A	N/A	N/A	N/A
1634-04-4	MTBE	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	20358	62	Hydrock Derived	N/A	N/A	<0.001	N/A	N/A	N/A	N/A	N/A

TPH Additivity Check		HAZARD QUOTIENTS FOR EACH FRACTION	
	Aliphatics >EC5-EC6		2.381E-05
	Aliphatics >EC6-EC8		0.00001
Considered additive	Aliphatics >EC8-EC10		3.704E-05
	Aliphatics >EC10-EC12		0.0076923
	Aliphatics >EC12-EC16		0.0018182
	Aliphatics >EC16-EC35		0.0001538
	Aliphatics >EC35-EC44		0.0001292
	Aromatics EC5-EC7		1.37E-05
	Aromatics >EC7-EC8		7.692E-06
Considered additive	Aromatics >EC8-EC10		2.857E-05
	Aromatics >EC10-EC12		0.0133333
	Aromatics >EC12-EC16		0.0142857
Considered additive	Aromatics >EC16-EC21		0.0384615
	Aromatics >EC21-EC35		0.0090909







# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	
<b>Job no.:</b>	19114	Zone	S
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata	NAT
		Depth Min (m bgl)	0.1
		Depth Max (m bgl)	3.8

30/08/22	23/08/22	22/08/22	25/08/22	22/08/22	30/08/22	24/08/22	31/08/22	23/08/22	08/09/22
S	S	S	S	S	S	S	S	S	S
WS202	WS204	WS205	WS208	WS213	WS216	WS218	WS225	WS227	WS233
1.1	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.7	0.5

All values in mg/kg unless otherwise stated      Dataset mean SOM% **1.17**      Scenario SOM% **1**

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	30/08/22	23/08/22	22/08/22	25/08/22	22/08/22	30/08/22	24/08/22	31/08/22	23/08/22	08/09/22										
													NAT	NAT	NAT	NAT	NAT	NAT	NAT	NAT	NAT	NAT	NAT	NAT								
PAH 16 Total	mg/kg	0.8	4	0.80	0.80	0.80	0.80	0.00			-																					
<b>TPH fractions</b>																																
TPH ali EC05-EC06	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	304	42	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
TPH ali >EC06-EC08	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	144	100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
TPH ali >EC08-EC10	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	78	27	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
TPH ali >EC10-EC12	mg/kg	1	2	1.00	1.00	1.00	1.00	0.00	0	48	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
TPH ali >EC12-EC16	mg/kg	2	2	2.00	2.00	2.00	2.00	0.00	0	24	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
TPH ali >EC16-EC35	mg/kg	10	2	10.00	10.00	10.00	10.00	0.00	0	8	65000	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
TPH ali >EC35-EC44	mg/kg	8.4	2	8.40	8.40	8.40	8.40	0.00	0	8	65000	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
TPH aro EC05-EC07	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	1218	73	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
TPH aro >EC07-EC08	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
TPH aro >EC08-EC10	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	613	35	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
TPH aro >EC10-EC12	mg/kg	1	2	1.00	1.00	1.00	1.00	0.00	0	364	75	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
TPH aro >EC12-EC16	mg/kg	2	2	2.00	2.00	2.00	2.00	0.00	0	169	140	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
TPH aro >EC16-EC21	mg/kg	10	2	10.00	10.00	10.00	10.00	0.00	0	54	260	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
TPH aro >EC21-EC35	mg/kg	10	2	10.00	10.00	10.00	10.00	0.00	0	5	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
TPH aro >EC35-EC44	mg/kg	8.4	2	8.40	8.40	8.40	8.40	0.00	0	5	1100	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
<b>VOCs - BTEX &amp; MTBE</b>																																
Benzene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	1218	0.2	C4SL - CL:AIRE 2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
Toluene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
Ethylbenzene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	518	47	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
Xylene, o-	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	478	61	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
Xylene, p- (use this for combined m & p)	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	576	57	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
MTBE	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	20358	62	Hydrock Derived	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
<b>TPH Additivity Check</b>																																
<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>																																
Considered additive																																
Considered additive																																
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# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	
<b>Job no.:</b>	19114	Zone	S
<b>Lab. report no(s):</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata	NAT
		Depth Min (m bgl)	0.1
		Depth Max (m bgl)	3.8
		Dataset mean SOM%	1.17
		Scenario SOM%	1

All values in mg/kg unless otherwise stated



30/08/22	23/08/22	22/08/22	25/08/22	22/08/22	30/08/22	24/08/22	31/08/22	23/08/22	08/09/22
S	S	S	S	S	S	S	S	S	S
WS202	WS204	WS205	WS208	WS213	WS216	WS218	WS225	WS227	WS233
1.1	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.7	0.5

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	NAT	NAT	NAT	NAT	NAT	NAT	NAT	NAT				
Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.													A											
													Hazard I											
													Hazard In											
													Hazard Ind											

**Legend:**

MG	Made Ground	<span style="color: blue;">&lt;0.02</span>	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
HH	Hole Heath Sand and Gravel	<span style="background-color: orange;">0.02</span>	Value greater than, or equal to, the generic assessment criterion (GAC).
XX	XX Other Codes	<span style="color: red;">* &lt;10</span>	Value excluded from statistical analysis
TS	Topsoil	<span style="color: green;">Y</span>	Text result
NAT	Natural	-	Represents a determinand that was not tested.
		+	represents a data point that is not included in the current filter settings

# Assessment of Chemicals of Potential Concern to Human Health



Risk parameter: Default - Human Health - residential with home-grown produce (1%SOM)																																																			
Client: Oxford University Developments Ltd																																																			
Site: Begbroke Science Park																																																			
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												Scenario SOM% 1																																							
												All values in mg/kg unless otherwise stated																																							
												Hydrock																																							
												<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <th>31/08/22</th><th>02/09/22</th><th>02/09/22</th><th>06/09/22</th><th>02/02/2023</th><th>31/01/2023</th><th>06/02/2023</th><th>06/02/2023</th> </tr> <tr> <td>S</td><td>S</td><td>S</td><td>S</td><td>S</td><td>S</td><td>S</td><td>S</td> </tr> <tr> <td>WS238</td><td>WS243</td><td>WS245</td><td>WS252</td><td>TP315</td><td>TP304</td><td>TP309</td><td>TP310</td> </tr> <tr> <td>0.6</td><td>0.4</td><td>0.5</td><td>0.4</td><td>0.5</td><td>0.8</td><td>1</td><td>0.4</td> </tr> </table>								31/08/22	02/09/22	02/09/22	06/09/22	02/02/2023	31/01/2023	06/02/2023	06/02/2023	S	S	S	S	S	S	S	S	WS238	WS243	WS245	WS252	TP315	TP304	TP309	TP310	0.6	0.4	0.5	0.4	0.5	0.8	1	0.4
31/08/22	02/09/22	02/09/22	06/09/22	02/02/2023	31/01/2023	06/02/2023	06/02/2023																																												
S	S	S	S	S	S	S	S																																												
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0.6	0.4	0.5	0.4	0.5	0.8	1	0.4																																												
Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	NAT	NAT	NAT	NAT	NAT	NAT	NAT	NAT																															
<b>Asbestos</b>																																																			
Asbestos Identified	Y/N		21	-	-	-	-	No. of detects:	0	-	-	-	N	N	N	N																																			
<b>Hydrock Default Suite - FOC / SOM / pH</b>																																																			
FOC (dimensionless)	]	0.001	25	0.001	0.029	0.007	0.006	0.01		-	-	-	0.0077	0.0057	0.0014	0.0053	0.0039	0.0043	0.0015	0.0073																															
SOM (calculated)	%	0.1724	25	0.17	5.00	1.17	0.98	1.02		-	-	-	1.32748	0.98268	0.24136	0.91372	0.67236	0.74132	0.2586	1.25852																															
pH (su)	pH Units	0	25	7.50	8.50	8.02	8.00	0.25		-	-	-	8	7.9	7.9	8.1	8	8.1	8.5	7.7																															
<b>Hydrock Default Suite - Metals &amp; PAH</b>																																																			
Arsenic	mg/kg	1	25	16.00	93.00	48.28	48.00	20.54	16	NR	37	C4SL - CL:AIRE 2014	44	58	31	38	32	62	57	16																															
Beryllium	mg/kg	0.06	25	0.81	2.50	1.43	1.40	0.40	5	NR	1.7	Hydrock Derived	1.1	1.6	1.2	1.2	1.1	1.6	1.4	1																															
Boron	mg/kg	0.2	25	0.20	2.00	0.66	0.50	0.53	0	NR	300	Hydrock Derived	0.7	2	0.3	0.5	0.3	<0.2	<0.2	0.4																															
Cadmium	mg/kg	0.2	25	0.20	0.20	0.20	0.20	0.00	0	NR	22	C4SL - CL:AIRE 2014	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2																															
Chromium (III)	mg/kg	1	25	20.00	100.00	50.32	49.00	15.14	0	NR	890	Hydrock Derived	40	63	42	45	40	49	52	33																															
Chromium (VI)	mg/kg	1.2	25	1.80	5.50	1.95	1.80	0.74	0	NR	21	C4SL - CL:AIRE 2014	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8																															
Chromium (Total)	mg/kg	1	25	26.00	100.00	50.96	50.00	14.69		-	-	-	40	64	42	46	40	50	52	33																															
Copper	mg/kg	1	25	8.50	25.00	14.92	15.00	4.56	0	NR	2500	Hydrock Derived	15	17	11	8.5	9.4	16	9	12																															
Lead	mg/kg	1	25	10.00	65.00	20.48	18.00	10.97	0	NR	200	C4SL - CL:AIRE 2014	19	18	14	13	12	18	11	12																															
Mercury, inorganic	mg/kg	0.3	25	0.30	0.30	0.30	0.30	0.00	0	NR	40	Hydrock Derived	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3																															
Nickel	mg/kg	1	25	20.00	58.00	36.28	37.00	11.21	0	NR	130	Hydrock Derived	28	39	42	26	31	58	30	20																															
Selenium	mg/kg	1	25	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1																															
Vanadium	mg/kg	1	25	46.00	190.00	89.60	85.00	30.35	0	NR	410	Hydrock Derived	79	110	71	74	70	89	100	51																															
Zinc	mg/kg	1	25	41.00	130.00	81.88	83.00	26.25	0	NR	3900	Hydrock Derived	83	98	54	45	41	89	62	45																															
Cyanide (free)	mg/kg	1	25	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	<1	<1	<1	<1	<1	<1																															
Total Phenols (Monohydric)	mg/kg	1	25	1.00	1.00	1.00	1.00	0.00	0	24237	120	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1																															
Acenaphthene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	57	230	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Acenaphthylene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	86	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Anthracene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	1.17	2400	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Benz(a)anthracene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	1.71	8.9	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Benzo(a)pyrene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	0.91	5	C4SL - CL:AIRE 2014	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Benzo(b)fluoranthene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	1.22	2.6	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Benzo(ghi)perylene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	0.02	320	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Benzo(k)fluoranthene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	0.69	78	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Chrysene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	0.44	15	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Dibenz(ah)anthracene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	0.004	0.25	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Fluoranthene	mg/kg	0.05	25	0.05	0.27	0.06	0.05	0.04	0	19	290	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Fluorene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	31	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Indeno(123cd)pyrene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	0.06	28	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Naphthalene	mg/kg	0.05	25	0.05	0.05	0.05	0.05	0.00	0	76	13	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Phenanthrene	mg/kg	0.05	25	0.05	0.49	0.07	0.05	0.09	0	36	98	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															
Pyrene	mg/kg	0.05	25	0.05	0.32	0.06	0.05	0.05	0	2.2	620	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05																															



# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	
<b>Job no.:</b>	19114	Zone	S
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata	NAT
		Depth Min (m bgl)	0.1
		Depth Max (m bgl)	3.8

All values in mg/kg unless otherwise stated	Dataset mean SOM%	1.17					
	Scenario SOM%	1					

	31/08/22	02/09/22	02/09/22	06/09/22	02/02/2023	31/01/2023	06/02/2023	06/02/2023
	S	S	S	S	S	S	S	S
	WS238	WS243	WS245	WS252	TP315	TP304	TP309	TP310
	0.6	0.4	0.5	0.4	0.5	0.8	1	0.4

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	NAT	NAT	NAT	NAT	NAT	NAT	NAT			
PAH 16 Total	mg/kg	0.8	4	0.80	0.80	0.80	0.80	0.00			-											
<b>TPH fractions</b>																						
TPH ali EC05-EC06	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	304	42	Hydrock Derived	N/A	<0.001	N/A	N/A						
TPH ali >EC06-EC08	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	144	100	Hydrock Derived	N/A	<0.001	N/A	N/A						
TPH ali >EC08-EC10	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	78	27	Hydrock Derived	N/A	<0.001	N/A	N/A						
TPH ali >EC10-EC12	mg/kg	1	2	1.00	1.00	1.00	1.00	0.00	0	48	130	Hydrock Derived	N/A	<1	N/A	N/A						
TPH ali >EC12-EC16	mg/kg	2	2	2.00	2.00	2.00	2.00	0.00	0	24	1100	Hydrock Derived	N/A	<2	N/A	N/A						
TPH ali >EC16-EC35	mg/kg	10	2	10.00	10.00	10.00	10.00	0.00	0	8	65000	Hydrock Derived	N/A	<10	N/A	N/A						
TPH ali >EC35-EC44	mg/kg	8.4	2	8.40	8.40	8.40	8.40	0.00	0	8	65000	Hydrock Derived	N/A	<8.4	N/A	N/A						
TPH aro EC05-EC07	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	1218	73	Hydrock Derived	N/A	<0.001	N/A	N/A						
TPH aro >EC07-EC08	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	<0.001	N/A	N/A						
TPH aro >EC08-EC10	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	613	35	Hydrock Derived	N/A	<0.001	N/A	N/A						
TPH aro >EC10-EC12	mg/kg	1	2	1.00	1.00	1.00	1.00	0.00	0	364	75	Hydrock Derived	N/A	<1	N/A	N/A						
TPH aro >EC12-EC16	mg/kg	2	2	2.00	2.00	2.00	2.00	0.00	0	169	140	Hydrock Derived	N/A	<2	N/A	N/A						
TPH aro >EC16-EC21	mg/kg	10	2	10.00	10.00	10.00	10.00	0.00	0	54	260	Hydrock Derived	N/A	<10	N/A	N/A						
TPH aro >EC21-EC35	mg/kg	10	2	10.00	10.00	10.00	10.00	0.00	0	5	1100	Hydrock Derived	N/A	<10	N/A	N/A						
TPH aro >EC35-EC44	mg/kg	8.4	2	8.40	8.40	8.40	8.40	0.00	0	5	1100	Hydrock Derived	N/A	<8.4	N/A	N/A						
<b>VOCs - BTEX &amp; MTBE</b>																						
Benzene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	1218	0.2	C4SL - CL:AIRE 2014	N/A	<0.001	N/A	N/A						
Toluene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	N/A	<0.001	N/A	N/A						
Ethylbenzene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	518	47	Hydrock Derived	N/A	<0.001	N/A	N/A						
Xylene, o-	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	478	61	Hydrock Derived	N/A	<0.001	N/A	N/A						
Xylene, p- (use this for combined m & p)	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	576	57	Hydrock Derived	N/A	<0.001	N/A	N/A						
MTBE	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	20358	62	Hydrock Derived	N/A	<0.001	N/A	N/A						
<b>TPH Additivity Check</b>																						
<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>																						
														2.381E-05								
														0.00001								
														3.704E-05								
Considered additive													A	0.0076923								
Considered additive													A	0.0018182								
													A	0.0001538								
													A	0.0001292								
														1.37E-05								
														7.692E-06								
Considered additive													A	2.857E-05								
Considered additive													A	0.0133333								
Considered additive													A	0.0142857								
Considered additive													A	0.0384615								
Considered additive													A	0.0090909								

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)			
<b>Client:</b>	Oxford University Developments Ltd			
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>		
<b>Job no.:</b>	19114	Zone		S
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata		NAT
		Depth Min (m bgl)		0.1
		Depth Max (m bgl)	3.8	
All values in mg/kg unless otherwise stated		Dataset mean SOM%	1.17	
		Scenario SOM%	1	

31/08/22	02/09/22	02/09/22	06/09/22	02/02/2023	31/01/2023	06/02/2023	06/02/2023
S	S	S	S	S	S	S	S
WS238	WS243	WS245	WS252	TP315	TP304	TP309	TP310
0.6	0.4	0.5	0.4	0.5	0.8	1	0.4

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	NAT	NAT	NAT	NAT	NAT	NAT	NAT			
A													0.0076364									
Hazard I													0.009548									
Hazard In													0.027648									
Hazard Ind													0.047552									

Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.

<b>Legend:</b>	MG	Made Ground	<span style="color: blue;">&lt;0.02</span>	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
	HH	Hole Heath Sand and Gravel	<span style="background-color: orange;">0.02</span>	Value greater than, or equal to, the generic assessment criterion (GAC).
	XX	XX Other Codes	<span style="color: red;">* &lt;10</span>	Value excluded from statistical analysis
	TS	Topsoil	<span style="color: green;">Y</span>	Text result
	NAT	Natural	-	Represents a determinand that was not tested.
			+	represents a data point that is not included in the current filter settings

# Assessment of Chemicals of Potential Concern to Human Health



Risk parameter: <b>Default - Human Health - residential with home-grown produce (1%SOM)</b>																		
Client: Oxford University Developments Ltd																		
Site: Begbroke Science Park																		
Job no.: 19114																		
Lab. report no(s).: 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372																		
														Data Filters				
														Zone <b>Landfill</b>				
														Strata <b>NAT</b>				
														Depth Min (m bgl) <b>0.1</b>				
														Depth Max (m bgl) <b>3.8</b>				
All values in mg/kg unless otherwise stated																		
														Dataset mean SOM% <b>1.21</b>				
														Scenario SOM% <b>1</b>				
														Date				
														20/08/21 18/08/21 18/08/21 19/08/21				
														Zone				
														Landfill Landfill Landfill Landfill				
														Location				
														TP02 WS02 WS05 WS09				
														Depth (m bgl)				
														3.3 0.8 3.8 3.8				
CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	Strata	NAT	NAT	NAT	NAT
-	<b>Asbestos</b>																	
P1020	Asbestos Identified	Y/N	Y/N	4	-	-	-	-	No. of detects:	0	-	-	-	N	N	N	N	N
-	<b>Hydrock Default Suite - FOC / SOM / pH</b>																	
P1085	FOC (dimensionless)	[]	0.001	4	0.001	0.018	0.007	0.005	0.01	-	-	-	-	0.0041	0.0049	0.018	0.001	
-	SOM (calculated)	%	0.1724	4	0.17	3.10	1.21	0.78	1.30	-	-	-	-	0.70684	0.84476	3.1032	0.1724	
P1334	pH (su)	pH Units	0	4	8.00	8.70	8.30	8.25	0.32	-	-	-	-	8.7	8.1	8	8.4	
-	<b>Hydrock Default Suite - Metals &amp; PAH</b>																	
7440-38-2	Arsenic	mg/kg	1	4	25.00	<b>84.00</b>	<b>55.00</b>	<b>55.50</b>	28.88	2	NR	37	C4SL - CL:AIRE 2014	84	36	25	75	
7440-41-7	Beryllium	mg/kg	0.06	4	0.86	<b>1.80</b>	1.39	1.45	0.48	2	NR	1.7	Hydrock Derived	1.8	1.1	0.86	1.8	
7440-42-8	Boron	mg/kg	0.2	4	0.90	5.70	2.80	2.30	2.04	0	NR	300	Hydrock Derived	2.2	0.9	5.7	2.4	
7440-43-9	Cadmium	mg/kg	0.2	4	0.20	0.20	0.20	0.20	0.00	0	NR	22	C4SL - CL:AIRE 2014	<0.2	<0.2	<0.2	<0.2	
16065-83-1	Chromium (III)	mg/kg	1	4	21.00	64.00	44.25	46.00	18.84	0	NR	890	Hydrock Derived	54	38	21	64	
18540-29-9	Chromium (VI)	mg/kg	1.2	4	1.20	1.20	1.20	1.20	0.00	0	NR	21	C4SL - CL:AIRE 2014	<1.2	<1.2	<1.2	<1.2	
7440-47-3	Chromium (Total)	mg/kg	1	4	21.00	64.00	44.25	46.00	18.84	-	-	-	-	54	38	21	64	
7440-50-8	Copper	mg/kg	1	4	9.20	22.00	16.05	16.50	6.41	0	NR	2500	Hydrock Derived	22	12	21	9.2	
7439-92-1	Lead	mg/kg	1	4	16.00	88.00	36.75	21.50	34.33	0	NR	200	C4SL - CL:AIRE 2014	24	19	88	16	
7439-97-6	Mercury, inorganic	mg/kg	0.3	4	0.30	0.30	0.30	0.30	0.00	0	NR	40	Hydrock Derived	<0.3	<0.3	<0.3	<0.3	
7440-02-0	Nickel	mg/kg	1	4	22.00	57.00	36.75	34.00	16.03	0	NR	130	Hydrock Derived	57	26	22	42	
7782-49-2	Selenium	mg/kg	1	4	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	<1	<1	<1	<1	
7440-62-2	Vanadium	mg/kg	1	4	51.00	150.00	98.25	96.00	44.99	0	NR	410	Hydrock Derived	150	72	51	120	
7440-66-6	Zinc	mg/kg	1	4	83.00	250.00	133.00	99.50	78.85	0	NR	3900	Hydrock Derived	250	89	83	110	
P1095	Cyanide (free)	mg/kg	1	4	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	<1	<1	
P1186	Total Phenols (Monohydric)	mg/kg	1	4	1.00	1.00	1.00	1.00	0.00	0	24237	120	Hydrock Derived	<1	<1	<1	<1	
83-32-9	Acenaphthene	mg/kg	0.05	4	0.05	0.05	0.05	0.05	0.00	0	57	230	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	
208-96-8	Acenaphthylene	mg/kg	0.05	4	0.05	0.29	0.11	0.05	0.12	0	86	180	Hydrock Derived	<0.05	<0.05	0.29	<0.05	
120-12-7	Anthracene	mg/kg	0.05	4	0.05	0.51	0.17	0.05	0.23	0	1.17	2400	Hydrock Derived	<0.05	<0.05	0.51	<0.05	
56-55-3	Benzo(a)anthracene	mg/kg	0.05	4	0.05	3.10	0.81	0.05	1.53	0	1.71	8.9	Hydrock Derived	<0.05	<0.05	3.1	<0.05	
50-32-8	Benzo(a)pyrene	mg/kg	0.05	4	0.05	2.80	0.74	0.05	1.38	0	0.91	5	C4SL - CL:AIRE 2014	<0.05	<0.05	2.8	<0.05	
205-99-2	Benzo(b)fluoranthene	mg/kg	0.05	4	0.05	<b>3.70</b>	0.96	0.05	1.83	1	1.22	2.6	Hydrock Derived	<0.05	<0.05	<b>3.7</b>	<0.05	
191-24-2	Benzo(ghi)perylene	mg/kg	0.05	4	0.05	2.50	0.66	0.05	1.23	0	0.02	320	Hydrock Derived	<0.05	<0.05	2.5	<0.05	
207-08-9	Benzo(k)fluoranthene	mg/kg	0.05	4	0.05	1.20	0.34	0.05	0.58	0	0.69	78	Hydrock Derived	<0.05	<0.05	1.2	<0.05	
218-01-9	Chrysene	mg/kg	0.05	4	0.05	2.80	0.74	0.05	1.38	0	0.44	15	Hydrock Derived	<0.05	<0.05	2.8	<0.05	
53-70-3	Dibenz(ah)anthracene	mg/kg	0.05	4	0.05	<b>0.60</b>	0.19	0.05	0.28	1	0.004	0.25	Hydrock Derived	<0.05	<0.05	<b>0.6</b>	<0.05	
206-44-0	Fluoranthene	mg/kg	0.05	4	0.05	5.60	1.44	0.05	2.78	0	19	290	Hydrock Derived	<0.05	<0.05	5.6	<0.05	
86-73-7	Fluorene	mg/kg	0.05	4	0.05	0.05	0.05	0.05	0.00	0	31	180	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	
193-39-5	Indeno(123cd)pyrene	mg/kg	0.05	4	0.05	2.10	0.56	0.05	1.03	0	0.06	28	Hydrock Derived	<0.05	<0.05	2.1	<0.05	
91-20-3	Naphthalene	mg/kg	0.05	4	0.05	0.05	0.05	0.05	0.00	0	76	13	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	
85-01-8	Phenanthrene	mg/kg	0.05	4	0.05	2.20	0.59	0.05	1.08	0	36	98	Hydrock Derived	<0.05	<0.05	2.2	<0.05	
129-00-0	Pyrene	mg/kg	0.05	4	0.05	5.20	1.34	0.05	2.58	0	2.2	620	Hydrock Derived	<0.05	<0.05	5.2	<0.05	

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (1%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park		
<b>Job no.:</b>	19114		
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372		
	<b>Data Filters</b>		
	Zone	Landfill	
	Strata	NAT	
	Depth Min (m bgl)	0.1	
	Depth Max (m bgl)	3.8	
All values in mg/kg unless otherwise stated		Dataset mean SOM%	1.21
		Scenario SOM%	1



Date	20/08/21	18/08/21	18/08/21	19/08/21
<b>Zone</b>	Landfill	Landfill	Landfill	Landfill
<b>Location</b>	TP02	WS02	WS05	WS09
<b>Depth (m bgl)</b>	3.3	0.8	3.8	3.8

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	Strata	NAT	NAT	NAT	NAT
-	<b>TPH fractions</b>																	
P1407	TPH ali EC05-EC06	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	304	42	Hydrock Derived	<0.001	<0.001	N/A	N/A	
P1408	TPH ali >EC06-EC08	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	144	100	Hydrock Derived	<0.001	<0.001	N/A	N/A	
P1409	TPH ali >EC08-EC10	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	78	27	Hydrock Derived	<0.001	<0.001	N/A	N/A	
P1410	TPH ali >EC10-EC12	mg/kg	1	2	1.00	1.00	1.00	1.00	0.00	0	48	130	Hydrock Derived	<1	<1	N/A	N/A	
P1411	TPH ali >EC12-EC16	mg/kg	2	2	2.00	2.00	2.00	2.00	0.00	0	24	1100	Hydrock Derived	<2	<2	N/A	N/A	
P1938	TPH ali >EC16-EC35	mg/kg	10	2	10.00	39.00	24.50	24.50	20.51	0	8	65000	Hydrock Derived	39	<10	N/A	N/A	
P1415	TPH ali >EC35-EC44	mg/kg	8.4	2	8.40	28.00	18.20	18.20	13.86	0	8	65000	Hydrock Derived	28	<8.4	N/A	N/A	
P1441	TPH aro EC05-EC07	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	1218	73	Hydrock Derived	<0.001	<0.001	N/A	N/A	
P1355	TPH aro >EC07-EC08	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	<0.001	<0.001	N/A	N/A	
P1356	TPH aro >EC08-EC10	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	613	35	Hydrock Derived	<0.001	<0.001	N/A	N/A	
P1357	TPH aro >EC10-EC12	mg/kg	1	2	1.00	1.00	1.00	1.00	0.00	0	364	75	Hydrock Derived	<1	<1	N/A	N/A	
P1358	TPH aro >EC12-EC16	mg/kg	2	2	2.00	2.00	2.00	2.00	0.00	0	169	140	Hydrock Derived	<2	<2	N/A	N/A	
P1359	TPH aro >EC16-EC21	mg/kg	10	2	10.00	10.00	10.00	10.00	0.00	0	54	260	Hydrock Derived	<10	<10	N/A	N/A	
P1360	TPH aro >EC21-EC35	mg/kg	10	2	10.00	25.00	17.50	17.50	10.61	0	5	1100	Hydrock Derived	25	<10	N/A	N/A	
P1362	TPH aro >EC35-EC44	mg/kg	8.4	2	8.40	13.00	10.70	10.70	3.25	0	5	1100	Hydrock Derived	13	<8.4	N/A	N/A	
-	<b>VOCs - BTEX &amp; MTBE</b>																	
71-43-2	Benzene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	1218	0.2	C4SL - CL:AIRE 2014	<0.001	<0.001	N/A	N/A	
108-88-3	Toluene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	869	130	Hydrock Derived	<0.001	<0.001	N/A	N/A	
100-41-4	Ethylbenzene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	518	47	Hydrock Derived	<0.001	<0.001	N/A	N/A	
95-47-6	Xylene, o-	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	478	61	Hydrock Derived	<0.001	<0.001	N/A	N/A	
1330-20-7	Xylene, p- (use this for combined m & p)	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	576	57	Hydrock Derived	<0.001	<0.001	N/A	N/A	
1634-04-4	MTBE	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	20358	62	Hydrock Derived	<0.001	<0.001	N/A	N/A	
<b>TPH Additivity Check</b>														<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>				
														Aliphatics >EC5-EC6	2.381E-05	2.381E-05		
														Aliphatics >EC6-EC8	0.00001	0.00001		
Considered additive														Aliphatics >EC8-EC10	3.704E-05	3.704E-05		
														Aliphatics >EC10-EC12	0.0076923	0.0076923		
														Aliphatics >EC12-EC16	0.0018182	0.0018182		
														Aliphatics >EC16-EC35	0.0006	0.0001538		
														Aliphatics >EC35-EC44	0.0004308	0.0001292		
														Aromatics EC5-EC7	1.37E-05	1.37E-05		
														Aromatics >EC7-EC8	7.692E-06	7.692E-06		
Considered additive														Aromatics >EC8-EC10	2.857E-05	2.857E-05		
														Aromatics >EC10-EC12	0.0133333	0.0133333		
														Aromatics >EC12-EC16	0.0142857	0.0142857		
Considered additive														Aromatics >EC16-EC21	0.0384615	0.0384615		
														Aromatics >EC21-EC35	0.0227273	0.0090909		
														Aromatics >EC35-EC44	0.0118182	0.0076364		

# Assessment of Chemicals of Potential Concern to Human Health



**Risk parameter:** Default - Human Health - residential with home-grown produce (1%SOM)

**Client:** Oxford University Developments Ltd

**Site:** Begbroke Science Park

**Job no.:** 19114

**Lab. report no(s).:** 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372

**Data Filters**

Zone: Landfill

Strata: NAT

Depth Min (m bgl): 0.1

Depth Max (m bgl): 3.8

Date	20/08/21	18/08/21	18/08/21	19/08/21
Zone	Landfill	Landfill	Landfill	Landfill
Location	TP02	WS02	WS05	WS09
Depth (m bgl)	3.3	0.8	3.8	3.8

All values in mg/kg unless otherwise stated      Dataset mean SOM%: 1.21      Scenario SOM%: 1

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @1% SOM	GAC	GAC Source	Strata	NAT	NAT	NAT	NAT
Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.															<p style="color: blue; font-weight: bold;">Hazard Index for ali&gt;C8-C16: 0.009548    0.009548</p> <p style="color: magenta; font-weight: bold;">Hazard Index for aro&gt;C8-C16: 0.027648    0.027648</p> <p style="color: green; font-weight: bold;">Hazard Index for aro&gt;C16-C35: 0.061189    0.047552</p>			
<b>Legend:</b>		MG	Made Ground	<0.02	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.													
		HH	Hole Heath Sand and Gravel	0.02	Value greater than, or equal to, the generic assessment criterion (GAC).													
		XX	XX Other Codes	*<10	Value excluded from statistical analysis													
		TS	Topsoil	Y	Text result													
		NAT	Natural	-	Represents a determinand that was not tested.													
				+	represents a data point that is not included in the current filter settings													



# Assessment of Chemicals of Potential Concern to Human Health



**Risk parameter:** Default - Human Health - POSresi (2.5%SOM)  
**Client:** Oxford University Developments Ltd  
**Site:** Begbroke Science Park  
**Job no.:** 19114  
**Lab. report no(s):** 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372

**Data Filters**  
 Zone: Landfill  
 Strata: LF  
 Depth Min (m bgl): 0.1  
 Depth Max (m bgl): 3.8



All values in mg/kg unless otherwise stated

Dataset mean SOM%: 4.41  
 Scenario SOM%: 2.5

Date	18/08/21	19/08/21	19/08/21	18/08/21	17/08/21	20/08/21	20/08/21
Zone	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
Location	BH01	BH02	BH02	BH03	TP01	TP02	TP02
Depth (m bgl)	2.5	3	1.5	1	1	0.8	1.5

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	Strata	LF	LF	LF	LF	LF	LF	LF
-	<b>Asbestos</b>																				
P1020	Asbestos Identified	Y/N	Y/N	17	-	-	-	-	No. of detects:	3	-	-	-	N	N	N	Y	N	N	N	N
-	<b>Hydrock Default Suite - FOC / SOM / pH</b>																				
P1085	FOC (dimensionless)	[]	0.001	17	0.009	0.050	0.026	0.023	0.01	-	-	-	-	0.013	0.028	0.046	0.018	0.023	0.03	0.029	0.029
-	SOM (calculated)	%	0.1724	17	1.62	8.62	4.41	3.97	2.14	-	-	-	-	2.2412	4.8272	7.9304	3.1032	3.9652	5.172	4.9996	4.9996
P1334	pH (su)	pH Units	0	17	7.30	8.80	7.94	7.90	0.37	-	-	-	-	7.9	7.9	7.3	7.9	8	8	8	8.2
-	<b>Hydrock Default Suite - Metals &amp; PAH</b>																				
7440-38-2	Arsenic	mg/kg	1	17	25.00	85.00	55.47	49.00	19.86	2	NR	79	C4SL - CL:AIRE 2014	78	84	40	53	73	85	27	27
7440-41-7	Beryllium	mg/kg	0.06	17	1.20	7.30	2.20	1.60	1.45	6	NR	2.2	Hydrock Derived	2	2.4	3.2	1.6	3	7.3	1.3	1.3
7440-42-8	Boron	mg/kg	0.2	17	0.90	17.00	7.10	6.60	5.27	0	NR	21000	Hydrock Derived	1.8	3.4	6.6	12	8.2	17	14	14
7440-43-9	Cadmium	mg/kg	0.2	17	0.20	22.00	2.32	0.20	5.29	0	NR	220	C4SL - CL:AIRE 2014	1.5	5.3	2.5	3.4	<0.2	<0.2	<0.2	<0.2
16065-83-1	Chromium (III)	mg/kg	1	17	25.00	75.00	51.94	55.00	13.30	0	NR	1500	Hydrock Derived	75	74	54	55	55	56	25	25
18540-29-9	Chromium (VI)	mg/kg	1.2	17	1.20	1.20	1.20	1.20	0.00	0	NR	23	C4SL - CL:AIRE 2014	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
7440-47-3	Chromium (Total)	mg/kg	1	17	25.00	75.00	52.12	55.00	13.30	0	-	-	-	75	74	54	56	55	57	25	25
7440-50-8	Copper	mg/kg	1	17	21.00	1000.00	234.41	98.00	306.23	0	NR	12000	Hydrock Derived	35	1000	240	920	300	170	34	34
7439-92-1	Lead	mg/kg	1	17	45.00	830.00	268.82	190.00	245.75	2	NR	630	C4SL - CL:AIRE 2014	170	120	210	420	730	270	57	57
7439-97-6	Mercury, inorganic	mg/kg	0.3	17	0.30	2.40	0.52	0.30	0.54	0	NR	120	Hydrock Derived	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
7440-02-0	Nickel	mg/kg	1	17	24.00	150.00	56.18	46.00	32.09	0	NR	230	Hydrock Derived	44	150	46	90	91	81	24	24
7782-49-2	Selenium	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	NR	1100	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1
7440-62-2	Vanadium	mg/kg	1	17	36.00	140.00	82.88	78.00	29.27	0	NR	2000	Hydrock Derived	140	130	61	84	93	110	50	50
7440-66-6	Zinc	mg/kg	1	17	110.00	6500.00	1050.00	340.00	1679.11	0	NR	81000	Hydrock Derived	240	540	2100	3700	340	1300	290	290
P1095	Cyanide (free)	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	<1	<1	<1	<1	<1	<1
P1186	Total Phenols (Monohydric)	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	38058	690	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1
83-32-9	Acenaphthene	mg/kg	0.05	17	0.05	0.95	0.12	0.05	0.23	0	141	15000	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.95
208-96-8	Acenaphthylene	mg/kg	0.05	17	0.05	0.58	0.08	0.05	0.13	0	212	15000	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.58
120-12-7	Anthracene	mg/kg	0.05	17	0.05	3.70	0.34	0.05	0.89	0	2.91	74000	Hydrock Derived	<0.05	<0.05	0.62	<0.05	<0.05	<0.05	3.7	3.7
56-55-3	Benzo(a)anthracene	mg/kg	0.05	17	0.05	12.00	1.26	0.39	2.84	0	4.28	29	Hydrock Derived	1.5	<0.05	1.6	<0.05	<0.05	0.6	12	12
50-32-8	Benzo(a)pyrene	mg/kg	0.05	17	0.05	8.50	0.99	0.39	2.00	0	2.28	10	C4SL - CL:AIRE 2014	1.3	<0.05	1.4	0.5	<0.05	0.49	8.5	8.5
205-99-2	Benzo(b)fluoranthene	mg/kg	0.05	17	0.05	9.70	1.16	0.49	2.28	1	3.04	7.2	Hydrock Derived	1.7	<0.05	1.7	0.64	<0.05	0.57	9.7	9.7
191-24-2	Benzo(ghi)perylene	mg/kg	0.05	17	0.05	5.70	0.67	0.27	1.34	0	0.04	640	Hydrock Derived	1	<0.05	1	0.4	<0.05	0.39	5.7	5.7
207-08-9	Benzo(k)fluoranthene	mg/kg	0.05	17	0.05	4.60	0.54	0.26	1.07	0	1.72	190	Hydrock Derived	0.53	<0.05	0.51	0.27	<0.05	0.32	4.6	4.6
218-01-9	Chrysene	mg/kg	0.05	17	0.05	8.80	0.97	0.39	2.07	0	1.10	57	Hydrock Derived	1.2	<0.05	1.2	<0.05	<0.05	0.6	8.8	8.8
53-70-3	Dibenz(ah)anthracene	mg/kg	0.05	17	0.05	1.60	0.18	0.05	0.38	1	0.010	0.57	Hydrock Derived	0.27	<0.05	0.28	<0.05	<0.05	<0.05	1.6	1.6
206-44-0	Fluoranthene	mg/kg	0.05	17	0.05	21.00	2.19	0.92	4.92	0	47	3100	Hydrock Derived	2	0.92	2.1	0.72	<0.05	1	21	21
86-73-7	Fluorene	mg/kg	0.05	17	0.05	1.60	0.15	0.05	0.38	0	77	9900	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	1.6	1.6
193-39-5	Indeno(123cd)pyrene	mg/kg	0.05	17	0.05	5.20	0.61	0.24	1.23	0	0.15	82	Hydrock Derived	0.96	<0.05	0.93	0.35	<0.05	0.32	5.2	5.2
91-20-3	Naphthalene	mg/kg	0.05	17	0.05	0.05	0.05	0.05	0.00	0	183	4100	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
85-01-8	Phenanthrene	mg/kg	0.05	17	0.05	11.00	1.14	0.35	2.61	0	90	3100	Hydrock Derived	0.62	0.32	1.3	0.27	<0.05	0.64	11	11
129-00-0	Pyrene	mg/kg	0.05	17	0.05	17.00	1.90	0.79	3.97	0	5.5	7400	Hydrock Derived	1.9	0.93	2	0.66	<0.05	0.84	17	17

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - POSresi (2.5%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park		
<b>Job no.:</b>	19114		
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372		
		<b>Data Filters</b>	
		Zone <b>Landfill</b>	
		Strata <b>LF</b>	
		Depth Min (m bgl) <b>0.1</b>	
		Depth Max (m bgl) <b>3.8</b>	
All values in mg/kg unless otherwise stated		Dataset mean SOM% <b>4.41</b>	
		Scenario SOM% <b>2.5</b>	



Date	18/08/21	19/08/21	19/08/21	18/08/21	17/08/21	20/08/21	20/08/21
<b>Zone</b>	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
<b>Location</b>	BH01	BH02	BH02	BH03	TP01	TP02	TP02
<b>Depth (m bgl)</b>	2.5	3	1.5	1	1	0.8	1.5

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	Strata	LF	LF	LF	LF	LF	LF	LF
-	<b>TPH fractions</b>																				
P1407	TPH ali EC05-EC06	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	558	590000	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
P1408	TPH ali >EC06-EC08	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	322	610000	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
P1409	TPH ali >EC08-EC10	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	190	13000	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
P1410	TPH ali >EC10-EC12	mg/kg	1	12	1.00	1.80	1.09	1.00	0.24	0	118	13000	Hydrock Derived		<1	N/A	N/A	N/A	<1	<1	1.8
P1411	TPH ali >EC12-EC16	mg/kg	2	12	2.00	15.00	4.38	2.00	4.16	0	59	13000	Hydrock Derived		6.7	N/A	N/A	N/A	<2	<2	15
P1938	TPH ali >EC16-EC35	mg/kg	10	12	10.00	970.00	170.42	46.00	279.75	0	21	250000	Hydrock Derived		970	N/A	N/A	N/A	51	41	320
P1415	TPH ali >EC35-EC44	mg/kg	8.4	12	8.40	340.00	60.83	14.00	96.88	0	21	250000	Hydrock Derived		340	N/A	N/A	N/A	17	24	87
P1441	TPH aro EC05-EC07	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	2265	56000	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
P1355	TPH aro >EC07-EC08	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1916	56000	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
P1356	TPH aro >EC08-EC10	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1503	5000	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
P1357	TPH aro >EC10-EC12	mg/kg	1	12	1.00	5.10	1.34	1.00	1.18	0	899	5000	Hydrock Derived		<1	N/A	N/A	N/A	<1	<1	5.1
P1358	TPH aro >EC12-EC16	mg/kg	2	12	2.00	110.00	11.40	2.00	31.08	0	419	5000	Hydrock Derived		<2	N/A	N/A	N/A	<2	6.8	110
P1359	TPH aro >EC16-EC21	mg/kg	10	12	10.00	600.00	64.42	11.00	169.10	0	134	3800	Hydrock Derived		13	N/A	N/A	N/A	<10	53	600
P1360	TPH aro >EC21-EC35	mg/kg	10	12	10.00	620.00	120.25	53.00	183.25	0	12	3800	Hydrock Derived		340	N/A	N/A	N/A	32	110	620
P1362	TPH aro >EC35-EC44	mg/kg	8.4	12	8.40	230.00	48.49	12.95	70.61	0	12	3800	Hydrock Derived		230	N/A	N/A	N/A	16	30	150
-	<b>VOCs - BTEX &amp; MTBE</b>																				
71-43-2	Benzene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	2265	140	C4SL - CL:AIRE 2014		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
108-88-3	Toluene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1916	56000	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
100-41-4	Ethylbenzene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1216	24000	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
95-47-6	Xylene, o-	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1120	42000	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
1330-20-7	Xylene, p- (use this for combined m & p)	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1353	42000	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
1634-04-4	MTBE	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	33075	75000	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
<b>TPH Additivity Check</b>														<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>							
														Aliphatics >EC5-EC6	1.695E-09				1.695E-09	1.695E-09	1.695E-09
														Aliphatics >EC6-EC8	1.639E-09				1.639E-09	1.639E-09	1.639E-09
Considered additive														Aliphatics >EC8-EC10	7.692E-08				7.692E-08	7.692E-08	7.692E-08
														Aliphatics >EC10-EC12	7.692E-05				7.692E-05	0.0001385	
														Aliphatics >EC12-EC16	0.0005154				0.0001538	0.0001538	0.0011538
														Aliphatics >EC16-EC35	0.00388				0.000204	0.000164	0.00128
														Aliphatics >EC35-EC44	0.00136				0.000068	0.000096	0.000348
														Aromatics >EC5-EC7	1.786E-08				1.786E-08	1.786E-08	1.786E-08
														Aromatics >EC7-EC8	1.786E-08				1.786E-08	1.786E-08	1.786E-08
Considered additive														Aromatics >EC8-EC10	0.0000002				0.0000002	0.0000002	0.0000002
														Aromatics >EC10-EC12	0.0002				0.0002	0.0002	0.00102
														Aromatics >EC12-EC16	0.0004				0.0004	0.00136	0.022
Considered additive														Aromatics >EC16-EC21	0.0034211				0.0026316	0.0139474	0.1578947
														Aromatics >EC21-EC35	0.0894737				0.0084211	0.0289474	0.1631579
														Aromatics >EC35-EC44	0.0605263				0.0042105	0.0078947	0.0394737



# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - POSresi (2.5%SOM)									
<b>Client:</b>	Oxford University Developments Ltd									
<b>Site:</b>	Begbroke Science Park									
<b>Job no.:</b>	19114									
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372									
<b>Data Filters</b>										
Zone <b>Landfill</b>										
Strata <b>LF</b>										
Depth Min (m bgl) <b>0.1</b>										
Depth Max (m bgl) <b>3.8</b>										
All values in mg/kg unless otherwise stated										
Dataset mean SOM% <b>4.41</b>										
Scenario SOM% <b>2.5</b>										



20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	18/08/21	18/08/21
Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
TPO2	TPO3	TPO4	TPO5	TPO5	TPO5	TPO6	TPO7	WS03	WS05	
2.5	2.3	0.5	0.5	2	1.3	0.7	2.7	1	2.9	

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	
<b>Asbestos</b>																							
Asbestos Identified	Y/N	Y/N	17	-	-	-	-	No. of detects:	3	-	-	-		N	N				N	N		N	
<b>Hydrock Default Suite - FOC / SOM / pH</b>																							
FOC (dimensionless)		0.001	17	0.009	0.050	0.026	0.023	0.01						0.022	0.012					0.035	0.018		0.029
SOM (calculated)	%	0.1724	17	1.62	8.62	4.41	3.97	2.14						3.7928	2.0688					6.034	3.1032		4.9996
pH (su)	pH Units	0	17	7.30	8.80	7.94	7.90	0.37					N/A	8.1	8.8	N/A	N/A	N/A		8.6	7.8	N/A	7.7
<b>Hydrock Default Suite - Metals &amp; PAH</b>																							
Arsenic	mg/kg	1	17	25.00	85.00	55.47	49.00	19.86	2	NR	79	C4SL - CL:AIRE 2014	N/A	77	49	N/A	N/A	N/A		66	72	N/A	40
Beryllium	mg/kg	0.06	17	1.20	7.30	2.20	1.60	1.45	6	NR	2.2	Hydrock Derived	N/A	2.3	2.5	N/A	N/A	N/A		1.5	1.9	N/A	1.2
Boron	mg/kg	0.2	17	0.90	17.00	7.10	6.60	5.27	0	NR	21000	Hydrock Derived	N/A	4.4	2.6	N/A	N/A	N/A		1.2	7.1	N/A	3.9
Cadmium	mg/kg	0.2	17	0.20	22.00	2.32	0.20	5.29	0	NR	220	C4SL - CL:AIRE 2014	N/A	22	<0.2	N/A	N/A	N/A		<0.2	<0.2	N/A	<0.2
Chromium (III)	mg/kg	1	17	25.00	75.00	51.94	55.00	13.30	0	NR	1500	Hydrock Derived	N/A	55	43	N/A	N/A	N/A		56	55	N/A	41
Chromium (VI)	mg/kg	1.2	17	1.20	1.20	1.20	1.20	0.00	0	NR	23	C4SL - CL:AIRE 2014	N/A	<1.2	<1.2	N/A	N/A	N/A		<1.2	<1.2	N/A	<1.2
Chromium (Total)	mg/kg	1	17	25.00	75.00	52.12	55.00	13.30					N/A	55	44	N/A	N/A	N/A		56	55	N/A	41
Copper	mg/kg	1	17	21.00	1000.00	234.41	98.00	306.23	0	NR	12000	Hydrock Derived	N/A	81	190	N/A	N/A	N/A		40	42	N/A	570
Lead	mg/kg	1	17	45.00	830.00	268.82	190.00	245.75	2	NR	630	C4SL - CL:AIRE 2014	N/A	190	830	N/A	N/A	N/A		73	83	N/A	60
Mercury, inorganic	mg/kg	0.3	17	0.30	2.40	0.52	0.30	0.54	0	NR	120	Hydrock Derived	N/A	<0.3	<0.3	N/A	N/A	N/A		2.4	<0.3	N/A	<0.3
Nickel	mg/kg	1	17	24.00	150.00	56.18	46.00	32.09	0	NR	230	Hydrock Derived	N/A	55	57	N/A	N/A	N/A		36	44	N/A	33
Selenium	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	NR	1100	Hydrock Derived	N/A	<1	<1	N/A	N/A	N/A		<1	<1	N/A	<1
Vanadium	mg/kg	1	17	36.00	140.00	82.88	78.00	29.27	0	NR	2000	Hydrock Derived	N/A	95	77	N/A	N/A	N/A		110	100	N/A	70
Zinc	mg/kg	1	17	110.00	6500.00	1050.00	340.00	1679.11	0	NR	81000	Hydrock Derived	N/A	6500	660	N/A	N/A	N/A		210	210	N/A	130
Cyanide (free)	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	N/A	<1	<1	N/A	N/A	N/A		<1	<1	N/A	<1
Total Phenols (Monohydric)	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	38058	690	Hydrock Derived	N/A	<1	<1	N/A	N/A	N/A		<1	<1	N/A	<1
Acenaphthene	mg/kg	0.05	17	0.05	0.95	0.12	0.05	0.23	0	141	15000	Hydrock Derived	N/A	<0.05	<0.05	N/A	N/A	N/A		<0.05	<0.05	N/A	<0.05
Acenaphthylene	mg/kg	0.05	17	0.05	0.58	0.08	0.05	0.13	0	212	15000	Hydrock Derived	N/A	<0.05	<0.05	N/A	N/A	N/A		<0.05	<0.05	N/A	<0.05
Anthracene	mg/kg	0.05	17	0.05	3.70	0.34	0.05	0.89	0	2.91	74000	Hydrock Derived	N/A	0.22	<0.05	N/A	N/A	N/A		0.67	<0.05	N/A	<0.05
Benz(a)anthracene	mg/kg	0.05	17	0.05	12.00	1.26	0.39	2.84	0	4.28	29	Hydrock Derived	N/A	1	<0.05	N/A	N/A	N/A		1.7	<0.05	N/A	0.39
Benzo(a)pyrene	mg/kg	0.05	17	0.05	8.50	0.99	0.39	2.00	0	2.28	10	C4SL - CL:AIRE 2014	N/A	0.84	<0.05	N/A	N/A	N/A		1.3	<0.05	N/A	0.3
Benzo(b)fluoranthene	mg/kg	0.05	17	0.05	9.70	1.16	0.49	2.28	1	3.04	7.2	Hydrock Derived	N/A	0.9	<0.05	N/A	N/A	N/A		1.5	<0.05	N/A	0.38
Benzo(ghi)perylene	mg/kg	0.05	17	0.05	5.70	0.67	0.27	1.34	0	0.04	640	Hydrock Derived	N/A	0.63	<0.05	N/A	N/A	N/A		0.83	<0.05	N/A	0.27
Benzo(k)fluoranthene	mg/kg	0.05	17	0.05	4.60	0.54	0.26	1.07	0	1.72	190	Hydrock Derived	N/A	0.53	<0.05	N/A	N/A	N/A		1.68	<0.05	N/A	0.21
Chrysene	mg/kg	0.05	17	0.05	8.80	0.97	0.39	2.07	0	1.10	57	Hydrock Derived	N/A	0.89	<0.05	N/A	N/A	N/A		0.64	<0.05	N/A	0.38
Dibenz(ah)anthracene	mg/kg	0.05	17	0.05	1.60	0.18	0.05	0.38	1	0.010	0.57	Hydrock Derived	N/A	<0.05	<0.05	N/A	N/A	N/A		0.29	<0.05	N/A	<0.05
Fluoranthene	mg/kg	0.05	17	0.05	21.00	2.19	0.92	4.92	0	47	3100	Hydrock Derived	N/A	1.5	<0.05	N/A	N/A	N/A		3	<0.05	N/A	0.92
Fluorene	mg/kg	0.05	17	0.05	1.60	0.15	0.05	0.38	0	77	9900	Hydrock Derived	N/A	<0.05	<0.05	N/A	N/A	N/A		<0.05	<0.05	N/A	<0.05
Indeno(123cd)pyrene	mg/kg	0.05	17	0.05	5.20	0.61	0.24	1.23	0	0.15	82	Hydrock Derived	N/A	0.55	<0.05	N/A	N/A	N/A		0.77	<0.05	N/A	0.24
Naphthalene	mg/kg	0.05	17	0.05	0.05	0.05	0.05	0.05	0	183	4100	Hydrock Derived	N/A	<0.05	<0.05	N/A	N/A	N/A		<0.05	<0.05	N/A	<0.05
Phenanthrene	mg/kg	0.05	17	0.05	11.00	1.14	0.35	2.61	0	90	3100	Hydrock Derived	N/A	0.66	<0.05	N/A	N/A	N/A		2.3	<0.05	N/A	0.91
Pyrene	mg/kg	0.05	17	0.05	17.00	1.90	0.79	3.97	0	5.5	7400	Hydrock Derived	N/A	1.4	<0.05	N/A	N/A	N/A		2.6	<0.05	N/A	0.79





# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - POSresi (2.5%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	Zone <b>Landfill</b>
<b>Job no.:</b>	19114		Strata <b>LF</b>
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372		Depth Min (m bgl) <b>0.1</b>
			Depth Max (m bgl) <b>3.8</b>
All values in mg/kg unless otherwise stated		Dataset mean SOM%	<b>4.41</b>
		Scenario SOM%	<b>2.5</b>



20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	18/08/21	18/08/21
Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
TPO2	TPO3	TPO4	TPO5	TPO5	TPO5	TPO6	TPO7	WS03	WS05
2.5	2.3	0.5	0.5	2	1.3	0.7	2.7	1	2.9

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	LF	LF	LF	LF	LF	LF	LF	LF	LF
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Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.													Hazard I	0.000231		0.000231	0.000485	0.000831				0.000231		
													Hazard In	0.0006		0.0006	0.0006	0.0006					0.0006	
													Hazard Ind	0.005263		0.005263	0.030263	0.034737					0.005263	

<b>Legend:</b>	MG	Made Ground	<span style="color: blue;">&lt;0.02</span>	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
	HH	Hole Heath Sand and Gravel	<span style="background-color: orange;">0.02</span>	Value greater than, or equal to, the generic assessment criterion (GAC).
	XX	XX Other Codes	<span style="color: red;">* &lt; 10</span>	Value excluded from statistical analysis
	TS	Topsoil	<span style="color: green;">Y</span>	Text result
	NAT	Natural	-	Represents a determinand that was not tested.
			+	represents a data point that is not included in the current filter settings



# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - POSresi (2.5%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	Zone <b>Landfill</b>
<b>Job no.:</b>	19114		Strata <b>LF</b>
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372		Depth Min (m bgl) <b>0.1</b>
			Depth Max (m bgl) <b>3.8</b>
All values in mg/kg unless otherwise stated		Dataset mean SOM%	<b>4.41</b>
		Scenario SOM%	<b>2.5</b>



19/08/21	19/08/21	19/08/21	19/08/21	19/08/21	19/08/21
Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
WS06	WS07	WS08	WS09	WS09	WS10
1.8	2.3	3.4	2.5	3	0.6

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	LF	LF	LF	LF	LF	LF
<b>TPH fractions</b>																		
TPH ali EC05-EC06	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	558	590000	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
TPH ali >EC06-EC08	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	322	610000	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
TPH ali >EC08-EC10	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	190	13000	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
TPH ali >EC10-EC12	mg/kg	1	12	1.00	1.80	1.09	1.00	0.24	0	118	13000	Hydrock Derived	<1	<1	N/A	<1	N/A	
TPH ali >EC12-EC16	mg/kg	2	12	2.00	15.00	4.38	2.00	4.16	0	59	13000	Hydrock Derived	<2	<2	N/A	<2	N/A	
TPH ali >EC16-EC35	mg/kg	10	12	10.00	970.00	170.42	46.00	279.75	0	21	250000	Hydrock Derived	63	<10	N/A	<10	N/A	
TPH ali >EC35-EC44	mg/kg	8.4	12	8.40	340.00	60.83	14.00	96.88	0	21	250000	Hydrock Derived	11	<8.4	N/A	<8.4	N/A	
TPH aro EC05-EC07	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	2265	56000	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
TPH aro >EC07-EC08	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1916	56000	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
TPH aro >EC08-EC10	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1503	5000	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
TPH aro >EC10-EC12	mg/kg	1	12	1.00	5.10	1.34	1.00	1.18	0	899	5000	Hydrock Derived	<1	<1	N/A	<1	N/A	
TPH aro >EC12-EC16	mg/kg	2	12	2.00	110.00	11.40	2.00	31.08	0	419	5000	Hydrock Derived	<2	<2	N/A	<2	N/A	
TPH aro >EC16-EC21	mg/kg	10	12	10.00	600.00	64.42	11.00	169.10	0	134	3800	Hydrock Derived	17	<10	N/A	<10	N/A	
TPH aro >EC21-EC35	mg/kg	10	12	10.00	620.00	120.25	53.00	183.25	0	12	3800	Hydrock Derived	74	<10	N/A	<10	N/A	
TPH aro >EC35-EC44	mg/kg	8.4	12	8.40	230.00	48.49	12.95	70.61	0	12	3800	Hydrock Derived	9.9	<8.4	N/A	<8.4	N/A	
<b>VOCs - BTEX &amp; MTBE</b>																		
Benzene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	2265	140	C4SL - CL:AIRE 2014	<0.001	<0.001	N/A	<0.001	N/A	
Toluene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1916	56000	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
Ethylbenzene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1216	24000	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
Xylene, o-	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1120	42000	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
Xylene, p- (use this for combined m & p)	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1353	42000	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
MTBE	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	33075	75000	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
<b>TPH Additivity Check</b>																		
<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>																		
													1.695E-09	1.695E-09		1.695E-09		
													1.639E-09	1.639E-09		1.639E-09		
Considered additive													7.692E-08	7.692E-08		7.692E-08		
													7.692E-05	7.692E-05		7.692E-05		
													0.0001538	0.0001538		0.0001538		
													0.000252	0.00004		0.00004		
													0.000044	0.0000336		0.0000336		
													1.786E-08	1.786E-08		1.786E-08		
													1.786E-08	1.786E-08		1.786E-08		
Considered additive													0.0000002	0.0000002		0.0000002		
													0.0002	0.0002		0.0002		
													0.0004	0.0004		0.0004		
Considered additive													0.0044737	0.0026316		0.0026316		
													0.0194737	0.0026316		0.0026316		
													0.0026053	0.0022105		0.0022105		

## Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b> Default - Human Health - POSresi (2.5%SOM)		<b>Data Filters</b> Zone: Landfill Strata: LF Depth Min (m bgl): 0.1 Depth Max (m bgl): 3.8																																							
<b>Client:</b> Oxford University Developments Ltd <b>Site:</b> Begbroke Science Park <b>Job no.:</b> 19114 <b>Lab. report no(s):</b> 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372		All values in mg/kg unless otherwise stated Dataset mean SOM%: 4.41 Scenario SOM%: 2.5										<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>19/08/21</td><td>19/08/21</td><td>19/08/21</td><td>19/08/21</td><td>19/08/21</td><td>19/08/21</td> </tr> <tr> <td>Landfill</td><td>Landfill</td><td>Landfill</td><td>Landfill</td><td>Landfill</td><td>Landfill</td> </tr> <tr> <td>WS06</td><td>WS07</td><td>WS08</td><td>WS09</td><td>WS09</td><td>WS10</td> </tr> <tr> <td>1.8</td><td>2.3</td><td>3.4</td><td>2.5</td><td>3</td><td>0.6</td> </tr> </table>						19/08/21	19/08/21	19/08/21	19/08/21	19/08/21	19/08/21	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	WS06	WS07	WS08	WS09	WS09	WS10	1.8	2.3	3.4	2.5	3	0.6
19/08/21	19/08/21	19/08/21	19/08/21	19/08/21	19/08/21																																				
Landfill	Landfill	Landfill	Landfill	Landfill	Landfill																																				
WS06	WS07	WS08	WS09	WS09	WS10																																				
1.8	2.3	3.4	2.5	3	0.6																																				
Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	LF	LF	LF	LF	LF	LF																							
Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.													Hazard I: 0.000231, 0.000231, 0.000231	Hazard In: 0.0006, 0.0006, 0.0006	Hazard Ind: 0.023947, 0.005263, 0.005263																										
<b>Legend:</b>		MG Made Ground HH Hole Heath Sand and Gravel XX XX Other Codes TS Topsoil NAT Natural	<0.02 Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate. 0.02 Value greater than, or equal to, the generic assessment criterion (GAC). *<10 Value excluded from statistical analysis Y Text result - Represents a determinand that was not tested. + represents a data point that is not included in the current filter settings																																						

# Assessment of Chemicals of Potential Concern to Human Health



**Risk parameter:** Default - Human Health - residential with home-grown produce (2.5%SOM)  
**Client:** Oxford University Developments Ltd  
**Site:** Begbroke Science Park  
**Job no.:** 19114  
**Lab. report no(s):** 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372

**Data Filters**  
 Zone: Landfill  
 Strata: LF  
 Depth Min (m bgl): 0.1  
 Depth Max (m bgl): 3.8



All values in mg/kg unless otherwise stated

Dataset mean SOM%: 4.41  
 Scenario SOM%: 2.5

Date	18/08/21	19/08/21	19/08/21	18/08/21	17/08/21	20/08/21	20/08/21
Zone	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
Location	BH01	BH02	BH02	BH03	TP01	TP02	TP02
Depth (m bgl)	2.5	3	1.5	1	1	0.8	1.5

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	Strata	LF	LF	LF	LF	LF	LF	LF
-	<b>Asbestos</b>																				
P1020	Asbestos Identified	Y/N	Y/N	17	-	-	-	-	No. of detects:	3	-	-	-	N	N	N	Y	N	N	N	N
-	<b>Hydrock Default Suite - FOC / SOM / pH</b>																				
P1085	FOC (dimensionless)	[]	0.001	17	0.009	0.050	0.026	0.023	0.01	-	-	-	-	0.013	0.028	0.046	0.018	0.023	0.03	0.029	0.029
-	SOM (calculated)	%	0.1724	17	1.62	8.62	4.41	3.97	2.14	-	-	-	-	2.2412	4.8272	7.9304	3.1032	3.9652	5.172	4.9996	4.9996
P1334	pH (su)	pH Units	0	17	7.30	8.80	7.94	7.90	0.37	-	-	-	-	7.9	7.9	7.3	7.9	8	8	8	8.2
-	<b>Hydrock Default Suite - Metals &amp; PAH</b>																				
7440-38-2	Arsenic	mg/kg	1	17	25.00	85.00	55.47	49.00	19.86	14	NR	37	C4SL - CL:AIRE 2014	78	84	40	53	73	85	27	27
7440-41-7	Beryllium	mg/kg	0.06	17	1.20	7.30	2.20	1.60	1.45	8	NR	1.7	Hydrock Derived	2	2.4	3.2	1.6	3	7.3	1.3	1.3
7440-42-8	Boron	mg/kg	0.2	17	0.90	17.00	7.10	6.60	5.27	0	NR	300	Hydrock Derived	1.8	3.4	6.6	12	8.2	17	14	14
7440-43-9	Cadmium	mg/kg	0.2	17	0.20	22.00	2.32	0.20	5.29	1	NR	22	C4SL - CL:AIRE 2014	1.5	5.3	2.5	3.4	<0.2	<0.2	<0.2	<0.2
16065-83-1	Chromium (III)	mg/kg	1	17	25.00	75.00	51.94	55.00	13.30	0	NR	890	Hydrock Derived	75	74	54	55	55	56	25	25
18540-29-9	Chromium (VI)	mg/kg	1.2	17	1.20	1.20	1.20	1.20	0.00	0	NR	21	C4SL - CL:AIRE 2014	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
7440-47-3	Chromium (Total)	mg/kg	1	17	25.00	75.00	52.12	55.00	13.30	0	-	-	-	75	74	54	56	55	57	25	25
7440-50-8	Copper	mg/kg	1	17	21.00	1000.00	234.41	98.00	306.23	0	NR	2500	Hydrock Derived	35	1000	240	920	300	170	34	34
7439-92-1	Lead	mg/kg	1	17	45.00	830.00	268.82	190.00	245.75	8	NR	200	C4SL - CL:AIRE 2014	170	120	210	420	730	270	57	57
7439-97-6	Mercury, inorganic	mg/kg	0.3	17	0.30	2.40	0.52	0.30	0.54	0	NR	40	Hydrock Derived	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
7440-02-0	Nickel	mg/kg	1	17	24.00	150.00	56.18	46.00	32.09	1	NR	130	Hydrock Derived	44	150	46	90	91	81	24	24
7782-49-2	Selenium	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1
7440-62-2	Vanadium	mg/kg	1	17	36.00	140.00	82.88	78.00	29.27	0	NR	410	Hydrock Derived	140	130	61	84	93	110	50	50
7440-66-6	Zinc	mg/kg	1	17	110.00	6500.00	1050.00	340.00	1679.11	1	NR	3900	Hydrock Derived	240	540	2100	3700	340	1300	290	290
P1095	Cyanide (free)	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	<1	<1	<1	<1	<1	<1
P1186	Total Phenols (Monohydric)	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	38058	210	Hydrock Derived	<1	<1	<1	<1	<1	<1	<1	<1
83-32-9	Acenaphthene	mg/kg	0.05	17	0.05	0.95	0.12	0.05	0.23	0	141	540	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.95
208-96-8	Acenaphthylene	mg/kg	0.05	17	0.05	0.58	0.08	0.05	0.13	0	212	440	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.58
120-12-7	Anthracene	mg/kg	0.05	17	0.05	3.70	0.34	0.05	0.89	0	2.91	5500	Hydrock Derived	<0.05	<0.05	0.62	<0.05	<0.05	<0.05	<0.05	3.7
56-55-3	Benzo(a)anthracene	mg/kg	0.05	17	0.05	12.00	1.26	0.39	2.84	1	4.28	12	Hydrock Derived	1.5	<0.05	1.6	<0.05	<0.05	0.6	12	12
50-32-8	Benzo(a)pyrene	mg/kg	0.05	17	0.05	8.50	0.99	0.39	2.00	1	2.28	5	C4SL - CL:AIRE 2014	1.3	<0.05	1.4	0.5	<0.05	0.49	8.5	8.5
205-99-2	Benzo(b)fluoranthene	mg/kg	0.05	17	0.05	9.70	1.16	0.49	2.28	1	3.04	3.3	Hydrock Derived	1.7	<0.05	1.7	0.64	<0.05	0.57	9.7	9.7
191-24-2	Benzo(ghi)perylene	mg/kg	0.05	17	0.05	5.70	0.67	0.27	1.34	0	0.04	340	Hydrock Derived	1	<0.05	1	0.4	<0.05	0.39	5.7	5.7
207-08-9	Benzo(k)fluoranthene	mg/kg	0.05	17	0.05	4.60	0.54	0.26	1.07	0	1.72	93	Hydrock Derived	0.53	<0.05	0.51	0.27	<0.05	0.32	4.6	4.6
218-01-9	Chrysene	mg/kg	0.05	17	0.05	8.80	0.97	0.39	2.07	0	1.10	22	Hydrock Derived	1.2	<0.05	1.2	<0.05	<0.05	0.6	8.8	8.8
53-70-3	Dibenz(ah)anthracene	mg/kg	0.05	17	0.05	1.60	0.18	0.05	0.38	2	0.010	0.29	Hydrock Derived	0.27	<0.05	0.28	<0.05	<0.05	<0.05	1.6	1.6
206-44-0	Fluoranthene	mg/kg	0.05	17	0.05	21.00	2.19	0.92	4.92	0	47	560	Hydrock Derived	2	0.92	2.1	0.72	<0.05	1	21	21
86-73-7	Fluorene	mg/kg	0.05	17	0.05	1.60	0.15	0.05	0.38	0	77	420	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	1.6	1.6
193-39-5	Indeno(123cd)pyrene	mg/kg	0.05	17	0.05	5.20	0.61	0.24	1.23	0	0.15	36	Hydrock Derived	0.96	<0.05	0.93	0.35	<0.05	0.32	5.2	5.2
91-20-3	Naphthalene	mg/kg	0.05	17	0.05	0.05	0.05	0.05	0.00	0	183	30	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
85-01-8	Phenanthrene	mg/kg	0.05	17	0.05	11.00	1.14	0.35	2.61	0	90	220	Hydrock Derived	0.62	0.32	1.3	0.27	<0.05	0.64	11	11
129-00-0	Pyrene	mg/kg	0.05	17	0.05	17.00	1.90	0.79	3.97	0	5.5	1200	Hydrock Derived	1.9	0.93	2	0.66	<0.05	0.84	17	17



# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (2.5%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	Zone <b>Landfill</b>
<b>Job no.:</b>	19114		Strata <b>LF</b>
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372		Depth Min (m bgl) <b>0.1</b>
			Depth Max (m bgl) <b>3.8</b>

Date	18/08/21	19/08/21	19/08/21	18/08/21	17/08/21	20/08/21	20/08/21
<b>Zone</b>	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
<b>Location</b>	BH01	BH02	BH02	BH03	TP01	TP02	TP02
<b>Depth (m bgl)</b>	2.5	3	1.5	1	1	0.8	1.5

All values in mg/kg unless otherwise stated      Dataset mean SOM% **4.41**  
Scenario SOM% **2.5**

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	Strata	LF	LF	LF	LF	LF	LF	LF
-	<b>TPH fractions</b>																				
P1407	TPH ali EC05-EC06	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	558	78	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
P1408	TPH ali >EC06-EC08	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	322	230	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
P1409	TPH ali >EC08-EC10	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	190	65	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
P1410	TPH ali >EC10-EC12	mg/kg	1	12	1.00	1.80	1.09	1.00	0.24	0	118	330	Hydrock Derived		<1	N/A	N/A	N/A	<1	<1	1.8
P1411	TPH ali >EC12-EC16	mg/kg	2	12	2.00	15.00	4.38	2.00	4.16	0	59	2400	Hydrock Derived		6.7	N/A	N/A	N/A	<2	<2	15
P1938	TPH ali >EC16-EC35	mg/kg	10	12	10.00	970.00	170.42	46.00	279.75	0	21	92000	Hydrock Derived		970	N/A	N/A	N/A	51	41	320
P1415	TPH ali >EC35-EC44	mg/kg	8.4	12	8.40	340.00	60.83	14.00	96.88	0	21	92000	Hydrock Derived		340	N/A	N/A	N/A	17	24	87
P1441	TPH aro EC05-EC07	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	2265	150	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
P1355	TPH aro >EC07-EC08	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1916	300	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
P1356	TPH aro >EC08-EC10	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1503	84	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
P1357	TPH aro >EC10-EC12	mg/kg	1	12	1.00	5.10	1.34	1.00	1.18	0	899	180	Hydrock Derived		<1	N/A	N/A	N/A	<1	<1	5.1
P1358	TPH aro >EC12-EC16	mg/kg	2	12	2.00	110.00	11.40	2.00	31.08	0	419	330	Hydrock Derived		<2	N/A	N/A	N/A	<2	6.8	110
P1359	TPH aro >EC16-EC21	mg/kg	10	12	10.00	<b>600.00</b>	64.42	11.00	169.10	<b>1</b>	134	540	Hydrock Derived		13	N/A	N/A	N/A	<10	53	<b>600</b>
P1360	TPH aro >EC21-EC35	mg/kg	10	12	10.00	620.00	120.25	53.00	183.25	0	12	1500	Hydrock Derived		340	N/A	N/A	N/A	32	110	620
P1362	TPH aro >EC35-EC44	mg/kg	8.4	12	8.40	230.00	48.49	12.95	70.61	0	12	1500	Hydrock Derived		230	N/A	N/A	N/A	16	30	150
-	<b>VOCs - BTEX &amp; MTBE</b>																				
71-43-2	Benzene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	2265	0.41	C4SL - CL:AIRE 2014		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
108-88-3	Toluene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1916	300	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
100-41-4	Ethylbenzene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1216	110	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
95-47-6	Xylene, o-	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1120	140	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
1330-20-7	Xylene, p- (use this for combined m & p)	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1353	130	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001
1634-04-4	MTBE	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	33075	110	Hydrock Derived		<0.001	N/A	N/A	N/A	<0.001	<0.001	<0.001

TPH Additivity Check	HAZARD QUOTIENTS FOR EACH FRACTION			
	Aliphatics >EC5-EC6	1.282E-05		1.282E-05
	Aliphatics >EC6-EC8	4.348E-06		4.348E-06
	Aliphatics >EC8-EC10	1.538E-05		1.538E-05
	Aliphatics >EC10-EC12	0.0030303		0.0030303
	Aliphatics >EC12-EC16	0.0027917		0.0027917
	Aliphatics >EC16-EC35	0.0105435		0.0105435
	Aliphatics >EC35-EC44	0.0036957		0.0036957
	Aromatics >EC5-EC7	6.667E-06		6.667E-06
	Aromatics >EC7-EC8	3.333E-06		3.333E-06
	Aromatics >EC8-EC10	1.19E-05		1.19E-05
	Aromatics >EC10-EC12	0.0055556		0.0055556
	Aromatics >EC12-EC16	0.0060606		0.0060606
	Aromatics >EC16-EC21	0.0240741		0.0240741
	Aromatics >EC21-EC35	0.2266667		0.2266667
	Aromatics >EC35-EC44	0.1533333		0.1533333

Considered additive

Considered additive

Considered additive

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (2.5%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	
<b>Job no.:</b>	19114	Zone	Landfill
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata	LF
		Depth Min (m bgl)	0.1
		Depth Max (m bgl)	3.8
	All values in mg/kg unless otherwise stated	Dataset mean SOM%	4.41
		Scenario SOM%	2.5



Date	18/08/21	19/08/21	19/08/21	18/08/21	17/08/21	20/08/21	20/08/21
Zone	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
Location	BH01	BH02	BH02	BH03	TP01	TP02	TP02
Depth (m bgl)	2.5	3	1.5	1	1	0.8	1.5

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	Strata	LF	LF	LF	LF	LF	LF	LF
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Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.

Hazard Index for ali>C8-C16	0.005837				0.003879	0.003879	0.01172
Hazard Index for aro>C8-C16	0.011628				0.011628	0.026174	0.361679
Hazard Index for aro>C16-C35	0.250741				0.039852	0.171481	1.524444

**Legend:**

MG	Made Ground	<0.02	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
HH	Hole Heath Sand and Gravel	0.02	Value greater than, or equal to, the generic assessment criterion (GAC).
XX	XX Other Codes	*<10	Value excluded from statistical analysis
TS	Topsoil	Y	Text result
NAT	Natural	-	Represents a determinand that was not tested.
		+	represents a data point that is not included in the current filter settings

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (2.5%SOM)												
<b>Client:</b>	Oxford University Developments Ltd												
<b>Site:</b>	Begbroke Science Park												
<b>Job no.:</b>	19114												
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372												
	<b>Data Filters</b>												
	Zone <b>Landfill</b>												
	Strata <b>LF</b>												
	Depth Min (m bgl) <b>0.1</b>												
	Depth Max (m bgl) <b>3.8</b>												
All values in mg/kg unless otherwise stated										Dataset mean SOM% <b>4.41</b>			
										Scenario SOM% <b>2.5</b>			



20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	18/08/21	18/08/21
Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
TPO2	TPO3	TPO4	TPO5	TPO5	TPO5	TPO6	TPO7	WS03	WS05	
2.5	2.3	0.5	0.5	2	1.3	0.7	2.7	1	2.9	

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	
<b>Asbestos</b>																							
Asbestos Identified	Y/N	Y/N	17	-	-	-	-	No. of detects:	3	-	-	-		N	N				N	N		N	
<b>Hydrock Default Suite - FOC / SOM / pH</b>																							
FOC (dimensionless)		0.001	17	0.009	0.050	0.026	0.023	0.01		-	-	-		0.022	0.012					0.035	0.018		0.029
SOM (calculated)	%	0.1724	17	1.62	8.62	4.41	3.97	2.14		-	-	-		3.7928	2.0688					6.034	3.1032		4.9996
pH (su)	pH Units	0	17	7.30	8.80	7.94	7.90	0.37		-	-	-	N/A	8.1	8.8	N/A	N/A	N/A		8.6	7.8	N/A	7.7
<b>Hydrock Default Suite - Metals &amp; PAH</b>																							
Arsenic	mg/kg	1	17	25.00	85.00	55.47	49.00	19.86	14	NR	37	C4SL - CL:AIRE 2014	N/A	77	49	N/A	N/A	N/A		66	72	N/A	40
Beryllium	mg/kg	0.06	17	1.20	7.30	2.20	1.60	1.45	8	NR	1.7	Hydrock Derived	N/A	2.3	2.5	N/A	N/A	N/A		1.5	1.9	N/A	1.2
Boron	mg/kg	0.2	17	0.90	17.00	7.10	6.60	5.27	0	NR	300	Hydrock Derived	N/A	4.4	2.6	N/A	N/A	N/A		1.2	7.1	N/A	3.9
Cadmium	mg/kg	0.2	17	0.20	22.00	2.32	0.20	5.29	1	NR	22	C4SL - CL:AIRE 2014	N/A	22	<0.2	N/A	N/A	N/A		<0.2	<0.2	N/A	<0.2
Chromium (III)	mg/kg	1	17	25.00	75.00	51.94	55.00	13.30	0	NR	890	Hydrock Derived	N/A	55	43	N/A	N/A	N/A		56	55	N/A	41
Chromium (VI)	mg/kg	1.2	17	1.20	1.20	1.20	1.20	0.00	0	NR	21	C4SL - CL:AIRE 2014	N/A	<1.2	<1.2	N/A	N/A	N/A		<1.2	<1.2	N/A	<1.2
Chromium (Total)	mg/kg	1	17	25.00	75.00	52.12	55.00	13.30		-	-	-	N/A	55	44	N/A	N/A	N/A		56	55	N/A	41
Copper	mg/kg	1	17	21.00	1000.00	234.41	98.00	306.23	0	NR	2500	Hydrock Derived	N/A	81	190	N/A	N/A	N/A		40	42	N/A	570
Lead	mg/kg	1	17	45.00	830.00	268.82	190.00	245.75	8	NR	200	C4SL - CL:AIRE 2014	N/A	190	830	N/A	N/A	N/A		73	83	N/A	60
Mercury, inorganic	mg/kg	0.3	17	0.30	2.40	0.52	0.30	0.54	0	NR	40	Hydrock Derived	N/A	<0.3	<0.3	N/A	N/A	N/A		2.4	<0.3	N/A	<0.3
Nickel	mg/kg	1	17	24.00	150.00	56.18	46.00	32.09	1	NR	130	Hydrock Derived	N/A	55	57	N/A	N/A	N/A		36	44	N/A	33
Selenium	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	N/A	<1	<1	N/A	N/A	N/A		<1	<1	N/A	<1
Vanadium	mg/kg	1	17	36.00	140.00	82.88	78.00	29.27	0	NR	410	Hydrock Derived	N/A	95	77	N/A	N/A	N/A		110	100	N/A	70
Zinc	mg/kg	1	17	110.00	6500.00	1050.00	340.00	1679.11	1	NR	3900	Hydrock Derived	N/A	6500	660	N/A	N/A	N/A		210	210	N/A	130
Cyanide (free)	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	N/A	<1	<1	N/A	N/A	N/A		<1	<1	N/A	<1
Total Phenols (Monohydric)	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	38058	210	Hydrock Derived	N/A	<1	<1	N/A	N/A	N/A		<1	<1	N/A	<1
Acenaphthene	mg/kg	0.05	17	0.05	0.95	0.12	0.05	0.23	0	141	540	Hydrock Derived	N/A	<0.05	<0.05	N/A	N/A	N/A		<0.05	<0.05	N/A	<0.05
Acenaphthylene	mg/kg	0.05	17	0.05	0.58	0.08	0.05	0.13	0	212	440	Hydrock Derived	N/A	<0.05	<0.05	N/A	N/A	N/A		<0.05	<0.05	N/A	<0.05
Anthracene	mg/kg	0.05	17	0.05	3.70	0.34	0.05	0.89	0	2.91	5500	Hydrock Derived	N/A	0.22	<0.05	N/A	N/A	N/A		0.67	<0.05	N/A	<0.05
Benz(a)anthracene	mg/kg	0.05	17	0.05	12.00	1.26	0.39	2.84	1	4.28	12	Hydrock Derived	N/A	1	<0.05	N/A	N/A	N/A		1.7	<0.05	N/A	0.39
Benzo(a)pyrene	mg/kg	0.05	17	0.05	8.50	0.99	0.39	2.00	1	2.28	5	C4SL - CL:AIRE 2014	N/A	0.84	<0.05	N/A	N/A	N/A		1.3	<0.05	N/A	0.3
Benzo(b)fluoranthene	mg/kg	0.05	17	0.05	9.70	1.16	0.49	2.28	1	3.04	3.3	Hydrock Derived	N/A	0.9	<0.05	N/A	N/A	N/A		1.5	<0.05	N/A	0.38
Benzo(ghi)perylene	mg/kg	0.05	17	0.05	5.70	0.67	0.27	1.34	0	0.04	340	Hydrock Derived	N/A	0.63	<0.05	N/A	N/A	N/A		0.83	<0.05	N/A	0.27
Benzo(k)fluoranthene	mg/kg	0.05	17	0.05	4.60	0.54	0.26	1.07	0	1.72	93	Hydrock Derived	N/A	0.53	<0.05	N/A	N/A	N/A		1.68	<0.05	N/A	0.21
Chrysene	mg/kg	0.05	17	0.05	8.80	0.97	0.39	2.07	0	1.10	22	Hydrock Derived	N/A	0.89	<0.05	N/A	N/A	N/A		1.4	<0.05	N/A	0.38
Dibenz(ah)anthracene	mg/kg	0.05	17	0.05	1.60	0.18	0.05	0.38	2	0.010	0.29	Hydrock Derived	N/A	<0.05	<0.05	N/A	N/A	N/A		0.29	<0.05	N/A	<0.05
Fluoranthene	mg/kg	0.05	17	0.05	21.00	2.19	0.92	4.92	0	47	560	Hydrock Derived	N/A	1.5	<0.05	N/A	N/A	N/A		3	<0.05	N/A	0.92
Fluorene	mg/kg	0.05	17	0.05	1.60	0.15	0.05	0.38	0	77	420	Hydrock Derived	N/A	<0.05	<0.05	N/A	N/A	N/A		<0.05	<0.05	N/A	<0.05
Indeno(123cd)pyrene	mg/kg	0.05	17	0.05	5.20	0.61	0.24	1.23	0	0.15	36	Hydrock Derived	N/A	0.55	<0.05	N/A	N/A	N/A		0.77	<0.05	N/A	0.24
Naphthalene	mg/kg	0.05	17	0.05	0.05	0.05	0.05	0.05	0	183	30	Hydrock Derived	N/A	<0.05	<0.05	N/A	N/A	N/A		<0.05	<0.05	N/A	<0.05
Phenanthrene	mg/kg	0.05	17	0.05	11.00	1.14	0.35	2.61	0	90	220	Hydrock Derived	N/A	0.66	<0.05	N/A	N/A	N/A		2.3	<0.05	N/A	0.91
Pyrene	mg/kg	0.05	17	0.05	17.00	1.90	0.79	3.97	0	5.5	1200	Hydrock Derived	N/A	1.4	<0.05	N/A	N/A	N/A		2.6	<0.05	N/A	0.79

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (2.5%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	
<b>Job no.:</b>	19114	Zone	Landfill
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata	LF
		Depth Min (m bgl)	0.1
		Depth Max (m bgl)	3.8
		Dataset mean SOM%	4.41
		Scenario SOM%	2.5



20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	18/08/21	18/08/21
Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
TPO2	TPO3	TPO4	TPO5	TPO5	TPO5	TPO6	TPO7	WS03	WS05	
2.5	2.3	0.5	0.5	2	1.3	0.7	2.7	1	2.9	

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	LF	LF	LF	LF	LF	LF	LF	LF	LF			
<b>TPH fractions</b>																								
TPH ali EC05-EC06	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	558	78	Hydrock Derived	<0.001	N/A	<0.001	<0.001	<0.001	N/A	N/A	N/A	<0.001	N/A		
TPH ali >EC06-EC08	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	322	230	Hydrock Derived	<0.001	N/A	<0.001	<0.001	<0.001	N/A	N/A	N/A	<0.001	N/A		
TPH ali >EC08-EC10	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	190	65	Hydrock Derived	<0.001	N/A	<0.001	<0.001	<0.001	N/A	N/A	N/A	<0.001	N/A		
TPH ali >EC10-EC12	mg/kg	1	12	1.00	1.80	1.09	1.00	0.24	0	118	330	Hydrock Derived	<1	N/A	<1	<1	1.3	N/A	N/A	N/A	<1	N/A		
TPH ali >EC12-EC16	mg/kg	2	12	2.00	15.00	4.38	2.00	4.16	0	59	2400	Hydrock Derived	<2	N/A	<2	5.3	9.5	N/A	N/A	N/A	<2	N/A		
TPH ali >EC16-EC35	mg/kg	10	12	10.00	970.00	170.42	46.00	279.75	0	21	92000	Hydrock Derived	<10	N/A	<10	220	330	N/A	N/A	N/A	<10	N/A		
TPH ali >EC35-EC44	mg/kg	8.4	12	8.40	340.00	60.83	14.00	96.88	0	21	92000	Hydrock Derived	<8.4	N/A	<8.4	79	130	N/A	N/A	N/A	<8.4	N/A		
TPH aro EC05-EC07	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	2265	150	Hydrock Derived	<0.001	N/A	<0.001	<0.001	<0.001	N/A	N/A	N/A	<0.001	N/A		
TPH aro >EC07-EC08	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1916	300	Hydrock Derived	<0.001	N/A	<0.001	<0.001	<0.001	N/A	N/A	N/A	<0.001	N/A		
TPH aro >EC08-EC10	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1503	84	Hydrock Derived	<0.001	N/A	<0.001	<0.001	<0.001	N/A	N/A	N/A	<0.001	N/A		
TPH aro >EC10-EC12	mg/kg	1	12	1.00	5.10	1.34	1.00	1.18	0	899	180	Hydrock Derived	<1	N/A	<1	<1	<1	N/A	N/A	N/A	<1	N/A		
TPH aro >EC12-EC16	mg/kg	2	12	2.00	110.00	11.40	2.00	31.08	0	419	330	Hydrock Derived	<2	N/A	<2	<2	<2	N/A	N/A	N/A	<2	N/A		
TPH aro >EC16-EC21	mg/kg	10	12	10.00	600.00	64.42	11.00	169.10	1	134	540	Hydrock Derived	<10	N/A	<10	18	12	N/A	N/A	N/A	<10	N/A		
TPH aro >EC21-EC35	mg/kg	10	12	10.00	620.00	120.25	53.00	183.25	0	12	1500	Hydrock Derived	<10	N/A	<10	97	120	N/A	N/A	N/A	<10	N/A		
TPH aro >EC35-EC44	mg/kg	8.4	12	8.40	230.00	48.49	12.95	70.61	0	12	1500	Hydrock Derived	<8.4	N/A	<8.4	34	70	N/A	N/A	N/A	<8.4	N/A		
<b>VOCs - BTEX &amp; MTBE</b>																								
Benzene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	2265	0.41	C4SL - CL:AIRE 2014	<0.001	N/A	<0.001	<0.001	<0.001	N/A	N/A	N/A	<0.001	N/A		
Toluene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1916	300	Hydrock Derived	<0.001	N/A	<0.001	<0.001	<0.001	N/A	N/A	N/A	<0.001	N/A		
Ethylbenzene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1216	110	Hydrock Derived	<0.001	N/A	<0.001	<0.001	<0.001	N/A	N/A	N/A	<0.001	N/A		
Xylene, o-	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1120	140	Hydrock Derived	<0.001	N/A	<0.001	<0.001	<0.001	N/A	N/A	N/A	<0.001	N/A		
Xylene, p- (use this for combined m & p)	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1353	130	Hydrock Derived	<0.001	N/A	<0.001	<0.001	<0.001	N/A	N/A	N/A	<0.001	N/A		
MTBE	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	33075	110	Hydrock Derived	<0.001	N/A	<0.001	<0.001	<0.001	N/A	N/A	N/A	<0.001	N/A		
<b>TPH Additivity Check</b>																								
<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>																								
													1.282E-05		1.282E-05	1.282E-05	1.282E-05					1.282E-05		
													4.348E-06		4.348E-06	4.348E-06	4.348E-06					4.348E-06		
													1.538E-05		1.538E-05	1.538E-05	1.538E-05					1.538E-05		
													0.0030303		0.0030303	0.0030303	0.0039394					0.0030303		
													0.0008333		0.0008333	0.0022083	0.0039583					0.0008333		
													0.0001087		0.0001087	0.0023913	0.003587					0.0001087		
													9.13E-05		9.13E-05	0.0008587	0.001413					9.13E-05		
													6.667E-06		6.667E-06	6.667E-06	6.667E-06					6.667E-06		
													3.333E-06		3.333E-06	3.333E-06	3.333E-06					3.333E-06		
													1.19E-05		1.19E-05	1.19E-05	1.19E-05					1.19E-05		
													0.0055556		0.0055556	0.0055556	0.0055556					0.0055556		
													0.0060606		0.0060606	0.0060606	0.0060606					0.0060606		
													0.0185185		0.0185185	0.0333333	0.0222222					0.0185185		
													0.0066667		0.0066667	0.0646667	0.08					0.0066667		
													0.0056		0.0056	0.0226667	0.0466667					0.0056		

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (2.5%SOM)										
<b>Client:</b>	Oxford University Developments Ltd					<b>Data Filters</b>					
<b>Site:</b>	Begbroke Science Park					Zone <b>Landfill</b>					
<b>Job no.:</b>	19114					Strata <b>LF</b>					
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372					Depth Min (m bgl) <b>0.1</b>					
						Depth Max (m bgl) <b>3.8</b>					
All values in mg/kg unless otherwise stated										Dataset mean SOM% <b>4.41</b>	
										Scenario SOM% <b>2.5</b>	



20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	18/08/21	18/08/21
Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
TPO2	TPO3	TPO4	TPO5	TPO5	TPO5	TPO6	TPO7	WS03	WS05	
2.5	2.3	0.5	0.5	2	1.3	0.7	2.7	1	2.9	

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	LF	LF	LF	LF	LF	LF	LF	LF	LF
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Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.													Hazard I	0.003879		0.003879	0.005254	0.007913					0.003879	
													Hazard In	0.011628		0.011628	0.011628	0.011628					0.011628	
													Hazard Ind	0.025185		0.025185	0.098	0.102222					0.025185	

<b>Legend:</b>	MG	Made Ground	<0.02	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
	HH	Hole Heath Sand and Gravel	0.02	Value greater than, or equal to, the generic assessment criterion (GAC).
	XX	XX Other Codes	*<10	Value excluded from statistical analysis
	TS	Topsoil	Y	Text result
	NAT	Natural	-	Represents a determinand that was not tested.
			+	represents a data point that is not included in the current filter settings



# Assessment of Chemicals of Potential Concern to Human Health



Risk parameter: Default - Human Health - residential with home-grown produce (2.5%SOM)													Data Filters					
Client: Oxford University Developments Ltd			Zone: Landfill															
Site: Begbroke Science Park			Strata: LF															
Job no.: 19114			Depth Min (m bgl): 0.1															
Lab. report no(s): 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372			Depth Max (m bgl): 3.8															
All values in mg/kg unless otherwise stated													Dataset mean SOM%: 4.41 Scenario SOM%: 2.5					
Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	19/08/21 Landfill WS06	19/08/21 Landfill WS07	19/08/21 Landfill WS08	19/08/21 Landfill WS09	19/08/21 Landfill WS10	19/08/21 Landfill WS10
<b>Asbestos</b>																		
Asbestos Identified	Y/N	Y/N	17	-	-	-	-	No. of detects:	3	-	-	-	N	N	N	N	Y	Y
<b>Hydrock Default Suite - FOC / SOM / pH</b>																		
FOC (dimensionless)	[]	0.001	17	0.009	0.050	0.026	0.023	0.01	-	-	-	-	0.05	0.043		0.0094	0.011	0.018
SOM (calculated)	%	0.1724	17	1.62	8.62	4.41	3.97	2.14	-	-	-	-	8.62	7.4132		1.62056	1.8964	3.1032
pH (su)	pH Units	0	17	7.30	8.80	7.94	7.90	0.37	-	-	-	-	7.7	7.7	N/A	7.5	7.7	8.1
<b>Hydrock Default Suite - Metals &amp; PAH</b>																		
Arsenic	mg/kg	1	17	25.00	85.00	55.47	49.00	19.86	14	NR	37	C4SL - CL:AIRE 2014	25	34	N/A	48	45	47
Beryllium	mg/kg	0.06	17	1.20	7.30	2.20	1.60	1.45	8	NR	1.7	Hydrock Derived	1.6	1.4	N/A	1.4	1.3	1.5
Boron	mg/kg	0.2	17	0.90	17.00	7.10	6.60	5.27	0	NR	300	Hydrock Derived	12	16	N/A	2.9	6.7	0.9
Cadmium	mg/kg	0.2	17	0.20	22.00	2.32	0.20	5.29	1	NR	22	C4SL - CL:AIRE 2014	2.6	<0.2	N/A	<0.2	<0.2	<0.2
Chromium (III)	mg/kg	1	17	25.00	75.00	51.94	55.00	13.30	0	NR	890	Hydrock Derived	67	56	N/A	43	39	34
Chromium (VI)	mg/kg	1.2	17	1.20	1.20	1.20	1.20	0.00	0	NR	21	C4SL - CL:AIRE 2014	<1.2	<1.2	N/A	<1.2	<1.2	<1.2
Chromium (Total)	mg/kg	1	17	25.00	75.00	52.12	55.00	13.30	-	-	-	-	67	56	N/A	43	39	34
Copper	mg/kg	1	17	21.00	1000.00	234.41	98.00	306.23	0	NR	2500	Hydrock Derived	150	73	N/A	21	21	98
Lead	mg/kg	1	17	45.00	830.00	268.82	190.00	245.75	8	NR	200	C4SL - CL:AIRE 2014	370	600	N/A	45	62	280
Mercury, inorganic	mg/kg	0.3	17	0.30	2.40	0.52	0.30	0.54	0	NR	40	Hydrock Derived	1	0.5	N/A	<0.3	<0.3	1
Nickel	mg/kg	1	17	24.00	150.00	56.18	46.00	32.09	1	NR	130	Hydrock Derived	63	55	N/A	29	27	30
Selenium	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	<1	<1	N/A	<1	<1	<1
Vanadium	mg/kg	1	17	36.00	140.00	82.88	78.00	29.27	0	NR	410	Hydrock Derived	36	44	N/A	78	73	58
Zinc	mg/kg	1	17	110.00	6500.00	1050.00	340.00	1679.11	1	NR	3900	Hydrock Derived	560	280	N/A	110	130	550
Cyanide (free)	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	N/A	<1	<1	<1
Total Phenols (Monohydric)	mg/kg	1	17	1.00	1.00	1.00	1.00	0.00	0	NR	38058	Hydrock Derived	<1	<1	N/A	<1	<1	<1
Acenaphthene	mg/kg	0.05	17	0.05	0.95	0.12	0.05	0.23	0	NR	141	Hydrock Derived	0.4	<0.05	N/A	<0.05	<0.05	<0.05
Acenaphthylene	mg/kg	0.05	17	0.05	0.58	0.08	0.05	0.13	0	NR	212	Hydrock Derived	<0.05	<0.05	N/A	<0.05	<0.05	<0.05
Anthracene	mg/kg	0.05	17	0.05	3.70	0.34	0.05	0.89	0	NR	5500	Hydrock Derived	<0.05	<0.05	N/A	<0.05	<0.05	<0.05
Benz(a)anthracene	mg/kg	0.05	17	0.05	12.00	1.26	0.39	2.84	1	NR	4.28	Hydrock Derived	<0.05	0.39	N/A	<0.05	0.44	1.4
Benzo(a)pyrene	mg/kg	0.05	17	0.05	8.50	0.99	0.39	2.00	1	NR	2.28	C4SL - CL:AIRE 2014	<0.05	0.33	N/A	<0.05	0.39	1.2
Benzo(b)fluoranthene	mg/kg	0.05	17	0.05	9.70	1.16	0.49	2.28	1	NR	3.04	Hydrock Derived	<0.05	0.36	N/A	<0.05	0.49	1.4
Benzo(ghi)perylene	mg/kg	0.05	17	0.05	5.70	0.67	0.27	1.34	0	NR	0.04	Hydrock Derived	<0.05	<0.05	N/A	<0.05	<0.05	0.77
Benzo(k)fluoranthene	mg/kg	0.05	17	0.05	4.60	0.54	0.26	1.07	0	NR	1.72	Hydrock Derived	<0.05	0.26	N/A	<0.05	0.2	0.75
Chrysene	mg/kg	0.05	17	0.05	8.80	0.97	0.39	2.07	0	NR	1.10	Hydrock Derived	<0.05	0.39	N/A	<0.05	0.41	0.94
Dibenz(ah)anthracene	mg/kg	0.05	17	0.05	1.60	0.18	0.05	0.38	2	NR	0.010	Hydrock Derived	<0.05	<0.05	N/A	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	17	0.05	21.00	2.19	0.92	4.92	0	NR	47	Hydrock Derived	0.64	0.72	N/A	<0.05	0.52	2
Fluorene	mg/kg	0.05	17	0.05	1.60	0.15	0.05	0.38	0	NR	77	Hydrock Derived	0.2	<0.05	N/A	<0.05	<0.05	<0.05
Indeno(123cd)pyrene	mg/kg	0.05	17	0.05	5.20	0.61	0.24	1.23	0	NR	0.15	Hydrock Derived	<0.05	<0.05	N/A	<0.05	<0.05	0.67
Naphthalene	mg/kg	0.05	17	0.05	0.05	0.05	0.05	0.00	0	NR	183	Hydrock Derived	<0.05	<0.05	N/A	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	17	0.05	11.00	1.14	0.35	2.61	0	NR	90	Hydrock Derived	0.35	<0.05	N/A	<0.05	<0.05	0.66
Pyrene	mg/kg	0.05	17	0.05	17.00	1.90	0.79	3.97	0	NR	5.5	Hydrock Derived	0.72	0.67	N/A	<0.05	0.55	2

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (2.5%SOM)			
<b>Client:</b>	Oxford University Developments Ltd			
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>		
<b>Job no.:</b>	19114	Zone		Landfill
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata		LF
		Depth Min (m bgl)		0.1
		Depth Max (m bgl)	3.8	
All values in mg/kg unless otherwise stated		Dataset mean SOM%	4.41	
		Scenario SOM%	2.5	

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	19/08/21	19/08/21	19/08/21	19/08/21	19/08/21	19/08/21
													Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
<b>TPH fractions</b>													WS06	WS07	WS08	WS09	WS10	
													1.8	2.3	3.4	2.5	3	0.6
TPH ali EC05-EC06	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	558	78	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
TPH ali >EC06-EC08	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	322	230	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
TPH ali >EC08-EC10	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.000	0	190	65	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
TPH ali >EC10-EC12	mg/kg	1	12	1.00	1.80	1.09	1.00	0.24	0	118	330	Hydrock Derived	<1	<1	N/A	<1	N/A	
TPH ali >EC12-EC16	mg/kg	2	12	2.00	15.00	4.38	2.00	4.16	0	59	2400	Hydrock Derived	<2	<2	N/A	<2	N/A	
TPH ali >EC16-EC35	mg/kg	10	12	10.00	970.00	170.42	46.00	279.75	0	21	92000	Hydrock Derived	63	<10	N/A	<10	N/A	
TPH ali >EC35-EC44	mg/kg	8.4	12	8.40	340.00	60.83	14.00	96.88	0	21	92000	Hydrock Derived	11	<8.4	N/A	<8.4	N/A	
TPH aro EC05-EC07	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	2265	150	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
TPH aro >EC07-EC08	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1916	300	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
TPH aro >EC08-EC10	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1503	84	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
TPH aro >EC10-EC12	mg/kg	1	12	1.00	5.10	1.34	1.00	1.18	0	899	180	Hydrock Derived	<1	<1	N/A	<1	N/A	
TPH aro >EC12-EC16	mg/kg	2	12	2.00	110.00	11.40	2.00	31.08	0	419	330	Hydrock Derived	<2	<2	N/A	<2	N/A	
TPH aro >EC16-EC21	mg/kg	10	12	10.00	600.00	64.42	11.00	169.10	1	134	540	Hydrock Derived	17	<10	N/A	<10	N/A	
TPH aro >EC21-EC35	mg/kg	10	12	10.00	620.00	120.25	53.00	183.25	0	12	1500	Hydrock Derived	74	<10	N/A	<10	N/A	
TPH aro >EC35-EC44	mg/kg	8.4	12	8.40	230.00	48.49	12.95	70.61	0	12	1500	Hydrock Derived	9.9	<8.4	N/A	<8.4	N/A	
<b>VOCs - BTEX &amp; MTBE</b>																		
Benzene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	2265	0.41	C4SL - CL:AIRE 2014	<0.001	<0.001	N/A	<0.001	N/A	
Toluene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1916	300	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
Ethylbenzene	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1216	110	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
Xylene, o-	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1120	140	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
Xylene, p- (use this for combined m & p)	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	1353	130	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
MTBE	mg/kg	0.001	12	0.00	0.00	0.00	0.00	0.00	0	33075	110	Hydrock Derived	<0.001	<0.001	N/A	<0.001	N/A	
<b>TPH Additivity Check</b>																		
<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>																		
													1.282E-05	1.282E-05		1.282E-05		
													4.348E-06	4.348E-06		4.348E-06		
Considered additive													1.538E-05	1.538E-05		1.538E-05		
													0.0030303	0.0030303		0.0030303		
													0.0008333	0.0008333		0.0008333		
													0.0006848	0.0001087		0.0001087		
													0.0001196	9.13E-05		9.13E-05		
													6.667E-06	6.667E-06		6.667E-06		
													3.333E-06	3.333E-06		3.333E-06		
Considered additive													1.19E-05	1.19E-05		1.19E-05		
													0.0055556	0.0055556		0.0055556		
													0.0060606	0.0060606		0.0060606		
Considered additive													0.0314815	0.0185185		0.0185185		
													0.0493333	0.0066667		0.0066667		
													0.0066	0.0056		0.0056		

## Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (2.5%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	Zone <b>Landfill</b>
<b>Job no.:</b>	19114	Strata	LF
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Depth Min (m bgl)	<b>0.1</b>
		Depth Max (m bgl)	<b>3.8</b>
	All values in mg/kg unless otherwise stated	Dataset mean SOM%	<b>4.41</b>
		Scenario SOM%	<b>2.5</b>



19/08/21	19/08/21	19/08/21	19/08/21	19/08/21	19/08/21
Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
WS06	WS07	WS08	WS09	WS09	WS10
1.8	2.3	3.4	2.5	3	0.6

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	LF	LF	LF	LF	LF	LF
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Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.													Hazard I	0.003879	0.003879		0.003879				
													Hazard In	0.011628	0.011628		0.011628				
													Hazard Ind	0.080815	0.025185		0.025185				

<b>Legend:</b>	MG	Made Ground	<b>&lt;0.02</b>	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
	HH	Hole Heath Sand and Gravel	<b>0.02</b>	Value greater than, or equal to, the generic assessment criterion (GAC).
	XX	XX Other Codes	<b>*&lt;10</b>	Value excluded from statistical analysis
	TS	Topsoil	<b>Y</b>	Text result
	NAT	Natural	<b>-</b>	Represents a determinand that was not tested.
			<b>+</b>	represents a data point that is not included in the current filter settings

# Assessment of Chemicals of Potential Concern to Human Health



Risk parameter:		Default - Human Health - POSresi (2.5%SOM)																
Client:		Oxford University Developments Ltd											Data Filters					
Site:		Begbroke Science Park											Zone Landfill					
Job no.:		19114											Strata MG-TS					
Lab. report no(s).:		22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372											Depth Min (m bgl) 0.1					
													Depth Max (m bgl) 3.8					
All values in mg/kg unless otherwise stated													Dataset mean SOM% 5.73					
													Scenario SOM% 2.5					
CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	Date	20/08/21	18/08/21	18/08/21	19/08/21
														Zone	Landfill	Landfill	Landfill	Landfill
														Location	TP07	WS01	WS02	WS10
														Depth (m bgl)	0.1	0.1	0.2	0.2
														Strata	MG-TS	MG-TS	MG-TS	MG-TS
-	<b>Asbestos</b>																	
P1020	Asbestos Identified	Y/N	Y/N	4	-	-	-	-	No. of detects:	0	-	-	-		N	N	N	N
-	<b>Hydrock Default Suite - FOC / SOM / pH</b>																	
P1085	FOC (dimensionless)	[]	0.001	4	0.016	0.052	0.033	0.033	0.01	-	-	-	-		0.032	0.033	0.052	0.016
-	SOM (calculated)	%	0.1724	4	2.76	8.96	5.73	5.60	2.54	-	-	-	-		5.5168	5.6892	8.9648	2.7584
P1334	pH (su)	pH Units	0	4	7.90	8.10	8.03	8.05	0.10	-	-	-	-		8	8.1	8.1	7.9
-	<b>Hydrock Default Suite - Metals &amp; PAH</b>																	
7440-38-2	Arsenic	mg/kg	1	4	21.00	75.00	39.25	30.50	24.25	0	NR	79	C4SL - CL:AIRE 2014		75	21	30	31
7440-41-7	Beryllium	mg/kg	0.06	4	0.06	8.20	2.99	1.85	3.57	1	NR	2.2	Hydrock Derived		8.2	1.9	1.8	<0.06
7440-42-8	Boron	mg/kg	0.2	4	1.20	3.30	2.15	2.05	0.97	0	NR	21000	Hydrock Derived		3.3	2.6	1.5	1.2
7440-43-9	Cadmium	mg/kg	0.2	4	0.20	0.20	0.20	0.20	0.00	0	NR	220	C4SL - CL:AIRE 2014		<0.2	<0.2	<0.2	<0.2
16065-83-1	Chromium (III)	mg/kg	1	4	1.00	72.00	35.25	34.00	29.31	0	NR	1500	Hydrock Derived		72	29	39	<1
18540-29-9	Chromium (VI)	mg/kg	1.2	4	1.20	1.20	1.20	1.20	0.00	0	NR	23	C4SL - CL:AIRE 2014		<1.2	<1.2	<1.2	<1.2
7440-47-3	Chromium (Total)	mg/kg	1	4	1.00	72.00	35.50	34.50	29.35	0	NR	-	-		72	29	40	<1
7440-50-8	Copper	mg/kg	1	4	1.00	780.00	221.00	51.50	373.92	0	NR	12000	Hydrock Derived		780	28	75	<1
7439-92-1	Lead	mg/kg	1	4	31.00	430.00	202.50	174.50	187.08	0	NR	630	C4SL - CL:AIRE 2014		430	69	280	31
7439-97-6	Mercury, inorganic	mg/kg	0.3	4	0.30	0.50	0.35	0.30	0.10	0	NR	120	Hydrock Derived		0.5	<0.3	<0.3	<0.3
7440-02-0	Nickel	mg/kg	1	4	19.00	88.00	47.50	41.50	34.34	0	NR	230	Hydrock Derived		88	19	64	19
7782-49-2	Selenium	mg/kg	1	4	1.00	1.00	1.00	1.00	0.00	0	NR	1100	Hydrock Derived		<1	<1	<1	<1
7440-62-2	Vanadium	mg/kg	1	4	47.00	160.00	84.75	66.00	52.61	0	NR	2000	Hydrock Derived		160	50	82	47
7440-66-6	Zinc	mg/kg	1	4	1.00	570.00	250.25	215.00	241.73	0	NR	81000	Hydrock Derived		570	150	280	<1
P1095	Cyanide (free)	mg/kg	1	4	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020		<1	<1	<1	<1
P1186	Total Phenols (Monohydric)	mg/kg	1	4	1.00	1.00	1.00	1.00	0.00	0	38058	690	Hydrock Derived		<1	<1	<1	<1
83-32-9	Acenaphthene	mg/kg	0.05	4	0.05	0.26	0.10	0.05	0.11	0	141	15000	Hydrock Derived		<0.05	<0.05	0.26	<0.05
208-96-8	Acenaphthylene	mg/kg	0.05	4	0.05	1.10	0.31	0.05	0.53	0	212	15000	Hydrock Derived		<0.05	<0.05	1.1	<0.05
120-12-7	Anthracene	mg/kg	0.05	4	0.05	1.40	0.39	0.05	0.68	0	2.91	74000	Hydrock Derived		<0.05	<0.05	1.4	<0.05
56-55-3	Benzo(a)anthracene	mg/kg	0.05	4	0.05	2.70	0.92	0.47	1.21	0	4.28	29	Hydrock Derived		<0.05	0.61	2.7	0.33
50-32-8	Benzo(a)pyrene	mg/kg	0.05	4	0.05	4.90	1.46	0.45	2.31	0	2.28	10	C4SL - CL:AIRE 2014		<0.05	0.62	4.9	0.27
205-99-2	Benzo(b)fluoranthene	mg/kg	0.05	4	0.05	5.50	1.69	0.60	2.56	0	3.04	7.2	Hydrock Derived		<0.05	0.75	5.5	0.44
191-24-2	Benzo(ghi)perylene	mg/kg	0.05	4	0.05	8.90	2.40	0.33	4.34	0	0.04	640	Hydrock Derived		<0.05	0.61	8.9	<0.05
207-08-9	Benzo(k)fluoranthene	mg/kg	0.05	4	0.05	1.40	0.52	0.31	0.60	0	1.72	190	Hydrock Derived		<0.05	0.33	1.4	0.29
218-01-9	Chrysene	mg/kg	0.05	4	0.05	2.20	0.81	0.50	0.95	0	1.10	57	Hydrock Derived		<0.05	0.6	2.2	0.39
53-70-3	Dibenz(ah)anthracene	mg/kg	0.05	4	0.05	1.40	0.39	0.05	0.68	1	0.010	0.57	Hydrock Derived		<0.05	<0.05	1.4	<0.05
206-44-0	Fluoranthene	mg/kg	0.05	4	0.05	3.90	1.34	0.71	1.74	0	47	3100	Hydrock Derived		<0.05	0.94	3.9	0.47
86-73-7	Fluorene	mg/kg	0.05	4	0.05	0.31	0.12	0.05	0.13	0	77	9900	Hydrock Derived		<0.05	<0.05	0.31	<0.05
193-39-5	Indeno(123cd)pyrene	mg/kg	0.05	4	0.05	6.20	1.71	0.29	3.00	0	0.15	82	Hydrock Derived		<0.05	0.53	6.2	<0.05
91-20-3	Naphthalene	mg/kg	0.05	4	0.05	0.05	0.05	0.05	0.00	0	183	4100	Hydrock Derived		<0.05	<0.05	<0.05	<0.05
85-01-8	Phenanthrene	mg/kg	0.05	4	0.05	2.00	0.60	0.17	0.94	0	90	3100	Hydrock Derived		<0.05	0.29	2	<0.05
129-00-0	Pyrene	mg/kg	0.05	4	0.05	3.60	1.27	0.72	1.59	0	5.5	7400	Hydrock Derived		<0.05	0.9	3.6	0.53

# Assessment of Chemicals of Potential Concern to Human Health



Risk parameter: Default - Human Health - POSresi (2.5%SOM)																		
Client: Oxford University Developments Ltd																		
Site: Begbroke Science Park																		
Job no.: 19114																		
Lab. report no(s): 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372																		
Data Filters																		
Zone Landfill																		
Strata MG-TS																		
Depth Min (m bgl) 0.1																		
Depth Max (m bgl) 3.8																		
All values in mg/kg unless otherwise stated																		
Dataset mean SOM% 5.73																		
Scenario SOM% 2.5																		
Hydrock																		
Date																		
Zone																		
Location																		
Depth (m bgl)																		
Strata																		
MG-TS																		
MG-TS																		
MG-TS																		
MG-TS																		
CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	Strata	MG-TS	MG-TS	MG-TS	MG-TS
-	<b>TPH fractions</b>																	
P1407	TPH ali EC05-EC06	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	558	590000	Hydrock Derived		<0.001	N/A	N/A	N/A
P1408	TPH ali >EC06-EC08	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	322	610000	Hydrock Derived		<0.001	N/A	N/A	N/A
P1409	TPH ali >EC08-EC10	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	190	13000	Hydrock Derived		<0.001	N/A	N/A	N/A
P1410	TPH ali >EC10-EC12	mg/kg	1	1	1.00	1.00	1.00	1.00	-	0	118	13000	Hydrock Derived		<1	N/A	N/A	N/A
P1411	TPH ali >EC12-EC16	mg/kg	2	1	2.00	2.00	2.00	2.00	-	0	59	13000	Hydrock Derived		<2	N/A	N/A	N/A
P1938	TPH ali >EC16-EC35	mg/kg	10	1	10.00	10.00	10.00	10.00	-	0	21	250000	Hydrock Derived		<10	N/A	N/A	N/A
P1415	TPH ali >EC35-EC44	mg/kg	8.4	1	8.40	8.40	8.40	8.40	-	0	21	250000	Hydrock Derived		<8.4	N/A	N/A	N/A
P1441	TPH aro EC05-EC07	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	2265	56000	Hydrock Derived		<0.001	N/A	N/A	N/A
P1355	TPH aro >EC07-EC08	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	1916	56000	Hydrock Derived		<0.001	N/A	N/A	N/A
P1356	TPH aro >EC08-EC10	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	1503	5000	Hydrock Derived		<0.001	N/A	N/A	N/A
P1357	TPH aro >EC10-EC12	mg/kg	1	1	1.00	1.00	1.00	1.00	-	0	899	5000	Hydrock Derived		<1	N/A	N/A	N/A
P1358	TPH aro >EC12-EC16	mg/kg	2	1	2.00	2.00	2.00	2.00	-	0	419	5000	Hydrock Derived		<2	N/A	N/A	N/A
P1359	TPH aro >EC16-EC21	mg/kg	10	1	10.00	10.00	10.00	10.00	-	0	134	3800	Hydrock Derived		<10	N/A	N/A	N/A
P1360	TPH aro >EC21-EC35	mg/kg	10	1	10.00	10.00	10.00	10.00	-	0	12	3800	Hydrock Derived		<10	N/A	N/A	N/A
P1362	TPH aro >EC35-EC44	mg/kg	8.4	1	8.40	8.40	8.40	8.40	-	0	12	3800	Hydrock Derived		<8.4	N/A	N/A	N/A
-	<b>VOCs - BTEX &amp; MTBE</b>																	
71-43-2	Benzene	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	2265	140	C4SL - CL:AIRE 2014		<0.001	N/A	N/A	N/A
108-88-3	Toluene	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	1916	56000	Hydrock Derived		<0.001	N/A	N/A	N/A
100-41-4	Ethylbenzene	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	1216	24000	Hydrock Derived		<0.001	N/A	N/A	N/A
95-47-6	Xylene, o-	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	1120	42000	Hydrock Derived		<0.001	N/A	N/A	N/A
1330-20-7	Xylene, p- (use this for combined m & p)	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	1353	42000	Hydrock Derived		<0.001	N/A	N/A	N/A
1634-04-4	MTBE	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	33075	75000	Hydrock Derived		<0.001	N/A	N/A	N/A
<b>TPH Additivity Check</b>														<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>				
														Aliphatics >EC5-EC6	1.695E-09			
														Aliphatics >EC6-EC8	1.639E-09			
Considered additive														Aliphatics >EC8-EC10	7.692E-08			
														Aliphatics >EC10-EC12	7.692E-05			
														Aliphatics >EC12-EC16	0.0001538			
														Aliphatics >EC16-EC35	0.00004			
														Aliphatics >EC35-EC44	0.0000336			
														Aromatics EC5-EC7	1.786E-08			
														Aromatics >EC7-EC8	1.786E-08			
Considered additive														Aromatics >EC8-EC10	0.0000002			
														Aromatics >EC10-EC12	0.0002			
														Aromatics >EC12-EC16	0.0004			
Considered additive														Aromatics >EC16-EC21	0.0026316			
														Aromatics >EC21-EC35	0.0026316			
														Aromatics >EC35-EC44	0.0022105			



# Assessment of Chemicals of Potential Concern to Human Health



**Risk parameter:** Default - Human Health - POSresi (2.5%SOM)

**Client:** Oxford University Developments Ltd

**Site:** Begbroke Science Park

**Job no.:** 19114

**Lab. report no(s).:** 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372

**Data Filters**

Zone: Landfill

Strata: MG-TS

Depth Min (m bgl): 0.1

Depth Max (m bgl): 3.8

All values in mg/kg unless otherwise stated      Dataset mean SOM%: 5.73      Scenario SOM%: 2.5

Date	20/08/21	18/08/21	18/08/21	19/08/21
Zone	Landfill	Landfill	Landfill	Landfill
Location	TP07	WS01	WS02	WS10
Depth (m bgl)	0.1	0.1	0.2	0.2

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	Strata	MG-TS	MG-TS	MG-TS	MG-TS	
Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.															<p style="color: blue; margin: 0;">Hazard Index for ali&gt;C8-C16: 0.000231</p> <p style="color: magenta; margin: 0;">Hazard Index for aro&gt;C8-C16: 0.0006</p> <p style="color: green; margin: 0;">Hazard Index for aro&gt;C16-C35: 0.005263</p>				
<b>Legend:</b>		MG	Made Ground	<0.02	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.														
		HH	Hole Heath Sand and Gravel	0.02	Value greater than, or equal to, the generic assessment criterion (GAC).														
		XX	XX Other Codes	*<10	Value excluded from statistical analysis														
		TS	Topsoil	Y	Text result														
		NAT	Natural	-	Represents a determinand that was not tested.														
				+	represents a data point that is not included in the current filter settings														

# Assessment of Chemicals of Potential Concern to Human Health



Risk parameter: <b>Default - Human Health - residential with home-grown produce (2.5%SOM)</b>																		
Client: Oxford University Developments Ltd																		
Site: Begbroke Science Park																		
Job no.: 19114																		
Lab. report no(s).: 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372																		
Data Filters																		
Zone: Landfill																		
Strata: MG-TS																		
Depth Min (m bgl): 0.1																		
Depth Max (m bgl): 3.8																		
All values in mg/kg unless otherwise stated																		
Dataset mean SOM%: 5.73																		
Scenario SOM%: 2.5																		
														Date	20/08/21	18/08/21	18/08/21	19/08/21
														Zone	Landfill	Landfill	Landfill	Landfill
														Location	TP07	WS01	WS02	WS10
														Depth (m bgl)	0.1	0.1	0.2	0.2
CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	Strata	MG-TS	MG-TS	MG-TS	MG-TS
-	<b>Asbestos</b>																	
P1020	Asbestos Identified	Y/N	Y/N	4	-	-	-	-	No. of detects:	0	-	-	-	N	N	N	N	
-	<b>Hydrock Default Suite - FOC / SOM / pH</b>																	
P1085	FOC (dimensionless)	[]	0.001	4	0.016	0.052	0.033	0.033	0.01	-	-	-	-	0.032	0.033	0.052	0.016	
-	SOM (calculated)	%	0.1724	4	2.76	8.96	5.73	5.60	2.54	-	-	-	-	5.5168	5.6892	8.9648	2.7584	
P1334	pH (su)	pH Units	0	4	7.90	8.10	8.03	8.05	0.10	-	-	-	-	8	8.1	8.1	7.9	
-	<b>Hydrock Default Suite - Metals &amp; PAH</b>																	
7440-38-2	Arsenic	mg/kg	1	4	21.00	75.00	39.25	30.50	24.25	1	NR	37	C4SL - CL:AIRE 2014	75	21	30	31	
7440-41-7	Beryllium	mg/kg	0.06	4	0.06	8.20	2.99	1.85	3.57	3	NR	1.7	Hydrock Derived	8.2	1.9	1.8	<0.06	
7440-42-8	Boron	mg/kg	0.2	4	1.20	3.30	2.15	2.05	0.97	0	NR	300	Hydrock Derived	3.3	2.6	1.5	1.2	
7440-43-9	Cadmium	mg/kg	0.2	4	0.20	0.20	0.20	0.20	0.00	0	NR	22	C4SL - CL:AIRE 2014	<0.2	<0.2	<0.2	<0.2	
16065-83-1	Chromium (III)	mg/kg	1	4	1.00	72.00	35.25	34.00	29.31	0	NR	890	Hydrock Derived	72	29	39	<1	
18540-29-9	Chromium (VI)	mg/kg	1.2	4	1.20	1.20	1.20	1.20	0.00	0	NR	21	C4SL - CL:AIRE 2014	<1.2	<1.2	<1.2	<1.2	
7440-47-3	Chromium (Total)	mg/kg	1	4	1.00	72.00	35.50	34.50	29.35	-	-	-	-	72	29	40	<1	
7440-50-8	Copper	mg/kg	1	4	1.00	780.00	221.00	51.50	373.92	0	NR	2500	Hydrock Derived	780	28	75	<1	
7439-92-1	Lead	mg/kg	1	4	31.00	430.00	202.50	174.50	187.08	2	NR	200	C4SL - CL:AIRE 2014	430	69	280	31	
7439-97-6	Mercury, inorganic	mg/kg	0.3	4	0.30	0.50	0.35	0.30	0.10	0	NR	40	Hydrock Derived	0.5	<0.3	<0.3	<0.3	
7440-02-0	Nickel	mg/kg	1	4	19.00	88.00	47.50	41.50	34.34	0	NR	130	Hydrock Derived	88	19	64	19	
7782-49-2	Selenium	mg/kg	1	4	1.00	1.00	1.00	1.00	0.00	0	NR	260	Hydrock Derived	<1	<1	<1	<1	
7440-62-2	Vanadium	mg/kg	1	4	47.00	160.00	84.75	66.00	52.61	0	NR	410	Hydrock Derived	160	50	82	47	
7440-66-6	Zinc	mg/kg	1	4	1.00	570.00	250.25	215.00	241.73	0	NR	3900	Hydrock Derived	570	150	280	<1	
P1095	Cyanide (free)	mg/kg	1	4	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	<1	<1	
P1186	Total Phenols (Monohydric)	mg/kg	1	4	1.00	1.00	1.00	1.00	0.00	0	38058	210	Hydrock Derived	<1	<1	<1	<1	
83-32-9	Acenaphthene	mg/kg	0.05	4	0.05	0.26	0.10	0.05	0.11	0	141	540	Hydrock Derived	<0.05	<0.05	0.26	<0.05	
208-96-8	Acenaphthylene	mg/kg	0.05	4	0.05	1.10	0.31	0.05	0.53	0	212	440	Hydrock Derived	<0.05	<0.05	1.1	<0.05	
120-12-7	Anthracene	mg/kg	0.05	4	0.05	1.40	0.39	0.05	0.68	0	2.91	5500	Hydrock Derived	<0.05	<0.05	1.4	<0.05	
56-55-3	Benzo(a)anthracene	mg/kg	0.05	4	0.05	2.70	0.92	0.47	1.21	0	4.28	12	Hydrock Derived	<0.05	0.61	2.7	0.33	
50-32-8	Benzo(a)pyrene	mg/kg	0.05	4	0.05	4.90	1.46	0.45	2.31	0	2.28	5	C4SL - CL:AIRE 2014	<0.05	0.62	4.9	0.27	
205-99-2	Benzo(b)fluoranthene	mg/kg	0.05	4	0.05	5.50	1.69	0.60	2.56	1	3.04	3.3	Hydrock Derived	<0.05	0.75	5.5	0.44	
191-24-2	Benzo(ghi)perylene	mg/kg	0.05	4	0.05	8.90	2.40	0.33	4.34	0	0.04	340	Hydrock Derived	<0.05	0.61	8.9	<0.05	
207-08-9	Benzo(k)fluoranthene	mg/kg	0.05	4	0.05	1.40	0.52	0.31	0.60	0	1.72	93	Hydrock Derived	<0.05	0.33	1.4	0.29	
218-01-9	Chrysene	mg/kg	0.05	4	0.05	2.20	0.81	0.50	0.95	0	1.10	22	Hydrock Derived	<0.05	0.6	2.2	0.39	
53-70-3	Dibenz(ah)anthracene	mg/kg	0.05	4	0.05	1.40	0.39	0.05	0.68	1	0.010	0.29	Hydrock Derived	<0.05	<0.05	1.4	<0.05	
206-44-0	Fluoranthene	mg/kg	0.05	4	0.05	3.90	1.34	0.71	1.74	0	47	560	Hydrock Derived	<0.05	0.94	3.9	0.47	
86-73-7	Fluorene	mg/kg	0.05	4	0.05	0.31	0.12	0.05	0.13	0	77	420	Hydrock Derived	<0.05	<0.05	0.31	<0.05	
193-39-5	Indeno(123cd)pyrene	mg/kg	0.05	4	0.05	6.20	1.71	0.29	3.00	0	0.15	36	Hydrock Derived	<0.05	0.53	6.2	<0.05	
91-20-3	Naphthalene	mg/kg	0.05	4	0.05	0.05	0.05	0.05	0.00	0	183	30	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	
85-01-8	Phenanthrene	mg/kg	0.05	4	0.05	2.00	0.60	0.17	0.94	0	90	220	Hydrock Derived	<0.05	0.29	2	<0.05	
129-00-0	Pyrene	mg/kg	0.05	4	0.05	3.60	1.27	0.72	1.59	0	5.5	1200	Hydrock Derived	<0.05	0.9	3.6	0.53	

# Assessment of Chemicals of Potential Concern to Human Health



Risk parameter: <b>Default - Human Health - residential with home-grown produce (2.5%SOM)</b> Client: Oxford University Developments Ltd Site: Begbroke Science Park Job no.: 19114 Lab. report no(s): 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372																																						
														Data Filters Zone <b>Landfill</b> Strata <b>MG-TS</b> Depth Min (m bgl) <b>0.1</b> Depth Max (m bgl) <b>3.8</b>																								
All values in mg/kg unless otherwise stated																																						
														Dataset mean SOM% <b>5.73</b> Scenario SOM% <b>2.5</b>																								
														<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Date</th> <th>20/08/21</th> <th>18/08/21</th> <th>18/08/21</th> <th>19/08/21</th> </tr> </thead> <tbody> <tr> <td>Zone</td> <td>Landfill</td> <td>Landfill</td> <td>Landfill</td> <td>Landfill</td> </tr> <tr> <td>Location</td> <td>TP07</td> <td>WS01</td> <td>WS02</td> <td>WS10</td> </tr> <tr> <td>Depth (m bgl)</td> <td>0.1</td> <td>0.1</td> <td>0.2</td> <td>0.2</td> </tr> </tbody> </table>					Date	20/08/21	18/08/21	18/08/21	19/08/21	Zone	Landfill	Landfill	Landfill	Landfill	Location	TP07	WS01	WS02	WS10	Depth (m bgl)	0.1	0.1	0.2	0.2
Date	20/08/21	18/08/21	18/08/21	19/08/21																																		
Zone	Landfill	Landfill	Landfill	Landfill																																		
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Depth (m bgl)	0.1	0.1	0.2	0.2																																		
CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	Strata	MG-TS	MG-TS	MG-TS	MG-TS																				
-	<b>TPH fractions</b>																																					
P1407	TPH ali EC05-EC06	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	558	78	Hydrock Derived		<0.001	N/A	N/A	N/A																				
P1408	TPH ali >EC06-EC08	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	322	230	Hydrock Derived		<0.001	N/A	N/A	N/A																				
P1409	TPH ali >EC08-EC10	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	190	65	Hydrock Derived		<0.001	N/A	N/A	N/A																				
P1410	TPH ali >EC10-EC12	mg/kg	1	1	1.00	1.00	1.00	1.00	-	0	118	330	Hydrock Derived		<1	N/A	N/A	N/A																				
P1411	TPH ali >EC12-EC16	mg/kg	2	1	2.00	2.00	2.00	2.00	-	0	59	2400	Hydrock Derived		<2	N/A	N/A	N/A																				
P1938	TPH ali >EC16-EC35	mg/kg	10	1	10.00	10.00	10.00	10.00	-	0	21	92000	Hydrock Derived		<10	N/A	N/A	N/A																				
P1415	TPH ali >EC35-EC44	mg/kg	8.4	1	8.40	8.40	8.40	8.40	-	0	21	92000	Hydrock Derived		<8.4	N/A	N/A	N/A																				
P1441	TPH aro EC05-EC07	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	2265	150	Hydrock Derived		<0.001	N/A	N/A	N/A																				
P1355	TPH aro >EC07-EC08	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	1916	300	Hydrock Derived		<0.001	N/A	N/A	N/A																				
P1356	TPH aro >EC08-EC10	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	1503	84	Hydrock Derived		<0.001	N/A	N/A	N/A																				
P1357	TPH aro >EC10-EC12	mg/kg	1	1	1.00	1.00	1.00	1.00	-	0	899	180	Hydrock Derived		<1	N/A	N/A	N/A																				
P1358	TPH aro >EC12-EC16	mg/kg	2	1	2.00	2.00	2.00	2.00	-	0	419	330	Hydrock Derived		<2	N/A	N/A	N/A																				
P1359	TPH aro >EC16-EC21	mg/kg	10	1	10.00	10.00	10.00	10.00	-	0	134	540	Hydrock Derived		<10	N/A	N/A	N/A																				
P1360	TPH aro >EC21-EC35	mg/kg	10	1	10.00	10.00	10.00	10.00	-	0	12	1500	Hydrock Derived		<10	N/A	N/A	N/A																				
P1362	TPH aro >EC35-EC44	mg/kg	8.4	1	8.40	8.40	8.40	8.40	-	0	12	1500	Hydrock Derived		<8.4	N/A	N/A	N/A																				
-	<b>VOCs - BTEX &amp; MTBE</b>																																					
71-43-2	Benzene	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	2265	0.41	C4SL - CL:AIRE 2014		<0.001	N/A	N/A	N/A																				
108-88-3	Toluene	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	1916	300	Hydrock Derived		<0.001	N/A	N/A	N/A																				
100-41-4	Ethylbenzene	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	1216	110	Hydrock Derived		<0.001	N/A	N/A	N/A																				
95-47-6	Xylene, o-	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	1120	140	Hydrock Derived		<0.001	N/A	N/A	N/A																				
1330-20-7	Xylene, p- (use this for combined m & p)	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	1353	130	Hydrock Derived		<0.001	N/A	N/A	N/A																				
1634-04-4	MTBE	mg/kg	0.001	1	0.00	0.00	0.00	0.00	-	0	33075	110	Hydrock Derived		<0.001	N/A	N/A	N/A																				
<b>TPH Additivity Check</b>														<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>																								
														Aliphatics >EC5-EC6 1.282E-05																								
														Aliphatics >EC6-EC8 4.348E-06																								
Considered additive														Aliphatics >EC8-EC10 1.538E-05																								
														Aliphatics >EC10-EC12 0.0030303																								
														Aliphatics >EC12-EC16 0.0008333																								
														Aliphatics >EC16-EC35 0.0001087																								
														Aliphatics >EC35-EC44 9.13E-05																								
														Aromatics EC5-EC7 6.667E-06																								
														Aromatics >EC7-EC8 3.333E-06																								
Considered additive														Aromatics >EC8-EC10 1.19E-05																								
														Aromatics >EC10-EC12 0.0055556																								
														Aromatics >EC12-EC16 0.0060606																								
														Aromatics >EC16-EC21 0.0185185																								
Considered additive														Aromatics >EC21-EC35 0.0066667																								
														Aromatics >EC35-EC44 0.0056																								

# Assessment of Chemicals of Potential Concern to Human Health



<b>Risk parameter:</b>	Default - Human Health - residential with home-grown produce (2.5%SOM)		
<b>Client:</b>	Oxford University Developments Ltd		
<b>Site:</b>	Begbroke Science Park	<b>Data Filters</b>	
<b>Job no.:</b>	19114	Zone <b>Landfill</b>	
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Strata <b>MG-TS</b>	
		Depth Min (m bgl) <b>0.1</b>	
		Depth Max (m bgl) <b>3.8</b>	
All values in mg/kg unless otherwise stated		Dataset mean SOM%	<b>5.73</b>
		Scenario SOM%	<b>2.5</b>

<b>Date</b>	20/08/21	18/08/21	18/08/21	19/08/21
<b>Zone</b>	Landfill	Landfill	Landfill	Landfill
<b>Location</b>	TP07	WS01	WS02	WS10
<b>Depth (m bgl)</b>	0.1	0.1	0.2	0.2

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	Strata	MG-TS	MG-TS	MG-TS	MG-TS
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Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.

Hazard Index for ali>C8-C16 **0.003879**

Hazard Index for aro>C8-C16 **0.011628**

Hazard Index for aro>C16-C35 **0.025185**

**Legend:**

MG	Made Ground	<span style="color: blue;">&lt;0.02</span>	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
HH	Hole Heath Sand and Gravel	<span style="background-color: orange; color: white;">0.02</span>	Value greater than, or equal to, the generic assessment criterion (GAC).
XX	XX Other Codes	<span style="background-color: orange; color: white;">*&lt;10</span>	Value excluded from statistical analysis
TS	Topsoil	<b>Y</b>	Text result
NAT	Natural	-	Represents a determinand that was not tested.
		+	represents a data point that is not included in the current filter settings

# Assessment of Chemicals of Potential Concern to Human Health



Risk parameter:		Default - Human Health - POSresi (2.5% SOM)																
Client:		Oxford University Developments Ltd																
Site:		Begbroke Science Park																
Job no.:		19114																
Lab. report no(s).:		22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372																
		Data Filters																
		Zone Landfill																
		Strata NAT																
		Depth Min (m bgl) 0.1																
		Depth Max (m bgl) 3.8																
All values in mg/kg unless otherwise stated										Dataset mean SOM%		1.21						
										Scenario SOM%		2.5						
		Date																
		20/08/21 18/08/21 18/08/21 19/08/21																
		Zone																
		Landfill Landfill Landfill Landfill																
		Location																
		TP02 WS02 WS05 WS09																
		Depth (m bgl)																
		3.3 0.8 3.8 3.8																
CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	Strata	NAT	NAT	NAT	NAT
-	<b>Asbestos</b>																	
P1020	Asbestos Identified	Y/N	Y/N	4	-	-	-	-	No. of detects:	0	-	-	-	N	N	N	N	
-	<b>Hydrock Default Suite - FOC / SOM / pH</b>																	
P1085	FOC (dimensionless)	[]	0.001	4	0.001	0.018	0.007	0.005	0.01	-	-	-	-	0.0041	0.0049	0.018	0.001	
-	SOM (calculated)	%	0.1724	4	0.17	3.10	1.21	0.78	1.30	-	-	-	-	0.70684	0.84476	3.1032	0.1724	
P1334	pH (su)	pH Units	0	4	8.00	8.70	8.30	8.25	0.32	-	-	-	-	8.7	8.1	8	8.4	
-	<b>Hydrock Default Suite - Metals &amp; PAH</b>																	
7440-38-2	Arsenic	mg/kg	1	4	25.00	84.00	55.00	55.50	28.88	1	NR	79	C4SL - CL:AIRE 2014	84	36	25	75	
7440-41-7	Beryllium	mg/kg	0.06	4	0.86	1.80	1.39	1.45	0.48	0	NR	2.2	Hydrock Derived	1.8	1.1	0.86	1.8	
7440-42-8	Boron	mg/kg	0.2	4	0.90	5.70	2.80	2.30	2.04	0	NR	21000	Hydrock Derived	2.2	0.9	5.7	2.4	
7440-43-9	Cadmium	mg/kg	0.2	4	0.20	0.20	0.20	0.20	0.00	0	NR	220	C4SL - CL:AIRE 2014	<0.2	<0.2	<0.2	<0.2	
16065-83-1	Chromium (III)	mg/kg	1	4	21.00	64.00	44.25	46.00	18.84	0	NR	1500	Hydrock Derived	54	38	21	64	
18540-29-9	Chromium (VI)	mg/kg	1.2	4	1.20	1.20	1.20	1.20	0.00	0	NR	23	C4SL - CL:AIRE 2014	<1.2	<1.2	<1.2	<1.2	
7440-47-3	Chromium (Total)	mg/kg	1	4	21.00	64.00	44.25	46.00	18.84	0	-	-	-	54	38	21	64	
7440-50-8	Copper	mg/kg	1	4	9.20	22.00	16.05	16.50	6.41	0	NR	12000	Hydrock Derived	22	12	21	9.2	
7439-92-1	Lead	mg/kg	1	4	16.00	88.00	36.75	21.50	34.33	0	NR	630	C4SL - CL:AIRE 2014	24	19	88	16	
7439-97-6	Mercury, inorganic	mg/kg	0.3	4	0.30	0.30	0.30	0.30	0.00	0	NR	120	Hydrock Derived	<0.3	<0.3	<0.3	<0.3	
7440-02-0	Nickel	mg/kg	1	4	22.00	57.00	36.75	34.00	16.03	0	NR	230	Hydrock Derived	57	26	22	42	
7782-49-2	Selenium	mg/kg	1	4	1.00	1.00	1.00	1.00	0.00	0	NR	1100	Hydrock Derived	<1	<1	<1	<1	
7440-62-2	Vanadium	mg/kg	1	4	51.00	150.00	98.25	96.00	44.99	0	NR	2000	Hydrock Derived	150	72	51	120	
7440-66-6	Zinc	mg/kg	1	4	83.00	250.00	133.00	99.50	78.85	0	NR	81000	Hydrock Derived	250	89	83	110	
P1095	Cyanide (free)	mg/kg	1	4	1.00	1.00	1.00	1.00	0.00	0	NR	24	Acute Risk - SoBRA 2020	<1	<1	<1	<1	
P1186	Total Phenols (Monohydric)	mg/kg	1	4	1.00	1.00	1.00	1.00	0.00	0	38058	690	Hydrock Derived	<1	<1	<1	<1	
83-32-9	Acenaphthene	mg/kg	0.05	4	0.05	0.05	0.05	0.05	0.00	0	141	15000	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	
208-96-8	Acenaphthylene	mg/kg	0.05	4	0.05	0.29	0.11	0.05	0.12	0	212	15000	Hydrock Derived	<0.05	<0.05	0.29	<0.05	
120-12-7	Anthracene	mg/kg	0.05	4	0.05	0.51	0.17	0.05	0.23	0	2.91	74000	Hydrock Derived	<0.05	<0.05	0.51	<0.05	
56-55-3	Benzo(a)anthracene	mg/kg	0.05	4	0.05	3.10	0.81	0.05	1.53	0	4.28	29	Hydrock Derived	<0.05	<0.05	3.1	<0.05	
50-32-8	Benzo(a)pyrene	mg/kg	0.05	4	0.05	2.80	0.74	0.05	1.38	0	2.28	10	C4SL - CL:AIRE 2014	<0.05	<0.05	2.8	<0.05	
205-99-2	Benzo(b)fluoranthene	mg/kg	0.05	4	0.05	3.70	0.96	0.05	1.83	0	3.04	7.2	Hydrock Derived	<0.05	<0.05	3.7	<0.05	
191-24-2	Benzo(ghi)perylene	mg/kg	0.05	4	0.05	2.50	0.66	0.05	1.23	0	0.04	640	Hydrock Derived	<0.05	<0.05	2.5	<0.05	
207-08-9	Benzo(k)fluoranthene	mg/kg	0.05	4	0.05	1.20	0.34	0.05	0.58	0	1.72	190	Hydrock Derived	<0.05	<0.05	1.2	<0.05	
218-01-9	Chrysene	mg/kg	0.05	4	0.05	2.80	0.74	0.05	1.38	0	1.10	57	Hydrock Derived	<0.05	<0.05	2.8	<0.05	
53-70-3	Dibenz(ah)anthracene	mg/kg	0.05	4	0.05	0.60	0.19	0.05	0.28	1	0.010	0.57	Hydrock Derived	<0.05	<0.05	0.6	<0.05	
206-44-0	Fluoranthene	mg/kg	0.05	4	0.05	5.60	1.44	0.05	2.78	0	47	3100	Hydrock Derived	<0.05	<0.05	5.6	<0.05	
86-73-7	Fluorene	mg/kg	0.05	4	0.05	0.05	0.05	0.05	0.00	0	77	9900	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	
193-39-5	Indeno(123cd)pyrene	mg/kg	0.05	4	0.05	2.10	0.56	0.05	1.03	0	0.15	82	Hydrock Derived	<0.05	<0.05	2.1	<0.05	
91-20-3	Naphthalene	mg/kg	0.05	4	0.05	0.05	0.05	0.05	0.00	0	183	4100	Hydrock Derived	<0.05	<0.05	<0.05	<0.05	
85-01-8	Phenanthrene	mg/kg	0.05	4	0.05	2.20	0.59	0.05	1.08	0	90	3100	Hydrock Derived	<0.05	<0.05	2.2	<0.05	
129-00-0	Pyrene	mg/kg	0.05	4	0.05	5.20	1.34	0.05	2.58	0	5.5	7400	Hydrock Derived	<0.05	<0.05	5.2	<0.05	



# Assessment of Chemicals of Potential Concern to Human Health



Risk parameter: <b>Default - Human Health - POSresi (2.5%SOM)</b> Client: Oxford University Developments Ltd Site: Begbroke Science Park Job no.: 19114 Lab. report no(s): 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372																																						
														Data Filters Zone: <b>Landfill</b> Strata: <b>NAT</b> Depth Min (m bgl): <b>0.1</b> Depth Max (m bgl): <b>3.8</b>																								
All values in mg/kg unless otherwise stated																																						
														Dataset mean SOM% <b>1.21</b> Scenario SOM% <b>2.5</b>																								
														<table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th>Date</th> <th>20/08/21</th> <th>18/08/21</th> <th>18/08/21</th> <th>19/08/21</th> </tr> </thead> <tbody> <tr> <td>Zone</td> <td>Landfill</td> <td>Landfill</td> <td>Landfill</td> <td>Landfill</td> </tr> <tr> <td>Location</td> <td>TP02</td> <td>WS02</td> <td>WS05</td> <td>WS09</td> </tr> <tr> <td>Depth (m bgl)</td> <td>3.3</td> <td>0.8</td> <td>3.8</td> <td>3.8</td> </tr> </tbody> </table>					Date	20/08/21	18/08/21	18/08/21	19/08/21	Zone	Landfill	Landfill	Landfill	Landfill	Location	TP02	WS02	WS05	WS09	Depth (m bgl)	3.3	0.8	3.8	3.8
Date	20/08/21	18/08/21	18/08/21	19/08/21																																		
Zone	Landfill	Landfill	Landfill	Landfill																																		
Location	TP02	WS02	WS05	WS09																																		
Depth (m bgl)	3.3	0.8	3.8	3.8																																		
CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	Strata	NAT	NAT	NAT	NAT																				
-	<b>TPH fractions</b>																																					
P1407	TPH ali EC05-EC06	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	558	590000	Hydrock Derived		<0.001	<0.001	N/A	N/A																				
P1408	TPH ali >EC06-EC08	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	322	610000	Hydrock Derived		<0.001	<0.001	N/A	N/A																				
P1409	TPH ali >EC08-EC10	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.000	0	190	13000	Hydrock Derived		<0.001	<0.001	N/A	N/A																				
P1410	TPH ali >EC10-EC12	mg/kg	1	2	1.00	1.00	1.00	1.00	0.00	0	118	13000	Hydrock Derived		<1	<1	N/A	N/A																				
P1411	TPH ali >EC12-EC16	mg/kg	2	2	2.00	2.00	2.00	2.00	0.00	0	59	13000	Hydrock Derived		<2	<2	N/A	N/A																				
P1938	TPH ali >EC16-EC35	mg/kg	10	2	10.00	39.00	24.50	24.50	20.51	0	21	250000	Hydrock Derived		39	<10	N/A	N/A																				
P1415	TPH ali >EC35-EC44	mg/kg	8.4	2	8.40	28.00	18.20	18.20	13.86	0	21	250000	Hydrock Derived		28	<8.4	N/A	N/A																				
P1441	TPH aro EC05-EC07	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	2265	56000	Hydrock Derived		<0.001	<0.001	N/A	N/A																				
P1355	TPH aro >EC07-EC08	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	1916	56000	Hydrock Derived		<0.001	<0.001	N/A	N/A																				
P1356	TPH aro >EC08-EC10	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	1503	5000	Hydrock Derived		<0.001	<0.001	N/A	N/A																				
P1357	TPH aro >EC10-EC12	mg/kg	1	2	1.00	1.00	1.00	1.00	0.00	0	899	5000	Hydrock Derived		<1	<1	N/A	N/A																				
P1358	TPH aro >EC12-EC16	mg/kg	2	2	2.00	2.00	2.00	2.00	0.00	0	419	5000	Hydrock Derived		<2	<2	N/A	N/A																				
P1359	TPH aro >EC16-EC21	mg/kg	10	2	10.00	10.00	10.00	10.00	0.00	0	134	3800	Hydrock Derived		<10	<10	N/A	N/A																				
P1360	TPH aro >EC21-EC35	mg/kg	10	2	10.00	25.00	17.50	17.50	10.61	0	12	3800	Hydrock Derived		25	<10	N/A	N/A																				
P1362	TPH aro >EC35-EC44	mg/kg	8.4	2	8.40	13.00	10.70	10.70	3.25	0	12	3800	Hydrock Derived		13	<8.4	N/A	N/A																				
-	<b>VOCs - BTEX &amp; MTBE</b>																																					
71-43-2	Benzene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	2265	140	C4SL - CL:AIRE 2014		<0.001	<0.001	N/A	N/A																				
108-88-3	Toluene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	1916	56000	Hydrock Derived		<0.001	<0.001	N/A	N/A																				
100-41-4	Ethylbenzene	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	1216	24000	Hydrock Derived		<0.001	<0.001	N/A	N/A																				
95-47-6	Xylene, o-	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	1120	42000	Hydrock Derived		<0.001	<0.001	N/A	N/A																				
1330-20-7	Xylene, p- (use this for combined m & p)	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	1353	42000	Hydrock Derived		<0.001	<0.001	N/A	N/A																				
1634-04-4	MTBE	mg/kg	0.001	2	0.00	0.00	0.00	0.00	0.00	0	33075	75000	Hydrock Derived		<0.001	<0.001	N/A	N/A																				
<b>TPH Additivity Check</b>														<b>HAZARD QUOTIENTS FOR EACH FRACTION</b>																								
														Aliphatics >EC5-EC6 1.695E-09 1.695E-09																								
														Aliphatics >EC6-EC8 1.639E-09 1.639E-09																								
Considered additive														Aliphatics >EC8-EC10 7.692E-08 7.692E-08																								
														Aliphatics >EC10-EC12 7.692E-05 7.692E-05																								
														Aliphatics >EC12-EC16 0.0001538 0.0001538																								
														Aliphatics >EC16-EC35 0.000156 0.00004																								
														Aliphatics >EC35-EC44 0.000112 0.0000336																								
														Aromatics EC5-EC7 1.786E-08 1.786E-08																								
														Aromatics >EC7-EC8 1.786E-08 1.786E-08																								
Considered additive														Aromatics >EC8-EC10 0.0000002 0.0000002																								
														Aromatics >EC10-EC12 0.0002 0.0002																								
														Aromatics >EC12-EC16 0.0004 0.0004																								
Considered additive														Aromatics >EC16-EC21 0.0026316 0.0026316																								
														Aromatics >EC21-EC35 0.0065789 0.0026316																								
														Aromatics >EC35-EC44 0.0034211 0.0022105																								

# Assessment of Chemicals of Potential Concern to Human Health



**Risk parameter:** Default - Human Health - POSresi (2.5%SOM)

**Client:** Oxford University Developments Ltd

**Site:** Begbroke Science Park

**Job no.:** 19114

**Lab. report no(s).:** 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372

**Data Filters**

Zone: **Landfill**

Strata: **NAT**

Depth Min (m bgl): **0.1**

Depth Max (m bgl): **3.8**

All values in mg/kg unless otherwise stated

Dataset mean SOM%: **1.21**  
Scenario SOM%: **2.5**

Date	20/08/21	18/08/21	18/08/21	19/08/21
Zone	Landfill	Landfill	Landfill	Landfill
Location	TP02	WS02	WS05	WS09
Depth (m bgl)	3.3	0.8	3.8	3.8

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	Soil Saturation Limit @2.5% SOM	GAC	GAC Source	Strata	NAT	NAT	NAT	NAT
Hazard Index table - HI or HQ greater than 1 highlighted with orange shading.																		
Hazard Index for ali>C8-C16: <b>0.000231</b> <b>0.000231</b>																		
Hazard Index for aro>C8-C16: <b>0.0006</b> <b>0.0006</b>																		
Hazard Index for aro>C16-C35: <b>0.009211</b> <b>0.005263</b>																		
<b>Legend:</b>		MG	Made Ground	<0.02	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.													
		HH	Hole Heath Sand and Gravel	0.02	Value greater than, or equal to, the generic assessment criterion (GAC).													
		XX	XX Other Codes	*<10	Value excluded from statistical analysis													
		TS	Topsoil	Y	Text result													
		NAT	Natural	-	Represents a determinand that was not tested.													
				+	represents a data point that is not included in the current filter settings													

*Phytotoxic GQRA*

# Assessment of Chemicals of Potential Concern to Plant Life



<b>Risk parameter:</b>	Phytotoxic pH 7
<b>Client:</b>	Oxford University Developments Ltd
<b>Site:</b>	Begbroke Science Park
<b>Job no.:</b>	19114
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372
	All values in mg/kg unless otherwise stated

<b>Data Filters</b>	
Zone	S
Strata	NAT
Depth Min (m bgl)	0.1
Depth Max (m bgl)	3.8
Dataset mean pH	8.02
Scenario pH	7

Date	02/09/22	01/09/22	25/08/22	09/09/22	08/09/22	08/09/22	08/09/22	08/09/22	30/08/22
Zone	S	S	S	S	S	S	S	S	S
Location	BH203	BH205	HP208	TP201	TP214	TP217	TP224	WS202	
Depth (m bgl)	0.5	0.4	0.8	0.7	0.5	0.4	0.5	1.1	



CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	Strata	NAT	NAT	NAT	NAT	NAT	NAT	NAT	NAT	
-	<b>Hydrock Default Suite - FOC / SOM / pH</b>																					
P1334	pH (su)	pH Units	0	25	7.50	8.50	8.02	8.00	0.25		-	-		7.5	8.5	7.8	8.4	7.9	8.3	7.9	8.2	
-	<b>Hydrock Default Suite - Metals &amp; PAH</b>																					
7440-38-2	Arsenic	mg/kg	1	25	16.00	93.00	48.28	48.00	20.54	0	250	MAFF 1998		31	49	27	83	64	78	29	48	
7440-42-8	Boron	mg/kg	0.2	25	0.20	2.00	0.66	0.50	0.53	0	5	Nable, et al. 1997		1.1	0.6	0.7	0.2	0.3	0.2	0.8	0.7	
16065-83-1	Chromium (III)	mg/kg	1	25	20.00	100.00	50.32	49.00	15.14	0	400	MAFF 1998 (Cr(T))		38	49	20	66	64	55	45	48	
18540-29-9	Chromium (VI)	mg/kg	1.2	25	1.80	5.50	1.95	1.80	0.74	0	25	ICRCL 70/90 1990		<1.8	<1.8	5.5	<1.8	<1.8	<1.8	<1.8	<1.8	
7440-50-8	Copper	mg/kg	1	25	8.50	25.00	14.92	15.00	4.56	0	135	BS3882 2015		10	15	22	17	21	12	16	18	
7440-02-0	Nickel	mg/kg	1	25	20.00	58.00	36.28	37.00	11.21	0	75	BS3882 2015		25	42	24	48	41	30	23	49	
7440-66-6	Zinc	mg/kg	1	25	41.00	130.00	81.88	83.00	26.25	0	300	BS3882 2015		74	73	120	130	94	80	62	87	

<b>Legend:</b>	MG Made Ground HH Hole Heath Sand and Gravel XX XX Other Codes TS Topsoil NAT Natural	<0.02 0.02 *<10 y - +	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate. Value greater than, or equal to, the generic assessment criterion (GAC). Value excluded from statistical analysis Text result Represents a determinand that was not tested. represents a data point that is not included in the current filter settings
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## Assessment of Chemicals of Potential Concern to Plant Life



Risk parameter: <span style="background-color: #cccccc; padding: 2px;">Phytotoxic pH 7</span> Client: Oxford University Developments Ltd Site: Begbroke Science Park Job no.: 19114 Lab. report no(s).: 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372 All values in mg/kg unless otherwise stated											Data Filters Zone <span style="background-color: #cccccc; padding: 2px;">S</span> Strata <span style="background-color: #cccccc; padding: 2px;">NAT</span> Depth Min (m bgl) <span style="background-color: #cccccc; padding: 2px;">0.1</span> Depth Max (m bgl) <span style="background-color: #cccccc; padding: 2px;">3.8</span> Dataset mean pH <span style="background-color: #cccccc; padding: 2px;">8.02</span> Scenario pH <span style="background-color: #cccccc; padding: 2px;">7</span>											
											Hydrock											
											23/08/22	22/08/22	25/08/22	22/08/22	30/08/22	24/08/22	31/08/22	23/08/22	08/09/22	31/08/22	02/09/22	
											S	S	S	S	S	S	S	S	S	S	S	
											WS204	WS205	WS208	WS213	WS216	WS218	WS225	WS227	WS233	WS238	WS243	
											0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.7	0.5	0.6	0.4	
Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	NAT	NAT	NAT	NAT	NAT	NAT	NAT	NAT	NAT	NAT	
Hydrock Default Suite - FOC / SOM / pH																						
pH (su)	pH Units	0	25	7.50	8.50	8.02	8.00	0.25		-	-	8.1	8	8.2	7.9	8.2	7.8	7.8	7.8	7.9	8	7.9
Hydrock Default Suite - Metals & PAH																						
Arsenic	mg/kg	1	25	16.00	93.00	48.28	48.00	20.54	0	250	MAFF 1998	79	34	27	64	93	51	51	37	24	44	58
Boron	mg/kg	0.2	25	0.20	2.00	0.66	0.50	0.53	0	5	Nable, et al. 1997	1.7	1.3	0.3	0.7	0.4	0.6	1.8	0.3	<0.2	0.7	2
Chromium (III)	mg/kg	1	25	20.00	100.00	50.32	49.00	15.14	0	400	MAFF 1998 (Cr(T))	60	64	55	58	100	43	52	39	38	40	63
Chromium (VI)	mg/kg	1.2	25	1.80	5.50	1.95	1.80	0.74	0	25	ICRCL 70/90 1990	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Copper	mg/kg	1	25	8.50	25.00	14.92	15.00	4.56	0	135	BS3882 2015	16	19	25	14	20	11	19	11	9.1	15	17
Nickel	mg/kg	1	25	20.00	58.00	36.28	37.00	11.21	0	75	BS3882 2015	44	45	52	38	57	29	37	26	23	28	39
Zinc	mg/kg	1	25	41.00	130.00	81.88	83.00	26.25	0	300	BS3882 2015	92	120	65	100	130	87	100	68	48	83	98
Legend:																						
MG	Made Ground	<0.02 Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.																				
HH	Hole Heath Sand and Gravel																					
XX	XX Other Codes	0.02 Value greater than, or equal to, the generic assessment criterion (GAC).																				
TS	Topsoil	* <10 Value excluded from statistical analysis																				
NAT	Natural	Y Text result																				
		- Represents a determinand that was not tested.																				
		+ represents a data point that is not included in the current filter settings																				



## Assessment of Chemicals of Potential Concern to Plant Life



Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	NAT	NAT
<b>Hydrock Default Suite - FOC / SOM / pH</b>													
pH (su)	pH Units	0	25	7.50	8.50	8.02	8.00	0.25		-	-	7.9	8.1
<b>Hydrock Default Suite - Metals &amp; PAH</b>													
Arsenic	mg/kg	1	25	16.00	93.00	48.28	48.00	20.54	0	250	MAFF 1998	31	38
Boron	mg/kg	0.2	25	0.20	2.00	0.66	0.50	0.53	0	5	Nable, et al. 1997	0.3	0.5
Chromium (III)	mg/kg	1	25	20.00	100.00	50.32	49.00	15.14	0	400	MAFF 1998 (Cr(T))	42	45
Chromium (VI)	mg/kg	1.2	25	1.80	5.50	1.95	1.80	0.74	0	25	ICRCL 70/90 1990	<1.8	<1.8
Copper	mg/kg	1	25	8.50	25.00	14.92	15.00	4.56	0	135	BS3882 2015	11	8.5
Nickel	mg/kg	1	25	20.00	58.00	36.28	37.00	11.21	0	75	BS3882 2015	42	26
Zinc	mg/kg	1	25	41.00	130.00	81.88	83.00	26.25	0	300	BS3882 2015	54	45

Risk parameter:	Phytotoxic pH 7	Data Filters	
Client:	Oxford University Developments Ltd	Zone	S
Site:	Begbroke Science Park	Strata	NAT
Job no.:	19114	Depth Min (m bgl)	0.1
Lab. report no(s).:	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Depth Max (m bgl)	3.8
	All values in mg/kg unless otherwise stated	Dataset mean pH	8.02
		Scenario pH	7

Legend:			
MG	Made Ground	<0.02	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
HH	Hole Heath Sand and Gravel	0.02	Value greater than, or equal to, the generic assessment criterion (GAC).
XX	XX Other Codes	*<10	Value excluded from statistical analysis
TS	Topsoil	Y	Text result
NAT	Natural	-	Represents a determinand that was not tested.
		+	represents a data point that is not included in the current filter settings

# Assessment of Chemicals of Potential Concern to Plant Life



<b>Risk parameter:</b>	Phytotoxic pH 7	<b>Client:</b>	Oxford University Developments Ltd	<b>Data Filters</b>	Zone S	
<b>Client:</b>	Oxford University Developments Ltd	<b>Site:</b>	Begbroke Science Park	Strata MG		
<b>Job no.:</b>	19114	<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372	Depth Min (m bgl) 0.1		
			All values in mg/kg unless otherwise stated	Depth Max (m bgl) 3.8		
				Dataset mean pH	8.13	
				Scenario pH	7	

CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	Date					
													25/08/22	25/08/22	25/08/22	25/08/22	05/09/22	05/09/22
-	<b>Hydrock Default Suite - FOC / SOM / pH</b>																	
P1334	pH (su)	pH Units	0	6	7.80	8.50	8.13	8.15	0.26		-	-	8.2	8.3	8.5	7.9	7.8	8.1
-	<b>Hydrock Default Suite - Metals &amp; PAH</b>																	
7440-38-2	Arsenic	mg/kg	1	6	25.00	73.00	43.50	40.00	16.78	0	250	MAFF 1998	73	34	49	35	45	25
7440-42-8	Boron	mg/kg	0.2	6	0.30	1.10	0.75	0.85	0.33	0	5	Nable, et al. 1997	0.4	1.1	0.9	0.8	1	0.3
16065-83-1	Chromium (III)	mg/kg	1	6	18.00	58.00	39.67	40.50	14.92	0	400	MAFF 1998 (Cr(T))	58	29	52	36	45	18
18540-29-9	Chromium (VI)	mg/kg	1.2	6	1.80	1.80	1.80	1.80	0.00	0	25	ICRCL 70/90 1990	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
7440-50-8	Copper	mg/kg	1	6	7.50	29.00	15.42	14.00	7.14	0	135	B53882 2015	7.5	14	14	14	14	29
7440-02-0	Nickel	mg/kg	1	6	14.00	37.00	26.67	26.00	8.89	0	75	B53882 2015	36	21	37	24	28	14
7440-66-6	Zinc	mg/kg	1	6	67.00	100.00	90.67	94.50	12.27	0	300	B53882 2015	89	93	99	100	96	67

<b>Legend:</b>	MG Made Ground HH Hole Heath Sand and Gravel XX XX Other Codes TS Topsoil NAT Natural	<0.02 Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate. 0.02 Value greater than, or equal to, the generic assessment criterion (GAC). *<10 Value excluded from statistical analysis Y Text result - Represents a determinand that was not tested. + represents a data point that is not included in the current filter settings
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# Assessment of Chemicals of Potential Concern to Plant Life



Risk parameter: <b>Phytotoxic pH 7</b> Client: Oxford University Developments Ltd Site: Begbroke Science Park Job no.: 19114 Lab. report no(s): 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372 All values in mg/kg unless otherwise stated												Data Filters Zone <b>S</b> Strata <b>TS</b> Depth Min (m bgl) <b>0.1</b> Depth Max (m bgl) <b>3.8</b> Dataset mean pH <b>7.70</b> Scenario pH <b>7</b>								Hydrock							
												Date	30/08/22	31/08/22	02/09/22	03/08/22	01/09/22	14/09/22	14/09/22	14/09/22							
												Zone	S	S	S	S	S	S	S	S							
												Location	BH201	BH202	BH203	BH204	BH205	HP201	HP202	HP203							
												Depth (m bgl)	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1							
												Strata	TS	TS	TS	TS	TS	TS	TS	TS							
CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	Strata	TS	TS	TS	TS	TS	TS	TS							
-	<b>Hydrock Default Suite - FOC / SOM / pH</b>																										
P1334	pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-		6.6	8	7.1	8	7.6	7.8	7.1	7.7						
-	<b>Hydrock Default Suite - Metals &amp; PAH</b>																										
7440-38-2	Arsenic	mg/kg	1	78	13.00	71.00	34.19	30.00	15.82	0	250	MAFF 1998		45	29	29	24	24	25	30	23						
7440-42-8	Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	5	Nable, et al. 1997		0.7	0.4	0.9	0.4	2	2	3.9	1.4						
16065-83-1	Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	400	MAFF 1998 (Cr(T))		43	34	33	31	42	30	39	36						
18540-29-9	Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	25	ICRCL 70/90 1990		<1.8	<1.8	<1.8	<1.8	<1.8	2	<1.8	<1.8						
7440-50-8	Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	135	B53882 2015		13	11	13	12	15	21	30	23						
7440-02-0	Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	75	B53882 2015		29	23	23	21	29	25	27	27						
7440-66-6	Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	300	B53882 2015		76	71	73	66	88	130	260	130						

<b>Legend:</b>	MG Made Ground HH Hole Heath Sand and Gravel XX XX Other Codes TS Topsoil NAT Natural	<0.02 0.02 *<10 Y - +	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate. Value greater than, or equal to, the generic assessment criterion (GAC). Value excluded from statistical analysis Text result Represents a determinand that was not tested. represents a data point that is not included in the current filter settings
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# Assessment of Chemicals of Potential Concern to Plant Life



Risk parameter: <span style="background-color: #cccccc; padding: 2px;">Phytotoxic pH 7</span> Client: Oxford University Developments Ltd Site: Begbroke Science Park Job no.: 19114 Lab. report no(s).: 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372 All values in mg/kg unless otherwise stated											Data Filters Zone <span style="background-color: #cccccc; padding: 2px;">S</span> Strata <span style="background-color: #cccccc; padding: 2px;">TS</span> Depth Min (m bgl) <span style="background-color: #cccccc; padding: 2px;">0.1</span> Depth Max (m bgl) <span style="background-color: #cccccc; padding: 2px;">3.8</span> Dataset mean pH <span style="background-color: #cccccc; padding: 2px;">7.70</span> Scenario pH <span style="background-color: #cccccc; padding: 2px;">7</span>																					
											14/09/22	14/09/22	14/09/22	06/09/22	09/09/22	08/09/22	09/09/22	06/09/22	08/09/22	08/09/22	05/09/22											
											S	S	S	S	S	S	S	S	S	S	S											
											HP204	HP205	HP206	TP204	TP205	TP206	TP211	TP213	TP218	TP219	TP221											
											0.1	0.1	0.1	0.2	0.15	0.2	0.15	0.2	0.15	0.25	0.2											
Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS											
<b>Hydrock Default Suite - FOC / SOM / pH</b>																																
pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-	7.9	7.5	7.5	8	7.8	7.8	7.9	7.9	7	7.7	7.5										
<b>Hydrock Default Suite - Metals &amp; PAH</b>																																
Arsenic	mg/kg	1	78	13.00	71.00	34.19	30.00	15.82	0	250	MAFF 1998	18	21	32	71	54	59	39	31	41	51	41										
Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	5	Nable, et al. 1997	2.3	3.9	2.4	0.7	0.5	0.4	0.7	0.3	0.5	0.4	0.5										
Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	400	MAFF 1998 (Cr(T))	30	26	31	69	53	55	40	37	38	50	43										
Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	25	ICRCL 70/90 1990	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8										
Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	135	BS3882 2015	21	22	25	24	22	18	16	18	20	20	20										
Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	75	BS3882 2015	26	23	27	44	35	34	25	23	25	34	28										
Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	300	BS3882 2015	110	150	130	110	100	99	70	70	83	110	91										
<b>Legend:</b>																																
MG	Made Ground	<0.02 Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.																														
HH	Hole Heath Sand and Gravel																															
XX	XX Other Codes	0.02 Value greater than, or equal to, the generic assessment criterion (GAC).																														
TS	Topsoil	*<10 Value excluded from statistical analysis																														
NAT	Natural	Y Text result																														
		- Represents a determinand that was not tested.																														
		+ represents a data point that is not included in the current filter settings																														

# Assessment of Chemicals of Potential Concern to Plant Life



<b>Risk parameter:</b> Phytotoxic pH 7 <b>Client:</b> Oxford University Developments Ltd <b>Site:</b> Begbroke Science Park <b>Job no.:</b> 19114 <b>Lab. report no(s):</b> 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372 All values in mg/kg unless otherwise stated	<b>Data Filters</b> Zone <b>S</b> Strata <b>TS</b> Depth Min (m bgl) <b>0.1</b> Depth Max (m bgl) <b>3.8</b> Dataset mean pH <b>7.70</b> Scenario pH <b>7</b>	
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08/09/22	05/09/22	05/09/22	07/09/22	07/09/22	07/09/22	07/09/22	07/09/22	30/08/22	30/08/22	23/08/22	23/08/22
S	S	S	S	S	S	S	S	S	S	S	S
TP223	TP226	TP227	TP230	TP231	TP232	TP234	WS201	WS202	WS203	WS204	WS204
0.15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source														
												TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	
<b>Hydrock Default Suite - FOC / SOM / pH</b>																									
pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-	7.7	8	8.1	7.7	7.9	7.6	7.3	8.4	7.9	7.7	7.9			
<b>Hydrock Default Suite - Metals &amp; PAH</b>																									
Arsenic	mg/kg	1	78	13.00	71.00	34.19	30.00	15.82	0	250	MAFF 1998	18	39	36	14	15	20	15	19	28	52	67			
Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	5	Nable, et al. 1997	0.6	1	1.1	0.3	1.3	2	1.1	1.3	1.6	0.9	2.4			
Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	400	MAFF 1998 (Cr(T))	28	43	38	31	36	42	38	43	46	48	56			
Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	25	ICRCL 70/90 1990	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8			
Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	135	BS3882 2015	16	21	16	11	14	19	12	21	15	14	19			
Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	75	BS3882 2015	18	31	25	17	17	25	18	32	29	31	39			
Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	300	BS3882 2015	56	110	89	53	61	92	58	88	81	86	96			

<b>Legend:</b>	MG Made Ground	<0.02	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
	HH Hole Heath Sand and Gravel	0.02	Value greater than, or equal to, the generic assessment criterion (GAC).
	XX Other Codes	*<10	Value excluded from statistical analysis
	TS Topsoil	Y	Text result
	NAT Natural	-	Represents a determinand that was not tested.
		+	represents a data point that is not included in the current filter settings



# Assessment of Chemicals of Potential Concern to Plant Life



<b>Risk parameter:</b> Phytotoxic pH 7 <b>Client:</b> Oxford University Developments Ltd <b>Site:</b> Begbroke Science Park <b>Job no.:</b> 19114 <b>Lab. report no(s):</b> 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372 All values in mg/kg unless otherwise stated	<b>Data Filters</b> Zone <b>S</b> Strata <b>TS</b> Depth Min (m bgl) <b>0.1</b> Depth Max (m bgl) <b>3.8</b> Dataset mean pH <b>7.70</b> Scenario pH <b>7</b>	
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22/08/22	24/08/22	25/08/22	25/08/22	22/08/22	22/08/22	31/08/22	30/08/22	22/08/22	23/08/22	25/08/22
S	S	S	S	S	S	S	S	S	S	S
WS205	WS206	WS207	WS208	WS209	WS210	WS211	WS212	WS213	WS214	WS215
0.2	0.2	0.1	0.1	0.3	0.1	0.1	0.2	0.1	0.1	0.2

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	
												TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS
<b>Hydrock Default Suite - FOC / SOM / pH</b>																						
pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-	7.9	7.7	7.6	7.3	7.4	7.3	8.1	7.6	7.7	8.1	7.6
<b>Hydrock Default Suite - Metals &amp; PAH</b>																						
Arsenic	mg/kg	1	78	13.00	71.00	34.19	30.00	15.82	0	250	MAFF 1998	35	64	29	36	36	26	45	62	67	63	25
Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	5	Nable, et al. 1997	0.9	2.7	0.9	1	0.8	2.9	0.7	2.2	0.4	1.1	4.2
Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	400	MAFF 1998 (Cr(T))	49	52	47	54	38	55	39	54	69	50	47
Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	25	ICRCL 70/90 1990	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	135	BS3882 2015	19	16	17	23	17	18	13	17	15	15	19
Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	75	BS3882 2015	35	34	31	37	25	33	27	37	40	33	30
Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	300	BS3882 2015	120	110	82	93	95	94	95	94	100	96	85

<b>Legend:</b>	MG Made Ground HH Hole Heath Sand and Gravel XX XX Other Codes TS Topsoil NAT Natural	<0.02 0.02 *<10 Y - +	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate. Value greater than, or equal to, the generic assessment criterion (GAC). Value excluded from statistical analysis Text result Represents a determinand that was not tested. represents a data point that is not included in the current filter settings
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# Assessment of Chemicals of Potential Concern to Plant Life



Risk parameter: <span style="background-color: #cccccc; padding: 2px;">Phytotoxic pH 7</span> Client: Oxford University Developments Ltd Site: Begbroke Science Park Job no.: 19114 Lab. report no(s).: 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372 All values in mg/kg unless otherwise stated											Data Filters Zone <span style="background-color: #cccccc; padding: 2px;">S</span> Strata <span style="background-color: #cccccc; padding: 2px;">TS</span> Depth Min (m bgl) <span style="background-color: #cccccc; padding: 2px;">0.1</span> Depth Max (m bgl) <span style="background-color: #cccccc; padding: 2px;">3.8</span> Dataset mean pH <span style="background-color: #cccccc; padding: 2px;">7.70</span> Scenario pH <span style="background-color: #cccccc; padding: 2px;">7</span>											
											Hydrock											
											30/08/22	23/08/22	24/08/22	24/08/22	24/08/22	01/09/22	25/08/22	24/08/22	08/09/22	31/08/22	23/08/22	
											S	S	S	S	S	S	S	S	S	S	S	
											WS216	WS217	WS218	WS219	WS220	WS221	WS222	WS223	WS224	WS225	WS226	
											0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	
Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS	
Hydrock Default Suite - FOC / SOM / pH																						
pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-	7.9	7.6	7.6	7.9	7.9	7.9	7.5	8.6	8	7.7	
Hydrock Default Suite - Metals & PAH																						
Arsenic	mg/kg	1	78	13.00	71.00	34.19	30.00	15.82	0	250	MAFF 1998	65	47	48	27	22	31	41	59	25	27	57
Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	5	Nable, et al. 1997	0.9	1.1	0.5	0.6	0.5	2.4	0.3	1.8	0.6	1.1	0.2
Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	400	MAFF 1998 (Cr(T))	65	47	47	30	32	41	39	53	32	31	55
Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	25	ICRCL 70/90 1990	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	135	BS3882 2015	18	15	12	14	14	14	17	15	13	17	17
Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	75	BS3882 2015	49	32	30	20	21	24	27	35	20	24	36
Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	300	BS3882 2015	110	110	84	73	65	75	77	120	64	67	92
Legend:																						
MG	Made Ground	<0.02 Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.																				
HH	Hole Heath Sand and Gravel																					
XX	XX Other Codes	0.02 Value greater than, or equal to, the generic assessment criterion (GAC).																				
TS	Topsoil	* <10 Value excluded from statistical analysis																				
NAT	Natural	Y Text result																				
		- Represents a determinand that was not tested.																				
		+ represents a data point that is not included in the current filter settings																				

# Assessment of Chemicals of Potential Concern to Plant Life



Risk parameter: <span style="background-color: #e0e0e0; padding: 2px;">Phytotoxic pH 7</span> Client: Oxford University Developments Ltd Site: Begbroke Science Park Job no.: 19114 Lab. report no(s).: 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372 All values in mg/kg unless otherwise stated											Data Filters Zone <span style="background-color: #e0e0e0; padding: 2px;">S</span> Strata <span style="background-color: #e0e0e0; padding: 2px;">TS</span> Depth Min (m bgl) <span style="background-color: #e0e0e0; padding: 2px;">0.1</span> Depth Max (m bgl) <span style="background-color: #e0e0e0; padding: 2px;">3.8</span> Dataset mean pH <span style="background-color: #e0e0e0; padding: 2px;">7.70</span> Scenario pH <span style="background-color: #e0e0e0; padding: 2px;">7</span>														
											23/08/22	05/09/22	02/09/22	31/08/22	31/08/22	26/08/22	08/09/22	02/09/22	31/08/22	06/09/22	01/09/22				
											S	S	S	S	S	S	S	S	S	S	S				
											WS227	WS228	WS229	WS230	WS231	WS232	WS234	WS237	WS238	WS239	WS241				
											0.3	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2				
Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS				
<b>Hydrock Default Suite - FOC / SOM / pH</b>																									
pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-	7.3	7.5	7.5	7.6	7.9	8	8.3	7.6	7.8	8	7.8			
<b>Hydrock Default Suite - Metals &amp; PAH</b>																									
Arsenic	mg/kg	1	78	13.00	71.00	34.19	30.00	15.82	0	250	MAFF 1998	43	48	48	44	30	20	16	48	48	13	18			
Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	5	Nable, et al. 1997	0.7	0.4	0.7	1.3	0.7	0.9	1.9	0.9	2	1	3.5			
Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	400	MAFF 1998 (Cr(T))	40	49	48	44	29	32	37	45	47	23	36			
Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	25	ICRCL 70/90 1990	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8			
Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	135	BS3882 2015	11	18	15	14	14	13	16	15	16	11	21			
Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	75	BS3882 2015	27	35	33	30	27	19	23	29	34	15	24			
Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	300	BS3882 2015	76	77	90	89	65	59	72	86	94	48	91			
<b>Legend:</b>																									
MG	Made Ground	<0.02 Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.																							
HH	Hole Heath Sand and Gravel																								
XX	XX Other Codes	0.02 Value greater than, or equal to, the generic assessment criterion (GAC).																							
TS	Topsoil	*<10 Value excluded from statistical analysis																							
NAT	Natural	Y Text result																							
- Represents a determinand that was not tested.																									
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# Assessment of Chemicals of Potential Concern to Plant Life



Risk parameter: <span style="background-color: #cccccc; padding: 2px;">Phytotoxic pH 7</span> Client: Oxford University Developments Ltd Site: Begbroke Science Park Job no.: 19114 Lab. report no(s).: 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372 All values in mg/kg unless otherwise stated											Data Filters Zone <span style="background-color: #cccccc; padding: 2px;">S</span> Strata <span style="background-color: #cccccc; padding: 2px;">TS</span> Depth Min (m bgl) <span style="background-color: #cccccc; padding: 2px;">0.1</span> Depth Max (m bgl) <span style="background-color: #cccccc; padding: 2px;">3.8</span> Dataset mean pH <span style="background-color: #cccccc; padding: 2px;">7.70</span> Scenario pH <span style="background-color: #cccccc; padding: 2px;">7</span>															
											05/09/22	02/09/22	01/09/22	02/09/22	02/09/22	01/09/22	06/09/22	06/09/22	01/09/22	01/09/22	06/09/22					
											S	S	S	S	S	S	S	S	S	S	S					
											WS242	WS243	WS244	WS245	WS246	WS247	WS248	WS249	WS250	WS251	WS252					
											0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1					
Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	TS	TS	TS	TS	TS	TS	TS	TS	TS	TS					
<b>Hydrock Default Suite - FOC / SOM / pH</b>																										
pH (su)	pH Units	0	78	6.60	8.60	7.70	7.70	0.35		-	-	7.7	7.9	7.6	7.9	7.6	7.7	6.8	6.9	7.7	8.1	7.9				
<b>Hydrock Default Suite - Metals &amp; PAH</b>																										
Arsenic	mg/kg	1	78	13.00	71.00	34.19	30.00	15.82	0	250	MAFF 1998	24	52	20	18	23	30	14	18	17	16	24				
Boron	mg/kg	0.2	78	0.20	4.20	1.22	0.90	0.90	0	5	Nable, et al. 1997	0.6	1.4	0.4	1.4	1.6	0.8	0.5	0.5	1.7	1	1.8				
Chromium (III)	mg/kg	1	78	23.00	69.00	41.49	40.00	9.52	0	400	MAFF 1998 (Cr(T))	34	46	34	37	44	44	33	32	38	45	44				
Chromium (VI)	mg/kg	1.2	78	1.80	2.00	1.80	1.80	0.03	0	25	ICRCL 70/90 1990	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	1.9	<1.8	<1.8				
Copper	mg/kg	1	78	8.90	30.00	16.27	16.00	3.96	0	135	BS3882 2015	18	21	16	11	17	9.5	13	8.9	11	11	14				
Nickel	mg/kg	1	78	15.00	49.00	27.41	27.00	6.81	0	75	BS3882 2015	34	34	21	24	27	24	17	16	21	25	26				
Zinc	mg/kg	1	78	40.00	260.00	87.00	85.50	29.42	0	300	BS3882 2015	89	120	64	71	97	77	52	40	66	64	76				
<b>Legend:</b>																										
MG	Made Ground	<0.02 Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.																								
HH	Hole Heath Sand and Gravel																									
XX	XX Other Codes	0.02 Value greater than, or equal to, the generic assessment criterion (GAC).																								
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## Assessment of Chemicals of Potential Concern to Plant Life



CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	Strata	NAT	NAT	NAT	NAT																																																																																																																																																
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;"> <p><b>Risk parameter:</b> Phytotoxic pH 7</p> <p><b>Client:</b> Oxford University Developments Ltd</p> <p><b>Site:</b> Begbroke Science Park</p> <p><b>Job no.:</b> 19114</p> <p><b>Lab. report no(s).:</b> 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372</p> <p style="font-size: small;">All values in mg/kg unless otherwise stated</p> </div> <div style="width: 30%;"> <p><b>Data Filters</b></p> <p>Zone: <b>Landfill</b></p> <p>Strata: <b>NAT</b></p> <p>Depth Min (m bgl): <b>0.1</b></p> <p>Depth Max (m bgl): <b>3.8</b></p> <p>Dataset mean pH: <b>8.30</b></p> <p>Scenario pH: <b>7</b></p> </div> <div style="width: 15%; text-align: right;"> </div> </div>																																																																																																																																																																	
														Date	20/08/21	18/08/21	18/08/21	19/08/21																																																																																																																																															
														Zone	Landfill	Landfill	Landfill	Landfill																																																																																																																																															
														Location	TP02	WS02	WS05	WS09																																																																																																																																															
														Depth (m bgl)	3.3	0.8	3.8	3.8																																																																																																																																															
<p><b>Hydrock Default Suite - FOC / SOM / pH</b></p> <tr> <td>P1334</td> <td>pH (su)</td> <td>pH Units</td> <td>0</td> <td>4</td> <td>8.00</td> <td>8.70</td> <td>8.30</td> <td>8.25</td> <td>0.32</td> <td></td> <td>-</td> <td>-</td> <td>NAT</td> <td>8.7</td> <td>8.1</td> <td>8</td> <td>8.4</td> </tr> <p><b>Hydrock Default Suite - Metals &amp; PAH</b></p> <tr> <td>7440-38-2</td> <td>Arsenic</td> <td>mg/kg</td> <td>1</td> <td>4</td> <td>25.00</td> <td>84.00</td> <td>55.00</td> <td>55.50</td> <td>28.88</td> <td>0</td> <td>250</td> <td>MAFF 1998</td> <td>NAT</td> <td>84</td> <td>36</td> <td>25</td> <td>75</td> </tr> <tr> <td>7440-42-8</td> <td>Boron</td> <td>mg/kg</td> <td>0.2</td> <td>4</td> <td>0.90</td> <td>5.70</td> <td>2.80</td> <td>2.30</td> <td>2.04</td> <td>1</td> <td>5</td> <td>Nable, et al. 1997</td> <td>NAT</td> <td>2.2</td> <td>0.9</td> <td>5.7</td> <td>2.4</td> </tr> <tr> <td>16065-83-1</td> <td>Chromium (III)</td> <td>mg/kg</td> <td>1</td> <td>4</td> <td>21.00</td> <td>64.00</td> <td>44.25</td> <td>46.00</td> <td>18.84</td> <td>0</td> <td>400</td> <td>MAFF 1998 (Cr(T))</td> <td>NAT</td> <td>54</td> <td>38</td> <td>21</td> <td>64</td> </tr> <tr> <td>18540-29-9</td> <td>Chromium (VI)</td> <td>mg/kg</td> <td>1.2</td> <td>4</td> <td>1.20</td> <td>1.20</td> <td>1.20</td> <td>1.20</td> <td>0.00</td> <td>0</td> <td>25</td> <td>ICRCL 70/90 1990</td> <td>NAT</td> <td>&lt;1.2</td> <td>&lt;1.2</td> <td>&lt;1.2</td> <td>&lt;1.2</td> </tr> <tr> <td>7440-50-8</td> <td>Copper</td> <td>mg/kg</td> <td>1</td> <td>4</td> <td>9.20</td> <td>22.00</td> <td>16.05</td> <td>16.50</td> <td>6.41</td> <td>0</td> <td>135</td> <td>BS3882 2015</td> <td>NAT</td> <td>22</td> <td>12</td> <td>21</td> <td>9.2</td> </tr> <tr> <td>7440-02-0</td> <td>Nickel</td> <td>mg/kg</td> <td>1</td> <td>4</td> <td>22.00</td> <td>57.00</td> <td>36.75</td> <td>34.00</td> <td>16.03</td> <td>0</td> <td>75</td> <td>BS3882 2015</td> <td>NAT</td> <td>57</td> <td>26</td> <td>22</td> <td>42</td> </tr> <tr> <td>7440-66-6</td> <td>Zinc</td> <td>mg/kg</td> <td>1</td> <td>4</td> <td>83.00</td> <td>250.00</td> <td>133.00</td> <td>99.50</td> <td>78.85</td> <td>0</td> <td>300</td> <td>BS3882 2015</td> <td>NAT</td> <td>250</td> <td>89</td> <td>83</td> <td>110</td> </tr>																		P1334	pH (su)	pH Units	0	4	8.00	8.70	8.30	8.25	0.32		-	-	NAT	8.7	8.1	8	8.4	7440-38-2	Arsenic	mg/kg	1	4	25.00	84.00	55.00	55.50	28.88	0	250	MAFF 1998	NAT	84	36	25	75	7440-42-8	Boron	mg/kg	0.2	4	0.90	5.70	2.80	2.30	2.04	1	5	Nable, et al. 1997	NAT	2.2	0.9	5.7	2.4	16065-83-1	Chromium (III)	mg/kg	1	4	21.00	64.00	44.25	46.00	18.84	0	400	MAFF 1998 (Cr(T))	NAT	54	38	21	64	18540-29-9	Chromium (VI)	mg/kg	1.2	4	1.20	1.20	1.20	1.20	0.00	0	25	ICRCL 70/90 1990	NAT	<1.2	<1.2	<1.2	<1.2	7440-50-8	Copper	mg/kg	1	4	9.20	22.00	16.05	16.50	6.41	0	135	BS3882 2015	NAT	22	12	21	9.2	7440-02-0	Nickel	mg/kg	1	4	22.00	57.00	36.75	34.00	16.03	0	75	BS3882 2015	NAT	57	26	22	42	7440-66-6	Zinc	mg/kg	1	4	83.00	250.00	133.00	99.50	78.85	0	300	BS3882 2015	NAT	250	89	83	110
P1334	pH (su)	pH Units	0	4	8.00	8.70	8.30	8.25	0.32		-	-	NAT	8.7	8.1	8	8.4																																																																																																																																																
7440-38-2	Arsenic	mg/kg	1	4	25.00	84.00	55.00	55.50	28.88	0	250	MAFF 1998	NAT	84	36	25	75																																																																																																																																																
7440-42-8	Boron	mg/kg	0.2	4	0.90	5.70	2.80	2.30	2.04	1	5	Nable, et al. 1997	NAT	2.2	0.9	5.7	2.4																																																																																																																																																
16065-83-1	Chromium (III)	mg/kg	1	4	21.00	64.00	44.25	46.00	18.84	0	400	MAFF 1998 (Cr(T))	NAT	54	38	21	64																																																																																																																																																
18540-29-9	Chromium (VI)	mg/kg	1.2	4	1.20	1.20	1.20	1.20	0.00	0	25	ICRCL 70/90 1990	NAT	<1.2	<1.2	<1.2	<1.2																																																																																																																																																
7440-50-8	Copper	mg/kg	1	4	9.20	22.00	16.05	16.50	6.41	0	135	BS3882 2015	NAT	22	12	21	9.2																																																																																																																																																
7440-02-0	Nickel	mg/kg	1	4	22.00	57.00	36.75	34.00	16.03	0	75	BS3882 2015	NAT	57	26	22	42																																																																																																																																																
7440-66-6	Zinc	mg/kg	1	4	83.00	250.00	133.00	99.50	78.85	0	300	BS3882 2015	NAT	250	89	83	110																																																																																																																																																

**Legend:**

MG	Made Ground	<b>&lt;0.02</b>	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
HH	Hole Heath Sand and Gravel	<b>0.02</b>	Value greater than, or equal to, the generic assessment criterion (GAC).
XX	XX Other Codes	<b>*&lt;10</b>	Value excluded from statistical analysis
TS	Topsoil	<b>Y</b>	Text result
NAT	Natural	<b>-</b>	Represents a determinand that was not tested.
		<b>+</b>	represents a data point that is not included in the current filter settings



# Assessment of Chemicals of Potential Concern to Plant Life



<b>Risk parameter:</b>	Phytotoxic pH 7
<b>Client:</b>	Oxford University Developments Ltd
<b>Site:</b>	Begbroke Science Park
<b>Job no.:</b>	19114
<b>Lab. report no(s).:</b>	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372
	All values in mg/kg unless otherwise stated

<b>Data Filters</b>	
Zone	Landfill
Strata	LF
Depth Min (m bgl)	0.1
Depth Max (m bgl)	3.8
Dataset mean pH	7.94
Scenario pH	7

Date	18/08/21	19/08/21	19/08/21	18/08/21	17/08/21	20/08/21	20/08/21	20/08/21
Zone	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
Location	BH01	BH02	BH02	BH03	TP01	TP02	TP02	TP02
Depth (m bgl)	2.5	3	1.5	1	1	0.8	1.5	2.5



CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	Strata	LF	LF	LF	LF	LF	LF	LF	LF
-	<b>Hydrock Default Suite - FOC / SOM / pH</b>																				
P1334	pH (su)	pH Units	0	17	7.30	8.80	7.94	7.90	0.37		-	-	LF	7.9	7.9	7.3	7.9	8	8	8.2	N/A
-	<b>Hydrock Default Suite - Metals &amp; PAH</b>																				
7440-38-2	Arsenic	mg/kg	1	17	25.00	85.00	55.47	49.00	19.86	0	250	MAFF 1998	LF	78	84	40	53	73	85	27	N/A
7440-42-8	Boron	mg/kg	0.2	17	0.90	17.00	7.10	6.60	5.27	9	5	Nable, et al. 1997	LF	1.8	3.4	6.6	12	8.2	17	14	N/A
16065-83-1	Chromium (III)	mg/kg	1	17	25.00	75.00	51.94	55.00	13.30	0	400	MAFF 1998 (Cr(T))	LF	75	74	54	55	55	56	25	N/A
18540-29-9	Chromium (VI)	mg/kg	1.2	17	1.20	1.20	1.20	1.20	0.00	0	25	ICRCL 70/90 1990	LF	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	N/A
7440-50-8	Copper	mg/kg	1	17	21.00	1000.00	234.41	98.00	306.23	8	135	BS3882 2015	LF	35	1000	240	920	300	170	34	N/A
7440-02-0	Nickel	mg/kg	1	17	24.00	150.00	56.18	46.00	32.09	4	75	BS3882 2015	LF	44	150	46	90	91	81	24	N/A
7440-66-6	Zinc	mg/kg	1	17	110.00	6500.00	1050.00	340.00	1679.11	9	300	BS3882 2015	LF	240	540	2100	3700	340	1300	290	N/A

<b>Legend:</b>	MG Made Ground HH Hole Heath Sand and Gravel XX XX Other Codes TS Topsoil NAT Natural	<0.02 0.02 *<10 Y - +	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate. Value greater than, or equal to, the generic assessment criterion (GAC). Value excluded from statistical analysis Text result Represents a determinand that was not tested. represents a data point that is not included in the current filter settings
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# Assessment of Chemicals of Potential Concern to Plant Life



<b>Risk parameter:</b> Phytotoxic pH 7 <b>Client:</b> Oxford University Developments Ltd <b>Site:</b> Begbroke Science Park <b>Job no.:</b> 19114 <b>Lab. report no(s).:</b> 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372 All values in mg/kg unless otherwise stated	<b>Data Filters</b> Zone: <b>Landfill</b> Strata: <b>LF</b> Depth Min (m bgl): <b>0.1</b> Depth Max (m bgl): <b>3.8</b> Dataset mean pH: <b>7.94</b> Scenario pH: <b>7</b>	
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20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	18/08/21	18/08/21	19/08/21	19/08/21
Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
TP03	TP04	TP05	TP05	TP05	TP06	TP07	WS03	WS05	WS06	WS07	
2.3	0.5	0.5	2	1.3	0.7	2.7	1	2.9	1.8	2.3	

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	20/08/21	18/08/21	18/08/21	19/08/21	19/08/21	
												LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF
<b>Hydrock Default Suite - FOC / SOM / pH</b>																							
pH (su)	pH Units	0	17	7.30	8.80	7.94	7.90	0.37		-	-	8.1	8.8	N/A	N/A	N/A	8.6	7.8	N/A	7.7	7.7	7.7	
<b>Hydrock Default Suite - Metals &amp; PAH</b>																							
Arsenic	mg/kg	1	17	25.00	85.00	55.47	49.00	19.86	0	250	MAFF 1998	77	49	N/A	N/A	N/A	66	72	N/A	40	25	34	
Boron	mg/kg	0.2	17	0.90	17.00	7.10	6.60	5.27	9	5	Nable, et al. 1997	4.4	2.6	N/A	N/A	N/A	1.2	7.1	N/A	3.9	12	16	
Chromium (III)	mg/kg	1	17	25.00	75.00	51.94	55.00	13.30	0	400	MAFF 1998 (Cr(TI))	55	43	N/A	N/A	N/A	56	55	N/A	41	67	56	
Chromium (VI)	mg/kg	1.2	17	1.20	1.20	1.20	1.20	0.00	0	25	ICRCL 70/90 1990	<1.2	<1.2	N/A	N/A	N/A	<1.2	<1.2	N/A	<1.2	<1.2	<1.2	
Copper	mg/kg	1	17	21.00	1000.00	234.41	98.00	306.23	8	135	BS3882 2015	81	190	N/A	N/A	N/A	40	42	N/A	570	150	73	
Nickel	mg/kg	1	17	24.00	150.00	56.18	46.00	32.09	4	75	BS3882 2015	55	57	N/A	N/A	N/A	36	44	N/A	33	63	55	
Zinc	mg/kg	1	17	110.00	6500.00	1050.00	340.00	1679.11	9	300	BS3882 2015	6500	660	N/A	N/A	N/A	210	210	N/A	130	560	280	

<b>Legend:</b>	MG Made Ground HH Hole Heath Sand and Gravel XX XX Other Codes TS Topsoil NAT Natural	<0.02 0.02 *<10 Y - +	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate. Value greater than, or equal to, the generic assessment criterion (GAC). Value excluded from statistical analysis Text result Represents a determinand that was not tested. represents a data point that is not included in the current filter settings
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## Assessment of Chemicals of Potential Concern to Plant Life



Risk parameter:	Phytotoxic pH 7									
Client:	Oxford University Developments Ltd									
Site:	Begbroke Science Park									
Job no.:	19114									
Lab. report no(s).:	22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372									
	All values in mg/kg unless otherwise stated									
	Dataset mean pH <b>7.94</b>									
	Scenario pH <b>7</b>									

		Data Filters			Hydrock					
		Zone	Landfill					19/08/21	19/08/21	19/08/21
		Strata	LF					Landfill	Landfill	Landfill
		Depth Min (m bgl)	0.1					WS08	WS09	WS09
		Depth Max (m bgl)	3.8					3.4	2.5	3

Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	LF	LF	LF
<b>Hydrock Default Suite - FOC / SOM / pH</b>														
pH (su)	pH Units	0	17	7.30	8.80	7.94	7.90	0.37		-	-	N/A	7.5	7.7
<b>Hydrock Default Suite - Metals &amp; PAH</b>														
Arsenic	mg/kg	1	17	25.00	85.00	55.47	49.00	19.86	0	250	MAFF 1998	N/A	48	45
Boron	mg/kg	0.2	17	0.90	17.00	7.10	6.60	5.27	9	5	Nable, et al. 1997	N/A	2.9	6.7
Chromium (III)	mg/kg	1	17	25.00	75.00	51.94	55.00	13.30	0	400	MAFF 1998 (Cr(TI))	N/A	43	39
Chromium (VI)	mg/kg	1.2	17	1.20	1.20	1.20	1.20	0.00	0	25	ICRCL 70/90 1990	N/A	<1.2	<1.2
Copper	mg/kg	1	17	21.00	1000.00	234.41	98.00	306.23	8	135	BS3882 2015	N/A	21	21
Nickel	mg/kg	1	17	24.00	150.00	56.18	46.00	32.09	4	75	BS3882 2015	N/A	29	27
Zinc	mg/kg	1	17	110.00	6500.00	1050.00	340.00	1679.11	9	300	BS3882 2015	N/A	110	130

Legend:	Code	Description	Value	Explanation
	MG	Made Ground	<0.02	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.
	HH	Hole Heath Sand and Gravel	0.02	Value greater than, or equal to, the generic assessment criterion (GAC).
	XX	XX Other Codes	*<10	Value excluded from statistical analysis
	TS	Topsoil	Y	Text result
	NAT	Natural	-	Represents a determinand that was not tested.
			+	represents a data point that is not included in the current filter settings

## Assessment of Chemicals of Potential Concern to Plant Life



CAS No / P Code	Chemical of Potential Concern	Units	LoD	No. Samples	Min. Value	Max. Value	Mean	Median	Standard Deviation	No. Samples >= GAC & > LoD	GAC	GAC Source	Strata	MG-TS	MG-TS	MG-TS	MG-TS																								
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;"> <p><b>Risk parameter:</b> Phytotoxic pH 7</p> <p><b>Client:</b> Oxford University Developments Ltd</p> <p><b>Site:</b> Begbroke Science Park</p> <p><b>Job no.:</b> 19114</p> <p><b>Lab. report no(s).:</b> 22-85537, 22-83966, 22-83965, 22-83964, 22-82420, 22-82414, 22-82408, 22-82372</p> <p style="font-size: small;">All values in mg/kg unless otherwise stated</p> </div> <div style="width: 30%;"> <p><b>Data Filters</b></p> <p>Zone: <b>Landfill</b></p> <p>Strata: <b>MG-TS</b></p> <p>Depth Min (m bgl): <b>0.1</b></p> <p>Depth Max (m bgl): <b>3.8</b></p> <p>Dataset mean pH: <b>8.03</b></p> <p>Scenario pH: <b>7</b></p> </div> <div style="width: 15%; text-align: center;"> </div> <div style="width: 5%; text-align: right;"> <table border="1" style="font-size: x-small; border-collapse: collapse;"> <tr><th>Date</th><td>20/08/21</td><td>18/08/21</td><td>18/08/21</td><td>19/08/21</td></tr> <tr><th>Zone</th><td>Landfill</td><td>Landfill</td><td>Landfill</td><td>Landfill</td></tr> <tr><th>Location</th><td>TP07</td><td>WS01</td><td>WS02</td><td>WS10</td></tr> <tr><th>Depth (m bgl)</th><td>0.1</td><td>0.1</td><td>0.2</td><td>0.2</td></tr> </table> </div> </div>																		Date	20/08/21	18/08/21	18/08/21	19/08/21	Zone	Landfill	Landfill	Landfill	Landfill	Location	TP07	WS01	WS02	WS10	Depth (m bgl)	0.1	0.1	0.2	0.2				
Date	20/08/21	18/08/21	18/08/21	19/08/21																																					
Zone	Landfill	Landfill	Landfill	Landfill																																					
Location	TP07	WS01	WS02	WS10																																					
Depth (m bgl)	0.1	0.1	0.2	0.2																																					
<b>Hydrock Default Suite - FOC / SOM / pH</b>																																									
P1334	pH (su)	pH Units	0	4	7.90	8.10	8.03	8.05	0.10		-	-	8	8.1	8.1	7.9																									
<b>Hydrock Default Suite - Metals &amp; PAH</b>																																									
7440-38-2	Arsenic	mg/kg	1	4	21.00	75.00	39.25	30.50	24.25	0	250	MAFF 1998	75	21	30	31																									
7440-42-8	Boron	mg/kg	0.2	4	1.20	3.30	2.15	2.05	0.97	0	5	Nable, et al. 1997	3.3	2.6	1.5	1.2																									
16065-83-1	Chromium (III)	mg/kg	1	4	1.00	72.00	35.25	34.00	29.31	0	400	MAFF 1998 (Cr(T))	72	29	39	<1																									
18540-29-9	Chromium (VI)	mg/kg	1.2	4	1.20	1.20	1.20	1.20	0.00	0	25	ICRCL 70/90 1990	<1.2	<1.2	<1.2	<1.2																									
7440-50-8	Copper	mg/kg	1	4	1.00	780.00	221.00	51.50	373.92	1	135	BS3882 2015	780	28	75	<1																									
7440-02-0	Nickel	mg/kg	1	4	19.00	88.00	47.50	41.50	34.34	1	75	BS3882 2015	88	19	64	19																									
7440-66-6	Zinc	mg/kg	1	4	1.00	570.00	250.25	215.00	241.73	1	300	BS3882 2015	570	150	280	<1																									
<p><b>Legend:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">MG</td> <td style="width: 40%;">Made Ground</td> <td style="width: 10%;"><b>&lt;0.02</b></td> <td style="width: 40%;">Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.</td> </tr> <tr> <td>HH</td> <td>Hole Heath Sand and Gravel</td> <td><b>0.02</b></td> <td>Value greater than, or equal to, the generic assessment criterion (GAC).</td> </tr> <tr> <td>XX</td> <td>XX Other Codes</td> <td><b>*&lt;10</b></td> <td>Value excluded from statistical analysis</td> </tr> <tr> <td>TS</td> <td>Topsoil</td> <td><b>Y</b></td> <td>Text result</td> </tr> <tr> <td>NAT</td> <td>Natural</td> <td>-</td> <td>Represents a determinand that was not tested.</td> </tr> <tr> <td></td> <td></td> <td>+</td> <td>represents a data point that is not included in the current filter settings</td> </tr> </table>																		MG	Made Ground	<b>&lt;0.02</b>	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.	HH	Hole Heath Sand and Gravel	<b>0.02</b>	Value greater than, or equal to, the generic assessment criterion (GAC).	XX	XX Other Codes	<b>*&lt;10</b>	Value excluded from statistical analysis	TS	Topsoil	<b>Y</b>	Text result	NAT	Natural	-	Represents a determinand that was not tested.			+	represents a data point that is not included in the current filter settings
MG	Made Ground	<b>&lt;0.02</b>	Value below the laboratory reporting limit and are considered as being at the detection limit for the purposes of statistical analysis, as a conservative estimate.																																						
HH	Hole Heath Sand and Gravel	<b>0.02</b>	Value greater than, or equal to, the generic assessment criterion (GAC).																																						
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NAT	Natural	-	Represents a determinand that was not tested.																																						
		+	represents a data point that is not included in the current filter settings																																						

*Controlled Waters GQRA*



Summary of Remedial Targets Methodology Screening



Hydrock Scenario: <b>Scenario B - EQS (inland)</b>											2013/39/EU Annex I		
RTM Level: <b>RTM Level 2 - Groundwater Beneath Source Assessment - groundwater samples</b>											P = priority substance		
Water body receptor(s): <b>Groundwater and surface water</b>											PH = priority hazardous substances.		
Secondary receptor(s):											WFD Designation (2015 Directions)		
Data set: <b>Groundwater</b>											OP = Other substance identical to previous legislation		
Client: <b>Oxford University Development s Ltd</b>											SP = Specific Pollutant		
Site: <b>Begbroke</b>											JAGDAG <b>Hazardous Substances Determination (UK)</b>		
Job no: <b>C19114</b>											H Hazardous substance		
Test Certificates(s): <b>Z2-85131 &amp; Z2-86105</b>											NP Non-hazardous pollutant		
Dataset <b>RTD</b>											(blank) Not included in assessment		
											PNEC calculated (inland EQS)		
CAS / AGS Number	Chemicals of Potential Concern (concentrations in µg/l)	WFD Designation	Hazardous Substance Status	Summary of Sample Data					Value Being Compared to Target = Maximum Value	Water Quality Target (Exceeded if Red)	No. Samples Exceeding Water Quality Target	No. Samples above LoD Exceeding Water Quality	Notes
				No. of Samples	No. of Samples > LoD	Limit of Detection	Minimum Value	Maximum Value					
P1133	Hardness as mg/l CaCO <sub>3</sub>			-	-	-	10	-	-	-	-	-	Representative hardness of receiving surface water environment used in some inland EQS
7440-22-4	Silver (Ag) (dissolved)			31	0	0.05	<0.05	<0.05	<0.05	<0.05	0.05	0	
7429-90-5	Aluminum (Al) (dissolved)			31	29	1	<1	61	30	61	n/a	0	
7440-38-2	Arsenic (As) (dissolved)	SP	H	31	30	0.15	<0.15	2.13	1.33	2.13	50	0	0
7440-42-8	Boron (B) (dissolved)		NP	31	31	10	25	740	230	740	2000	0	0
7440-39-3	Barium (Ba) (dissolved)			31	31	0.06	12	200	117	200	n/a	0	0
7440-43-9	Cadmium (Cd) (dissolved)	PH	NP	31	9	0.02	<0.02	0.1	0.075	0.1	0.08	2	2
7440-48-4	Cobalt (Co) (dissolved)		NP	31	18	0.2	<0.2	11	3.55	11	3	2	2
18540-29-9	Chromium (VI) (Cr) (dissolved)	SP	H	31	0	5	<5	<5	<5	<5	3.4	31	0
16065-83-1	Chromium (III) (Cr) (dissolved)	SP		31	2	5	<5	7.9	5.7	7.9	4.7	31	2
7440-47-3	Chromium (Cr) (total) (dissolved)			31	10	0.2	<0.2	7.9	4.85	7.9	n/a	0	0
7440-50-8	Copper (Cu) (dissolved)	SP	NP	31	28	0.5	<0.5	3.6	3.25	3.6	1	15	15
7439-89-6	Iron (Fe) (dissolved)	SP		31	27	0.004	<0.004	0.15	0.1125	0.15	1000	0	0
7439-97-6	Mercury (Hg) (dissolved)	PH	H	31	0	0.05	<0.05	<0.05	<0.05	<0.05	0.07	0	0
P1286	Manganese (Mn) (dissolved)	SP		31	31	0.05	0.32	940	700	940	123	7	7
7440-23-5	Sodium (Na) (dissolved)			31	31	0.01	6.4	130	66	130	n/a	0	0
7440-02-0	Nickel (Ni) (dissolved)	P	NP	31	27	0.5	<0.5	13	11.5	13	4	10	10
7439-92-1	Lead (Pb) (dissolved)	P	H	31	0	0.2	<0.2	<0.2	<0.2	<0.2	1.2	0	0
7440-36-0	Antimony (Sb) (dissolved)		NP	31	28	0.4	<0.4	3.8	2.05	3.8	n/a	0	0
7782-49-2	Selenium (Se) (dissolved)		NP	31	14	0.6	<0.6	10	1.65	10	n/a	0	0
7440-31-5	Tin (Sn) (dissolved)			31	2	0.2	<0.2	0.28	0.215	0.28	25	0	0
7440-62-2	Vanadium (V) (dissolved)			31	15	0.2	<0.2	1.3	0.6	1.3	2.0	0	0
7440-66-6	Zinc (Zn) (dissolved)	SP	NP	31	31	0.5	0.7	6.5	5.1	6.5	12.3	0	0
P1095	Cyanide (free) (hydrogen cyanide)	SP	NP	31	0	1	<1	<1	<1	<1	1	0	0
57-12-5	Cyanide (total)			31	2	1	<1	2	1.1	2	n/a	0	0
P1140	Ammonium (NH <sub>4</sub> <sup>+</sup> )		NP	31	16	15	<15	9300	950	9300	n/a	0	0
P1238	Ammoniacal Nitrogen (as N)		NP	31	13	15	<15	7200	755	7200	300	3	3
P1720	Ammonia (unionised) (NH <sub>3</sub> as N) (free ammonia)	SP	NP	31	15	15	<15	8800	890	8800	n/a	0	0
15541-45-4	Bromate (BrO <sub>3</sub> )			31	0	0.002	<0.002	<0.002	<0.002	<0.002	n/a	0	0
16887-00-6	Chloride (Cl <sup>-</sup> )			31	31	0.15	14	170	81.5	170	250000	0	0
16984-48-8	Fluoride (F <sup>-</sup> )			31	31	50	220	700	520	700	1000	0	0
P1348	Nitrate (NO <sub>3</sub> <sup>-</sup> )			31	31	0.05	0.25	128	67.9	128	n/a	0	0
P1349	Nitrite (NO <sub>2</sub> <sup>-</sup> )			31	30	5	<5	810	680	810	n/a	0	0
14808-79-8	Sulfate (SO <sub>4</sub> <sup>2-</sup> )			31	31	45	31300	606000	254000	606000	400000	1	1
P1134	pH (min.) (su)			31	31	0	6.8	7.6	7.5	7.6	6	0	0
P1134	pH (max.) (su)			31	31	0	6.8	7.6	7.5	7.6	9	0	0
P1287	Electrical conductivity (µS/cm)			31	31	10	540	1500	1250	1500	n/a	0	0
120-12-7	Anthracene	PH	H	31	0	0.01	<0.01	<0.01	<0.01	<0.01	0.1	0	0
50-32-8	Benzo(a)pyrene	PH	H	31	0	0.01	<0.01	<0.01	<0.01	<0.01	0.00017	31	0
206-44-0	Fluoranthene	P	H	31	0	0.01	<0.01	<0.01	<0.01	<0.01	0.0063	31	0
91-20-3	Naphthalene	P	NP	31	0	0.01	<0.01	<0.01	<0.01	<0.01	2	0	0
GRP01	PAHs = sum of benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(ghi)perylene, indeno(1,2,3-cd)pyrene	P	H	31	0	0.04	<0.04	<0.04	<0.04	<0.04	n/a	0	0
P1877	Phenol	SP	NP	31	24	1	<1	3.2	2.85	3.2	7.7	0	0
P1407	Alii EC5-EC6			9	0	1	<1	<1	<1	<1	10	0	0
P1408	Alii >EC6-EC8			9	0	1	<1	<1	<1	<1	10	0	0
P1409	Alii >EC8-EC10			9	0	1	<1	<1	<1	<1	10	0	0
P1410	Alii >EC10-EC12			9	0	10	<10	<10	<10	<10	10	0	0
P1411	Alii >EC12-EC16			9	0	10	<10	<10	<10	<10	10	0	0
P1938	Alii >EC16-EC35			9	0	10	<10	<10	<10	<10	10	0	0
P1415	Alii >EC35-EC44			9	0	10	<10	<10	<10	<10	10	0	0
P1441	Aro EC5-EC7			9	0	1	<1	<1	<1	<1	10	0	0
P1355	Aro >EC7-EC8			9	0	1	<1	<1	<1	<1	10	0	0
P1356	Aro >EC8-EC10			9	0	1	<1	<1	<1	<1	10	0	0
P1357	Aro >EC10-EC12			9	0	10	<10	<10	<10	<10	10	0	0
P1358	Aro >EC12-EC16			9	0	10	<10	<10	<10	<10	10	0	0
P1359	Aro >EC16-EC21			9	0	10	<10	<10	<10	<10	10	0	0
P1360	Aro >EC21-EC35			9	0	10	<10	<10	<10	<10	10	0	0

## Summary of Remedial Targets Methodology Screening



RTM Level: <b>RTM Level 2 - Groundwater Beneath Source Assessment - groundwater samples</b> Water body receptor(s): <b>Groundwater and surface water</b> Secondary receptor(s): Data set: Groundwater Client: Oxford University Development s Ltd Site: Begbroke Job no: C19114 Test Certificates(s): 22-85131 & 22-86105 Dataset <b>RTD</b>											PNEC calculated (inland EQS)	P= priority substance PH = priority hazardous substances. <b>WFD Designation (2015 Directions)</b> OP = Other substance identical to previous legislation SP = Specific Pollutant <b>JAGDAG Hazardous Substances Determination (UK)</b> H Hazardous substance NP Non-hazardous pollutant (blank) Not included in assessment		
CAS / AGS Number	Chemicals of Potential Concern (concentrations in µg/l)	WFD Designation	Hazardous Substance Status	Summary of Sample Data						Value Being Compared to Target = Maximum Value	Water Quality Target (Exceeded if Red)	No. Samples Exceeding Water Quality Target	No. Samples above LoD Exceeding Water Quality	Notes
				No. of Samples	No. of Samples > LoD	Limit of Detection	Minimum Value	Maximum Value	95-%ile Value					
P1362	Aro >EC35-EC44			9	0	10	<10	<10	<10	<10	10	0	0	
71-43-2	Benzene	P	H	9	0	1	<1	<1	<1	<1	10	0	0	
108-88-3	Toluene	SP	H	9	0	1	<1	<1	<1	<1	74	0	0	
100-41-4	Ethylbenzene		H	9	0	1	<1	<1	<1	<1	20	0	0	Proposed EQS for Ethylbenzene in Water, R&D Technical Report P2-115/TR4, EA 2001
95-47-6	o-Xylene		H	13	0	1	<1	<1	<1	<1	30	0	0	EQS for total xylene
P1374	m,p-Xylene		H	13	0	1	<1	<1	<1	<1	30	0	0	EQS for total xylene
1634-04-04	Methyl tertiary butyl ether (MTBE)		NP	9	0	1	<1	<1	<1	<1	n/a			

Summary of Remedial Targets Methodology Screening



Hydrock Scenario: <b>Scenario B - EQS (inland)</b>											2013/39/EU Annex I		
RTM Level: <b>RTM Level 2 - Groundwater Beneath Source Assessment - groundwater samples</b>											P = priority substance		
Water body receptor(s): <b>Groundwater and surface water</b>											PH = priority hazardous substances.		
Secondary receptor(s):											WFD Designation (2015 Directions)		
Data set: Groundwater											OP = Other substance identical to previous legislation		
Client: Oxford University Development s Ltd											SP = Specific Pollutant		
Site: Begbroke											JAGDAG Hazardous Substances Determination (UK)		
Job no: C19114											H Hazardous substance		
Test Certificates(s): 22-85131 & 22-86105											NP Non-hazardous pollutant		
Dataset <b>OCF</b>											(blank) Not included in assessment		
											PNEC calculated (inland EQS)		
CAS / AGS Number	Chemicals of Potential Concern (concentrations in µg/l)	WFD Designation	Hazardous Substance Status	Summary of Sample Data					Value Being Compared to Target = Maximum Value	Water Quality Target (Exceeded if Red)	No. Samples Exceeding Water Quality Target	No. Samples above LoD Exceeding Water Quality	Notes
				No. of Samples	No. of Samples > LoD	Limit of Detection	Minimum Value	Maximum Value					
P1133	Hardness as mg/l CaCO <sub>3</sub>			-	-	-	10	-	-	-	-	-	Representative hardness of receiving surface water environment used in some inland EQS
7440-22-4	Silver (Ag) (dissolved)			6	0	0.05	<0.05	67	61	67	0.05	0	
7429-90-5	Aluminium (Al) (dissolved)			6	0	1	1.6	67	61	67	n/a	0	
7440-38-2	Arsenic (As) (dissolved)	SP	H	6	6	0.15	0.45	6.85	6.64	6.85	50	0	0
7440-42-8	Boron (B) (dissolved)		NP	6	6	10	210	1500	1475	1500	2000	0	0
7440-39-3	Barium (Ba) (dissolved)			6	6	0.06	31	75	74.75	75	n/a	0	0
7440-43-9	Cadmium (Cd) (dissolved)	PH	NP	6	4	0.02	<0.02	0.06	0.0575	0.06	0.08	0	0
7440-48-4	Cobalt (Co) (dissolved)		NP	6	6	0.2	1.5	19	18.5	19	3	4	4
18540-29-9	Chromium (VI) (Cr) (dissolved)	SP	H	6	0	5	<5	<5	<5	<5	3.4	6	0
16065-83-1	Chromium (III) (Cr) (dissolved)	SP		6	6	5	5.3	9.2	9	9.2	4.7	6	6
7440-47-3	Chromium (Cr) (total) (dissolved)			6	6	0.2	5.3	9.2	9	9.2	n/a	0	0
7440-50-8	Copper (Cu) (dissolved)	SP	NP	6	6	0.5	1.4	8.5	7.975	8.5	1	6	6
7439-89-6	Iron (Fe) (dissolved)	SP		6	6	0.004	14	420	342.5	420	1000	0	0
7439-97-6	Mercury (Hg) (dissolved)	PH	H	6	0	0.05	<0.05	<0.05	<0.05	<0.05	0.07	0	0
P1286	Manganese (Mn) (dissolved)	SP		6	6	0.05	230	2500	2350	2500	123	6	6
7440-23-5	Sodium (Na) (dissolved)			6	6	0.01	33000	60000	59250	60000	n/a	0	0
7440-02-0	Nickel (Ni) (dissolved)	P	NP	6	6	0.5	5.6	16	15.75	16	4	6	6
7439-92-1	Lead (Pb) (dissolved)	P	H	6	0	0.2	<0.2	<0.2	<0.2	<0.2	1.2	0	0
7440-36-0	Antimony (Sb) (dissolved)		NP	6	6	0.4	0.5	0.8	0.75	0.8	n/a	0	0
7782-49-2	Selenium (Se) (dissolved)		NP	6	3	0.6	<0.6	3	2.475	3	n/a	0	0
7440-31-5	Tin (Sn) (dissolved)			6	3	0.2	<0.2	0.39	0.38	0.39	25	0	0
7440-62-2	Vanadium (V) (dissolved)			6	4	0.2	<0.2	0.6	0.525	0.6	20	0	0
7440-66-6	Zinc (Zn) (dissolved)	SP	NP	6	6	0.5	5.3	9.5	9.2	9.5	12.3	0	0
P1095	Cyanide (free) (hydrogen cyanide)	SP	NP	6	0	1	<1	<1	<1	<1	1	0	0
57-12-5	Cyanide (total)			6	1	1	<1	2.6	2.2	2.6	n/a	0	0
P1140	Ammonium (NH <sub>4</sub> <sup>+</sup> )		NP	6	6	15	89	24000	23750	24000	n/a	0	0
P1238	Ammoniacal Nitrogen (as N)		NP	6	6	15	69	18000	18000	18000	300	4	4
P1720	Ammonia (unionised) (NH <sub>3</sub> as N) (free ammonia)	SP	NP	6	6	15	84	22000	17050	22000	n/a	0	0
15541-45-4	Bromate (BrO <sub>3</sub> )			6	6	0.002	2	2	2	2	n/a	0	0
16887-00-6	Chloride (Cl <sup>-</sup> )			6	6	0.15	28000	34000	34000	34000	250000	0	0
16984-48-8	Fluoride (F <sup>-</sup> )			6	6	50	110	170	162.5	170	1000	0	0
P1348	Nitrate (NO <sub>3</sub> <sup>-</sup> )			6	6	0.05	460	15300	14825	15300	n/a	0	0
P1349	Nitrite (NO <sub>2</sub> <sup>-</sup> )			6	4	5	<5	1100	865	1100	n/a	0	0
14808-79-8	Sulfate (SO <sub>4</sub> <sup>2-</sup> )			6	6	45	127000	645000	627000	645000	400000	4	4
P1134	pH (min.) (su)			6	6	0	6.7	7	6.975	7	6	0	0
P1134	pH (max.) (su)			6	6	0	6.7	7	6.975	7	9	0	0
P1287	Electrical conductivity (µS/cm)			6	6	10	690	1300	1300	1300	n/a	0	0
120-12-7	Anthracene	PH	H	6	0	0.01	<0.01	<0.01	<0.01	<0.01	0.1	0	0
50-32-8	Benzo(a)pyrene	PH	H	6	0	0.01	<0.01	<0.01	<0.01	<0.01	0.00017	6	0
206-44-0	Fluoranthene	P	H	6	0	0.01	<0.01	<0.01	<0.01	<0.01	0.0063	6	0
91-20-3	Naphthalene	P	NP	6	0	0.01	<0.01	<0.01	<0.01	<0.01	2	0	0
GRP01	PAHs = sum of benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(ghi)perylene, indeno(1,2,3-cd)pyrene	P	H	6	0	0.04	<0.04	<0.04	<0.04	<0.04	n/a	0	0
P1877	Phenol	SP	NP	6	5	1	<1	2.8	2.6	2.8	7.7	0	0
P1407	Alii >EC5-EC6			6	0	1	<1	<1	<1	<1	10	0	0
P1408	Alii >EC6-EC8			6	0	1	<1	<1	<1	<1	10	0	0
P1409	Alii >EC8-EC10			6	0	1	<1	<1	<1	<1	10	0	0
P1410	Alii >EC10-EC12			6	0	10	<10	<10	<10	<10	10	0	0
P1411	Alii >EC12-EC16			6	0	10	<10	<10	<10	<10	10	0	0
P1938	Alii >EC16-EC35			6	0	10	<10	<10	<10	<10	10	0	0
P1415	Alii >EC35-EC44			6	0	10	<10	<10	<10	<10	10	0	0
P1441	Aro >EC5-EC7			6	0	1	<1	<1	<1	<1	10	0	0
P1355	Aro >EC7-EC8			6	0	1	<1	<1	<1	<1	10	0	0
P1356	Aro >EC8-EC10			6	0	1	<1	<1	<1	<1	10	0	0
P1357	Aro >EC10-EC12			6	0	10	<10	<10	<10	<10	10	0	0
P1358	Aro >EC12-EC16			6	0	10	<10	<10	<10	<10	10	0	0
P1359	Aro >EC16-EC21			6	0	10	<10	<10	<10	<10	10	0	0
P1360	Aro >EC21-EC35			6	0	10	<10	<10	<10	<10	10	0	0

## Summary of Remedial Targets Methodology Screening



RTM Level: <b>RTM Level 2 - Groundwater Beneath Source Assessment - groundwater samples</b> Water body receptor(s): <b>Groundwater and surface water</b> Secondary receptor(s): Data set: Groundwater Client: Oxford University Development s Ltd Site: Begbroke Job no: C19114 Test Certificates(s): 22-85131 & 22-86105 Dataset <b>OCF</b>										PNEC calculated (inland EQS)	P= priority substance PH = priority hazardous substances. <b>WFD Designation (2015 Directions)</b> OP = Other substance identical to previous legislation SP = Specific Pollutant <b>JAGDAG Hazardous Substances Determination (UK)</b> H Hazardous substance NP Non-hazardous pollutant (blank) Not included in assessment			
CAS / AGS Number	Chemicals of Potential Concern (concentrations in µg/l)	WFD Designation	Hazardous Substance Status	Summary of Sample Data						Value Being Compared to Target = Maximum Value	Water Quality Target (Exceeded if Red)	No. Samples Exceeding Water Quality Target	No. Samples above LoD Exceeding Water Quality	Notes
				No. of Samples	No. of Samples > LoD	Limit of Detection	Minimum Value	Maximum Value	95-%ile Value					
P1362	Aro >EC35-EC44			6	0	10	<10	<10	<10	<10	10	0	0	
71-43-2	Benzene	P	H	6	0	1	<1	<1	<1	<1	10	0	0	
108-88-3	Toluene	SP	H	6	0	1	<1	<1	<1	<1	74	0	0	
100-41-4	Ethylbenzene		H	6	0	1	<1	<1	<1	<1	20	0	0	Proposed EQS for Ethylbenzene in Water, R&D Technical Report P2-115/TR4, EA 2001
95-47-6	o-Xylene		H	6	0	1	<1	<1	<1	<1	30	0	0	EQS for total xylene
P1374	m,p-Xylene		H	6	0	1	<1	<1	<1	<1	30	0	0	EQS for total xylene
1634-04-04	Methyl tertiary butyl ether (MTBE)		NP	6	0	1	<1	<1	<1	<1	n/a			

## Appendix G Waste Assessment

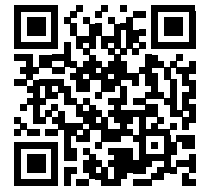


*HazWasteOnline™ Assessment*

# Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- a) understand the origin of the waste
- b) select the correct List of Waste code(s)
- c) confirm that the list of determinands, results and sampling plan are fit for purpose
- d) select and justify the chosen metal species (Appendix B)
- e) correctly apply moisture correction and other available corrections
- f) add the meta data for their user-defined substances (Appendix A)
- g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



VFU80-ZFGFR-2NEJE

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

## Job name

23-17130\_HWOL\_Results

## Description/Comments

i2 lab cert 23-17130

## Project

19114

## Site

Begbroke

## Classified by

<p>Name: <b>Nathan Thompson</b> Date: <b>29 Mar 2023 08:07 GMT</b> Telephone: <b>07557 345 513</b></p>	<p>Company: <b>Hydrock Consultants Ltd</b> <b>Hawthorn Park</b> <b>Holdenby Road, Spratton</b> <b>Northampton</b> <b>NN6 8LD</b></p>
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HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

<p><b>HazWasteOnline™ Certification:</b> <b>Course</b> Hazardous Waste Classification</p>	<p><b>CERTIFIED</b> <b>Date</b> 22 Apr 2021</p>
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Next 3 year Refresher due by Apr 2024

## Purpose of classification

2 - Material Characterisation

## Address of the waste

Begbroke Science Park

Post Code N/A

## SIC for the process giving rise to the waste

41202 Construction of domestic buildings

## Description of industry/producer giving rise to the waste

Development of greenfield site to commercial / residential end use and railway bridge area

## Description of the specific process, sub-process and/or activity that created the waste

Waste created during development of the site

## Description of the waste

Natural arisings. Topsoil and Alluvial soils.

### Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	TP317--02022023-0.10		Non Hazardous		3
2	TP315--02022023-0.50		Non Hazardous		6
3	TP303--02022023-0.10		Non Hazardous		8
4	TP304--31012023-0.80		Non Hazardous		11
5	TP309--06022023-0.10		Non Hazardous		13
6	TP309--06022023-1.00		Non Hazardous		16
7	TP310--06022023-0.40		Non Hazardous		18
8	TP312--06022023-0.10		Non Hazardous		20

### Related documents

#	Name	Description
1	23-17130_HWOL_Results.hwol	i2 Analytical .hwol file used to populate the Job
2	Hydrock Standard plus Cresol (ammended Lead)	waste stream template used to create this Job


### Report

Created by: Nathan Thompson

Created date: 29 Mar 2023 08:07 GMT

Appendices	Page
<a href="#">Appendix A: Classifier defined and non GB MCL determinands</a>	23
<a href="#">Appendix B: Rationale for selection of metal species</a>	24
<a href="#">Appendix C: Version</a>	25

Classification of sample: TP317--02022023-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP317--02022023-0.10</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>22%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 22% Wet Weight Moisture Correction applied (MC)





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	15 mg/kg	1.32	15.448 mg/kg	0.00154 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.93 mg/kg	2.775	2.013 mg/kg	0.000201 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.4 mg/kg	13.43	4.19 mg/kg	0.000419 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	32 mg/kg	1.462	46.77 mg/kg	0.00468 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	chrysene 601-048-00-0   205-923-4   218-01-9				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
17	copper { dicopper oxide; copper (I) oxide } 029-002-00-X   215-270-7   1317-39-1				13 mg/kg	1.126	11.417 mg/kg	0.00114 %	✓	
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
19	dibenz[a,h]anthracene 601-041-00-2   200-181-8   53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	ethylbenzene 601-023-00-4   202-849-4   100-41-4				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
21	fluoranthene 205-912-4   206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	fluorene 201-695-5   86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	indeno[123-cd]pyrene 205-893-2   193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
24	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	22 mg/kg		17.16 mg/kg	0.00172 %	✓	
25	mercury { mercury dichloride } 080-010-00-X   231-299-8   7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
26	naphthalene 601-052-00-2   202-049-5   91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
27	nickel { nickel dihydroxide } 028-008-00-X   235-008-5 [1]   12054-48-7 [1] 234-348-1 [2]   11113-74-9 [2]				17 mg/kg	1.579	20.944 mg/kg	0.00209 %	✓	
28	pH PH				7.8 pH		7.8 pH	7.8 pH		
29	phenanthrene 201-581-5   85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
30	pyrene 204-927-3   129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
32	toluene 601-021-00-3   203-625-9   108-88-3				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
33	TPH (C6 to C40) petroleum group TPH				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
34	xylene 601-022-00-9   202-422-2 [1]   95-47-6 [1] 203-396-5 [2]   106-42-3 [2] 203-576-3 [3]   108-38-3 [3] 215-535-7 [4]   1330-20-7 [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	zinc { zinc oxide } 030-013-00-7   215-222-5   1314-13-2				58 mg/kg	1.245	56.311 mg/kg	0.00563 %	✓	
36	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
37	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8   215-239-8   1314-62-1				49 mg/kg	1.785	68.23 mg/kg	0.00682 %	✓	
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X   216-653-1   1634-04-4				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
Total:								0.0262 %		



Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP315--02022023-0.50

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>TP315--02022023-0.50</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>16%</b> (wet weight correction)	

Hazard properties

None identified

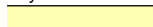
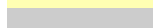


Determinands

Moisture content: 16% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	32 mg/kg	1.32	35.49 mg/kg	0.00355 %	✓		
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1 mg/kg	2.775	2.564 mg/kg	0.000256 %	✓		
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.3 mg/kg	13.43	3.384 mg/kg	0.000338 %	✓		
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD	
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	40 mg/kg	1.462	58.462 mg/kg	0.00585 %			
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD	
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	copper { dicopper oxide; copper (I) oxide }				9.4 mg/kg	1.126	8.89 mg/kg	0.000889 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	12 mg/kg		10.08 mg/kg	0.00101 %	✓	
	082-001-00-6									
23	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel { nickel dihydroxide }				31 mg/kg	1.579	41.13 mg/kg	0.00411 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				8 pH		8 pH	8pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc { zinc oxide }				41 mg/kg	1.245	42.868 mg/kg	0.00429 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				70 mg/kg	1.785	104.969 mg/kg	0.0105 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0317 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP303--02022023-0.10

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>TP303--02022023-0.10</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>15%</b> (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 15% Wet Weight Moisture Correction applied (MC)

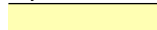



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	35 mg/kg	1.32	39.28 mg/kg	0.00393 %	✓		
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD	
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
9	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1 mg/kg	2.775	2.595 mg/kg	0.000259 %	✓		
12	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.8 mg/kg	13.43	9.132 mg/kg	0.000913 %	✓		
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD	
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }			215-160-9	40 mg/kg	1.462	58.462 mg/kg	0.00585 %			
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	chrysene 601-048-00-0   205-923-4   218-01-9				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
17	copper { dicopper oxide; copper (I) oxide } 029-002-00-X   215-270-7   1317-39-1				19 mg/kg	1.126	18.183 mg/kg	0.00182 %	✓	
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
19	dibenz[a,h]anthracene 601-041-00-2   200-181-8   53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	ethylbenzene 601-023-00-4   202-849-4   100-41-4				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
21	fluoranthene 205-912-4   206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	fluorene 201-695-5   86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	indeno[123-cd]pyrene 205-893-2   193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
24	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	160 mg/kg		136 mg/kg	0.0136 %	✓	
25	mercury { mercury dichloride } 080-010-00-X   231-299-8   7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
26	naphthalene 601-052-00-2   202-049-5   91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
27	nickel { nickel dihydroxide } 028-008-00-X   235-008-5 [1]   12054-48-7 [1] 234-348-1 [2]   11113-74-9 [2]				28 mg/kg	1.579	37.592 mg/kg	0.00376 %	✓	
28	pH PH				8 pH		8 pH	8pH		
29	phenanthrene 201-581-5   85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
30	pyrene 204-927-3   129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
32	toluene 601-021-00-3   203-625-9   108-88-3				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
33	TPH (C6 to C40) petroleum group TPH				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
34	xylene 601-022-00-9   202-422-2 [1]   95-47-6 [1] 203-396-5 [2]   106-42-3 [2] 203-576-3 [3]   108-38-3 [3] 215-535-7 [4]   1330-20-7 [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	zinc { zinc oxide } 030-013-00-7   215-222-5   1314-13-2				65 mg/kg	1.245	68.77 mg/kg	0.00688 %	✓	
36	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
37	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8   215-239-8   1314-62-1				70 mg/kg	1.785	106.219 mg/kg	0.0106 %	✓	
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X   216-653-1   1634-04-4				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
Total:								0.0495 %		



Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP304--31012023-0.80

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP304--31012023-0.80</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>16%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 16% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	62 mg/kg	1.32	68.763 mg/kg	0.00688 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.6 mg/kg	2.775	3.73 mg/kg	0.000373 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<0.2 mg/kg	13.43	<2.686 mg/kg	<0.000269 %		<LOD
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	49 mg/kg	1.462	71.616 mg/kg	0.00716 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
16	copper { dicopper oxide; copper (I) oxide } 029-002-00-X   215-270-7   1317-39-1				16 mg/kg	1.126	15.132	mg/kg	0.00151 %	✓	
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
18	dibenz[a,h]anthracene 601-041-00-2   200-181-8   53-70-3				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
19	fluoranthene 205-912-4   206-44-0				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
20	fluorene 201-695-5   86-73-7				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
21	indeno[123-cd]pyrene 205-893-2   193-39-5				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	18 mg/kg		15.12	mg/kg	0.00151 %	✓	
23	mercury { mercury dichloride } 080-010-00-X   231-299-8   7487-94-7				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
24	naphthalene 601-052-00-2   202-049-5   91-20-3				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25	nickel { nickel dihydroxide } 028-008-00-X   235-008-5 [1]   12054-48-7 [1]   234-348-1 [2]   11113-74-9 [2]				58 mg/kg	1.579	76.953	mg/kg	0.0077 %	✓	
26	pH PH				8.1 pH		8.1	pH	8.1 pH		
27	phenanthrene 201-581-5   85-01-8				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
28	pyrene 204-927-3   129-00-0				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
30	zinc { zinc oxide } 030-013-00-7   215-222-5   1314-13-2				89 mg/kg	1.245	93.055	mg/kg	0.00931 %	✓	
31	monohydric phenols P1186				<1 mg/kg		<1	mg/kg	<0.0001 %		<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8   215-239-8   1314-62-1				89 mg/kg	1.785	133.46	mg/kg	0.0133 %	✓	
Total:									0.049 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP309--06022023-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP309--06022023-0.10</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>21%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 21% Wet Weight Moisture Correction applied (MC)





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	21 mg/kg	1.32	21.904 mg/kg	0.00219 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.95 mg/kg	2.775	2.083 mg/kg	0.000208 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		1 mg/kg	13.43	10.61 mg/kg	0.00106 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	34 mg/kg	1.462	49.693 mg/kg	0.00497 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	chrysene 601-048-00-0   205-923-4   218-01-9				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
17	copper { dicopper oxide; copper (I) oxide } 029-002-00-X   215-270-7   1317-39-1				15 mg/kg	1.126	13.342 mg/kg	0.00133 %	✓	
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
19	dibenz[a,h]anthracene 601-041-00-2   200-181-8   53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	ethylbenzene 601-023-00-4   202-849-4   100-41-4				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
21	fluoranthene 205-912-4   206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	fluorene 201-695-5   86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	indeno[123-cd]pyrene 205-893-2   193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
24	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	21 mg/kg		16.59 mg/kg	0.00166 %	✓	
25	mercury { mercury dichloride } 080-010-00-X   231-299-8   7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
26	naphthalene 601-052-00-2   202-049-5   91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
27	nickel { nickel dihydroxide } 028-008-00-X   235-008-5 [1]   12054-48-7 [1]   234-348-1 [2]   11113-74-9 [2]				19 mg/kg	1.579	23.708 mg/kg	0.00237 %	✓	
28	pH PH				7 pH		7 pH	7pH		
29	phenanthrene 201-581-5   85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
30	pyrene 204-927-3   129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
32	toluene 601-021-00-3   203-625-9   108-88-3				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
33	TPH (C6 to C40) petroleum group TPH				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
34	xylene 601-022-00-9   202-422-2 [1]   95-47-6 [1]   203-396-5 [2]   106-42-3 [2]   203-576-3 [3]   108-38-3 [3]   215-535-7 [4]   1330-20-7 [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	zinc { zinc oxide } 030-013-00-7   215-222-5   1314-13-2				55 mg/kg	1.245	54.083 mg/kg	0.00541 %	✓	
36	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
37	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8   215-239-8   1314-62-1				51 mg/kg	1.785	71.925 mg/kg	0.00719 %	✓	
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X   216-653-1   1634-04-4				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
Total:								0.0283 %		



Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP309--06022023-1.00

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>TP309--06022023-1.00</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>9.3%</b>	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

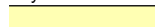
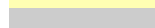


**Determinands**

Moisture content: 9.3% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	57 mg/kg	1.32	68.26 mg/kg	0.00683 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.4 mg/kg	2.775	3.524 mg/kg	0.000352 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	<0.2 mg/kg	13.43	<2.686 mg/kg	<0.000269 %		<LOD
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	52 mg/kg	1.462	76.001 mg/kg	0.0076 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	copper { dicopper oxide; copper (I) oxide }				9 mg/kg	1.126	9.191 mg/kg	0.000919 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	11 mg/kg		9.977 mg/kg	0.000998 %	✓	
	082-001-00-6									
23	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel { nickel dihydroxide }				30 mg/kg	1.579	42.978 mg/kg	0.0043 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				8.5 pH		8.5 pH	8.5 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc { zinc oxide }				62 mg/kg	1.245	69.995 mg/kg	0.007 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				100 mg/kg	1.785	161.916 mg/kg	0.0162 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0454 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP310--06022023-0.40

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>TP310--06022023-0.40</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>17%</b>	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified


Determinands

Moisture content: 17% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	16 mg/kg	1.32	17.534 mg/kg	0.00175 %	✓		
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1 mg/kg	2.775	2.304 mg/kg	0.00023 %	✓		
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.4 mg/kg	13.43	4.459 mg/kg	0.000446 %	✓		
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD	
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	33 mg/kg	1.462	48.231 mg/kg	0.00482 %			
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD	
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	copper { dicopper oxide; copper (I) oxide }				12 mg/kg	1.126	11.214 mg/kg	0.00112 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	12 mg/kg		9.96 mg/kg	0.000996 %	✓	
	082-001-00-6									
23	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel { nickel dihydroxide }				20 mg/kg	1.579	26.22 mg/kg	0.00262 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.7 pH		7.7 pH	7.7 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc { zinc oxide }				45 mg/kg	1.245	46.49 mg/kg	0.00465 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				51 mg/kg	1.785	75.567 mg/kg	0.00756 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0251 %		

**Key**

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: TP312--06022023-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>TP312--06022023-0.10</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>21%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

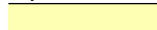



Moisture content: 21% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	17 mg/kg	1.32	17.732 mg/kg	0.00177 %	✓		
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD	
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
9	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1 mg/kg	2.775	2.193 mg/kg	0.000219 %	✓		
12	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.6 mg/kg	13.43	16.976 mg/kg	0.0017 %	✓		
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD	
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }			215-160-9	34 mg/kg	1.462	49.693 mg/kg	0.00497 %			
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	chrysene 601-048-00-0   205-923-4   218-01-9				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
17	copper { dicopper oxide; copper (I) oxide } 029-002-00-X   215-270-7   1317-39-1				14 mg/kg	1.126	12.452 mg/kg	0.00125 %	✓	
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
19	dibenz[a,h]anthracene 601-041-00-2   200-181-8   53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	ethylbenzene 601-023-00-4   202-849-4   100-41-4				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
21	fluoranthene 205-912-4   206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	fluorene 201-695-5   86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	indeno[123-cd]pyrene 205-893-2   193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
24	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	22 mg/kg		17.38 mg/kg	0.00174 %	✓	
25	mercury { mercury dichloride } 080-010-00-X   231-299-8   7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
26	naphthalene 601-052-00-2   202-049-5   91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
27	nickel { nickel dihydroxide } 028-008-00-X   235-008-5 [1]   12054-48-7 [1] 234-348-1 [2]   11113-74-9 [2]				19 mg/kg	1.579	23.708 mg/kg	0.00237 %	✓	
28	pH PH				7.6 pH		7.6 pH	7.6 pH		
29	phenanthrene 201-581-5   85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
30	pyrene 204-927-3   129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
32	toluene 601-021-00-3   203-625-9   108-88-3				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
33	TPH (C6 to C40) petroleum group TPH				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
34	xylene 601-022-00-9   202-422-2 [1]   95-47-6 [1] 203-396-5 [2]   106-42-3 [2] 203-576-3 [3]   108-38-3 [3] 215-535-7 [4]   1330-20-7 [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	zinc { zinc oxide } 030-013-00-7   215-222-5   1314-13-2				57 mg/kg	1.245	56.049 mg/kg	0.0056 %	✓	
36	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
37	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8   215-239-8   1314-62-1				53 mg/kg	1.785	74.746 mg/kg	0.00747 %	✓	
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X   216-653-1   1634-04-4				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
Total:								0.029 %		

Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

## Appendix A: Classifier defined and non GB MCL determinands

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Aquatic Chronic 2; H411

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H302, Acute Tox. 1; H330, Acute Tox. 1; H310, Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 23 Jul 2015

Hazard Statements: Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **boron tribromide/trichloride/trifluoride (combined)** (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride

Data source: N/A

Data source date: 06 Aug 2015

Hazard Statements: EUH014, Acute Tox. 2; H330, Acute Tox. 2; H300, Skin Corr. 1A; H314, Skin Corr. 1B; H314

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database

Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H332, Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Resp. Sens. 1; H334, Skin Sens. 1; H317, Repr. 1B; H360FD, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

GB MCL index number: 006-007-00-5

Description/Comments: Conversion factor based on a worst case compound: sodium cyanide

Additional Hazard Statement(s): EUH032 >= 0.2 %

Reason for additional Hazards Statement(s):

20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4

Description/Comments:

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Acute Tox. 4; H302, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Aquatic Acute 1; H400, Aquatic Chronic 1; H410

▪ **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Carc. 2; H351

▪ **lead compounds with the exception of those specified elsewhere in this Annex**

GB MCL index number: 082-001-00-6  
Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2  
Additional Hazard Statement(s): Carc. 2; H351  
Reason for additional Hazards Statement(s):  
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium [www.reach-lead.eu/substanceinformation.html](http://www.reach-lead.eu/substanceinformation.html). Review date 29/09/2015

▪ **pH** (CAS Number: PH)

Description/Comments: Appendix C4  
Data source: WM3 1st Edition 2015  
Data source date: 25 May 2015  
Hazard Statements: None.

▪ **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Carc. 2; H351, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Skin Irrit. 2; H315

▪ **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 21 Aug 2015  
Hazard Statements: Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

▪ **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013  
Data source: WM3 1st Edition 2015  
Data source date: 25 May 2015  
Hazard Statements: Flam. Liq. 3; H226, Asp. Tox. 1; H304, STOT RE 2; H373, Muta. 1B; H340, Carc. 1B; H350, Repr. 2; H361d, Aquatic Chronic 2; H411

▪ **monohydric phenols** (CAS Number: P1186)

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)  
Data source: CLP combined data  
Data source date: 26 Mar 2019  
Hazard Statements: Muta. 2; H341, Acute Tox. 3; H331, Acute Tox. 3; H311, Acute Tox. 3; H301, STOT RE 2; H373, Skin Corr. 1B; H314, Skin Corr. 1B; H314 >= 3%, Skin Irrit. 2; H315 1 £ conc. < 3%, Eye Irrit. 2; H319 1 £ conc. < 3%, Aquatic Chronic 2; H411

▪ **divanadium pentaoxide; vanadium pentoxide** (EC Number: 215-239-8, CAS Number: 1314-62-1)

GB MCL index number: 023-001-00-8  
Description/Comments:  
Additional Hazard Statement(s): Carc. 1B; H350, Acute Tox. 3; H301, Acute Tox. 2; H330  
Reason for additional Hazards Statement(s):  
20 Sep 2022 - Carc. 1B; H350 hazard statement sourced from: ATP 18 (Regulation (EU) 2022/692) considers vanadium pentoxide to be Carc. 1B; H350. The GB MCL Agency has reached the same opinion [but is yet to formerly make this change to the MCL List]. Substance has therefore been self-classified.  
28 Sep 2022 - Acute Tox. 3; H301 hazard statement sourced from: ATP 18 (Regulation (EU) 2022/692) considers vanadium pentoxide to be "Acute tox 3; H301". The GB MCL Agency has reached the same opinion [but is yet to formerly make this change to the MCL List]. Substance has therefore been self-classified.  
28 Sep 2022 - Acute Tox. 2; H330 hazard statement sourced from: ATP 18 (Regulation (EU) 2022/692) considers vanadium pentoxide to be "Acute tox 2; H330". The GB MCL Agency has reached the same opinion [but is yet to formerly make this change to the MCL List]. Substance has therefore been self-classified.

## Appendix B: Rationale for selection of metal species

### arsenic (arsenic trioxide)

Worst case species based on hazard statements



**beryllium {beryllium oxide}**

Worst case species based on hazard statements

**boron {boron tribromide/trichloride/trifluoride (combined)}**

Worst case species based on hazard statements

**cadmium {cadmium sulfide}**

Worst case species based on hazard statements

**chromium in chromium(III) compounds {chromium(III) oxide (worst case)}**

Worst case species based on hazard statements

**chromium in chromium(VI) compounds {chromium(VI) oxide}**

Worst case species based on hazard statements

**copper {dicopper oxide; copper (I) oxide}**

Most likely common species

**cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}**

Worst case species

**lead {lead compounds with the exception of those specified elsewhere in this Annex}**

Worst case species based on hazard statements

**mercury {mercury dichloride}**

Worst case species based on hazard statements

**nickel {nickel dihydroxide}**

Worst case species based on hazard statements

**selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}**

Worst case species based on hazard statements

**zinc {zinc oxide}**

Worst case species based on hazard statements

**vanadium {divanadium pentaoxide; vanadium pentoxide}**

Worst case species based on hazard statements.

**Appendix C: Version**

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021

HazWasteOnline Classification Engine Version: 2023.73.5544.10256 (14 Mar 2023)

HazWasteOnline Database: 2023.73.5544.10256 (14 Mar 2023)

This classification utilises the following guidance and legislation:

**WM3 v1.2.GB - Waste Classification** - 1st Edition v1.2.GB - Oct 2021

**CLP Regulation** - Regulation 1272/2008/EC of 16 December 2008

**1st ATP** - Regulation 790/2009/EC of 10 August 2009

**2nd ATP** - Regulation 286/2011/EC of 10 March 2011

**3rd ATP** - Regulation 618/2012/EU of 10 July 2012

**4th ATP** - Regulation 487/2013/EU of 8 May 2013

**Correction to 1st ATP** - Regulation 758/2013/EU of 7 August 2013

**5th ATP** - Regulation 944/2013/EU of 2 October 2013

**6th ATP** - Regulation 605/2014/EU of 5 June 2014

**WFD Annex III replacement** - Regulation 1357/2014/EU of 18 December 2014

**Revised List of Waste 2014** - Decision 2014/955/EU of 18 December 2014

**7th ATP** - Regulation 2015/1221/EU of 24 July 2015

**8th ATP** - Regulation (EU) 2016/918 of 19 May 2016

**9th ATP** - Regulation (EU) 2016/1179 of 19 July 2016

**10th ATP** - Regulation (EU) 2017/776 of 4 May 2017

**HP14 amendment** - Regulation (EU) 2017/997 of 8 June 2017

**13th ATP** - Regulation (EU) 2018/1480 of 4 October 2018

**14th ATP** - Regulation (EU) 2020/217 of 4 October 2020

**15th ATP** - Regulation (EU) 2020/1182 of 19 May 2020

**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)**

**Regulations 2020** - UK: 2020 No. 1567 of 16th December 2020

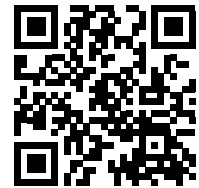
**The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020** - UK: 2020 No. 1540 of 16th December 2020

**GB MCL List** - version 1.1 of 09 June 2021

# Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



WLAQ6-MSRNL-JY8T0

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

## Job name

21-96277\_HWOL\_Results

## Description/Comments

Lab Cert 21-926077

## Project

19114

## Site

Begbroke

## Classified by

Name: **Nathan Thompson**  
 Date: **08 Oct 2021 13:48 GMT**  
 Telephone: **07557 345 513**  
 Company: **Hydrock Consultants Ltd**  
**Hawthorn Park**  
**Holdenby Road, Spratton**  
**Northampton**  
**NN6 8LD**

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

**HazWasteOnline™ Certification:**

**CERTIFIED**

**Course**  
 Hazardous Waste Classification

**Date**  
 22 Apr 2021

Next 3 year Refresher due by Apr 2024

## Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	BH01--18082021-2.50		Non Hazardous		3
2	BH02--19082021-3.00		Hazardous	HP 3(i), HP 7, HP 11	5
3	BH02--19082021-1.50		Non Hazardous		11
4	BH03--18082021-1.00		Hazardous	HP 14	13
5	TP01--17082021-1.00		Non Hazardous		15
6	TP02--20082021-0.80		Non Hazardous		20
7	TP02--20082021-1.50		Non Hazardous		23
8	TP02--20082021-2.50		Hazardous	HP 3(i), HP 7, HP 11	26
9	TP02--20082021-3.30		Non Hazardous		31
10	TP03--20082021-2.30		Hazardous	HP 14	34
11	tp04--20082021-0.50		Non Hazardous		40
12	TP05--20082021-0.50		Non Hazardous		42
13	TP05--20082021-2.00		Non Hazardous		43
14	TP05--20082021-1.30		Non Hazardous		48
15	TP06--20082021-0.70		Non Hazardous		49
16	TP07--20082021-0.10		Non Hazardous		51
17	TP07--20082021-2.70		Non Hazardous		53
18	WS01--18082021-0.10		Non Hazardous		56
19	WS02--18082021-0.20		Non Hazardous		58
20	WS02--18082021-0.80		Non Hazardous		60
21	WS03--18082021-1.00		Non Hazardous		62
22	WS04--18082021-2.50		Non Hazardous		63
23	WS05--18082021-2.90		Non Hazardous		68
24	WS05--18082021-3.80		Non Hazardous		71
25	WS06--19082021-1.80		Non Hazardous		73
26	WS07--19082021-2.30		Non Hazardous		78
27	WS08--19082021-3.40		Non Hazardous		84
28	WS09--19082021-2.50		Non Hazardous		89
29	WS09--19082021-3.00		Non Hazardous		91

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
30	WS09--19082021-3.80		Non Hazardous		94
31	WS10--18082021-0.20		Non Hazardous		99
32	WS10--18082021-0.60		Non Hazardous		101

**Related documents**

#	Name	Description
1	21-96277_HWOL_Results.hwol	.hwol file used to create the Job
2	Hydrock Standard plus Cresol (ammended Lead)	waste stream template used to create this Job


**Report**

Created by: Nathan Thompson

Created date: 08 Oct 2021 13:48 GMT

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	103
Appendix B: Rationale for selection of metal species	107
Appendix C: Version	108

Classification of sample: BH01--18082021-2.50

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>BH01--18082021-2.50</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>18%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 18% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	78 mg/kg	1.32	84.448 mg/kg	0.00844 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	1.5 mg/kg		1.23 mg/kg	0.000123 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	1.3 mg/kg		1.066 mg/kg	0.000107 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	1.7 mg/kg		1.394 mg/kg	0.000139 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		1 mg/kg		0.82 mg/kg	0.000082 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.53 mg/kg		0.435 mg/kg	0.0000435 %	✓	
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	2 mg/kg	2.775	4.552 mg/kg	0.000455 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		1.8 mg/kg	13.43	19.823 mg/kg	0.00198 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1.5 mg/kg	1.285	1.581 mg/kg	0.000123 %	✓	
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		75 mg/kg	1.462	89.886 mg/kg	0.00899 %	✓	
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	1.2 mg/kg		0.984 mg/kg	0.0000984 %	✓	
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	35 mg/kg	1.126	32.313 mg/kg	0.00323 %	✓	


#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
18	dibenz[a,h]anthracene				0.27	mg/kg		0.221	mg/kg	0.0000221 %	✓	
	601-041-00-2	200-181-8	53-70-3									
19	fluoranthene				2	mg/kg		1.64	mg/kg	0.000164 %	✓	
		205-912-4	206-44-0									
20	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
21	indeno[123-cd]pyrene				0.96	mg/kg		0.787	mg/kg	0.0000787 %	✓	
		205-893-2	193-39-5									
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	170	mg/kg		139.4	mg/kg	0.0139 %	✓	
	082-001-00-6											
23	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
24	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
25	nickel { nickel dihydroxide }				44	mg/kg	1.579	56.988	mg/kg	0.0057 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
26	pH				7.9	pH		7.9	pH	7.9 pH		
			PH									
27	phenanthrene				0.62	mg/kg		0.508	mg/kg	0.0000508 %	✓	
		201-581-5	85-01-8									
28	pyrene				1.9	mg/kg		1.558	mg/kg	0.000156 %	✓	
		204-927-3	129-00-0									
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
30	zinc { zinc oxide }				240	mg/kg	1.245	244.96	mg/kg	0.0245 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
31	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				140	mg/kg	1.785	204.939	mg/kg	0.0205 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
Total:										0.0896 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: BH02--19082021-3.00

 **Hazardous Waste**  
 Classified as **17 05 03 \***  
 in the List of Waste

Sample details

Sample name: <b>BH02--19082021-3.00</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>19%</b> (wet weight correction)	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Samples wet & unlikely to be hazardous.

Hazard Statements hit:

**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.154%)

**HP 7: Carcinogenic** "waste which induces cancer or increases its incidence"

Hazard Statements hit:

**Carc. 1B; H350** "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.154%)

**HP 11: Mutagenic** "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

**Muta. 1B; H340** "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.154%)

Determinands

Moisture content: 19% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
		203-458-1, 200-863-5	107-06-2, 75-34-3							
2	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
3	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
4	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7							
5	arsenic { arsenic trioxide }				84 mg/kg	1.32	89.835 mg/kg	0.00898 %	✓	
		033-003-00-0 215-481-4	1327-53-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	M/C Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
6	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
7	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
8	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
9	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
10	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
11	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
12	beryllium { beryllium oxide }				2.4 mg/kg	2.775	5.395 mg/kg	0.00054 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
13	boron { boron tribromide/trichloride/trifluoride (combined) }				3.4 mg/kg	13.43	36.986 mg/kg	0.0037 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2							
14	cadmium { cadmium sulfide }			1	5.3 mg/kg	1.285	5.518 mg/kg	0.000429 %	✓	
	048-010-00-4	215-147-8	1306-23-6							
15	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				74 mg/kg	1.462	87.606 mg/kg	0.00876 %	✓	
		215-160-9	1308-38-9							
16	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
17	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
18	copper { dicopper oxide; copper (I) oxide }				1000 mg/kg	1.126	911.97 mg/kg	0.0912 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
20	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
21	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
22	fluoranthene				0.92 mg/kg		0.745 mg/kg	0.0000745 %	✓	
		205-912-4	206-44-0							
23	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
24	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
25	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	120 mg/kg		97.2 mg/kg	0.00972 %	✓	
	082-001-00-6									
26	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
27	naphthalene				<0.0001 mg/kg		<0.0001 mg/kg	<0.00000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
28	nickel { nickel dihydroxide }				150 mg/kg	1.579	191.909 mg/kg	0.0192 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
29	pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
30	phenanthrene				0.32 mg/kg		0.259 mg/kg	0.0000259 %	✓	
		201-581-5	85-01-8							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
31	phenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
32	pyrene				0.93 mg/kg		0.753 mg/kg	0.0000753 %	✓	
		204-927-3	129-00-0							
33	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
34	tetrachloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-028-00-4	204-825-9	127-18-4							
35	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
36	TPH (C6 to C40) petroleum group				1900 mg/kg		1539 mg/kg	0.154 %	✓	
			TPH							
37	trichloroethylene; trichloroethene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-027-00-9	201-167-4	79-01-6							
38	xylene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
39	zinc { zinc oxide }				540 mg/kg	1.245	544.438 mg/kg	0.0544 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
40	hexachlorobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	602-065-00-6	204-273-9	118-74-1							
41	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]							
42	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
43	vanadium { divanadium pentaoxide; vanadium pentoxide }				130 mg/kg	1.785	187.98 mg/kg	0.0188 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
44	1,1,1-trichloroethane; methyl chloroform				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-013-00-2	200-756-3	71-55-6							
45	1,1,2,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5							
46	1,1,2-trichloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-014-00-8	201-166-9	79-00-5							
47	1,1-dichloroethylene; vinylidene chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-025-00-8	200-864-0	75-35-4							
48	1,1-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-031-00-0	209-253-3	563-58-6							
49	1,2,3-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		201-757-1	87-61-6							
50	1,2,4-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-043-00-3	202-436-9	95-63-6							
51	1,2-dibromoethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-010-00-6	203-444-5	106-93-4							
52	1,2-dichlorobenzene; o-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-034-00-7	202-425-9	95-50-1							
53	1,2-dichloropropane; propylene dichloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-020-00-0	201-152-2	78-87-5							
54	1,3-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-067-00-7	208-792-1	541-73-1							
55	1,3-dichloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		205-531-3	142-28-9							
56	1,4-dichlorobenzene; p-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-035-00-2	203-400-5	106-46-7							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
57	2,2-dichloropropane	209-832-0	594-20-7		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
58	bromodichloromethane	200-856-7	75-27-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
59	bromomethane; methylbromide	602-002-00-2	200-813-2	74-83-9	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
60	bromobenzene	602-060-00-9	203-623-8	108-86-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
61	n-butylbenzene	203-209-7	104-51-8		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
62	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]	602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
63	chlorobenzene	602-033-00-1	203-628-5	108-90-7	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
64	carbon tetrachloride; tetrachloromethane	602-008-00-5	200-262-8	56-23-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
65	chloroethane	602-009-00-0	200-830-5	75-00-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
66	chloroform; trichloromethane	602-006-00-4	200-663-8	67-66-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
67	chloromethane; methyl chloride	602-001-00-7	200-817-4	74-87-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
68	dibromochloromethane	204-704-0	124-48-1		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
69	1,2-dibromo-3-chloropropane	602-021-00-6	202-479-3	96-12-8	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
70	dibromomethane	602-003-00-8	200-824-2	74-95-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
71	hexachlorobutadiene	201-765-5	87-68-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
72	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
73	4-isopropyltoluene	202-796-7	99-87-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
74	sec-butylbenzene	205-227-0	135-98-8		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
75	styrene	601-026-00-0	202-851-5	100-42-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
76	trans-1,3-dichloropropene	431-460-4	10061-02-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
77	tert-butylbenzene	202-632-4	98-06-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
78	bromoform; tribromomethane	602-007-00-X	200-854-6	75-25-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
79	1,2,4-trichlorobenzene	602-087-00-6	204-428-0	120-82-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
80	1,1,1,2-tetrachloroethane	211-135-1	630-20-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
81	trichlorofluoromethane	200-892-3	75-69-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
82	mesitylene; 1,3,5-trimethylbenzene	601-025-00-5	203-604-4	108-67-8	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
83	vinyl chloride; chloroethylene	602-023-00-7	200-831-0	75-01-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
84	aniline	612-008-00-7	200-539-3	62-53-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
85	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]							
86	bis(2-chloroethyl) ether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	603-029-00-2	203-870-1	111-44-4							
87	hexachloroethane				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		200-666-4	67-72-1							
88	nitrobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	609-003-00-7	202-716-0	98-95-3							
89	3,5,5-trimethylcyclohex-2-enone; isophorone				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	606-012-00-8	201-126-0	78-59-1							
90	2-nitrophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-857-5	88-75-5							
91	3,4-xyleneol; [1] 2,5-xyleneol; [2] 2,4-xyleneol; [3] 2,3-xyleneol; [4] 2,6-xyleneol; [5] xyleneol; [6] 2,4(or 2,5)-xyleneol [7]				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]							
92	bis(2-chloroethoxy)methane				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		203-920-2	111-91-1							
93	2,4-dichlorophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-011-00-7	204-429-6	120-83-2							
94	4-chloroaniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-137-00-9	203-401-0	106-47-8							
95	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-014-00-3	200-431-6	59-50-7							
96	2,4,6-trichlorophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
97	2,4,5-trichlorophenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
98	2-methyl naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-078-3	91-57-6							
99	2-chloronaphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-079-9	91-58-7							
100	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							
101	2,6-dinitrotoluene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	609-049-00-8	210-106-0	606-20-2							
102	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]							
103	dibenzofuran				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		205-071-3	132-64-9							
104	4-chlorophenylphenylether				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		230-281-7	7005-72-3							
105	diethyl phthalate				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		201-550-6	84-66-2							
106	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]							
107	azobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	611-001-00-6	203-102-5	103-33-3							
108	4-bromophenylphenylether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		202-952-4	101-55-3							




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
109	carbazole	201-696-0	86-74-8		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
110	dibutyl phthalate; DBP	201-557-4	84-74-2		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
111	anthraquinone	201-549-0	84-65-1		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
112	BBP; benzyl butyl phthalate	201-622-7	85-68-7		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
113	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
114	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
115	cumene; [1] propylbenzene [2]	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
Total:								0.371 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Hazardous result
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: BH02--19082021-1.50

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>BH02--19082021-1.50</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>25%</b>	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 25% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		0.62 mg/kg		0.465 mg/kg	0.0000465 %	✓	
4	arsenic { arsenic trioxide }	215-481-4	1327-53-3		40 mg/kg	1.32	39.61 mg/kg	0.00396 %	✓	
5	benzo[a]anthracene	200-280-6	56-55-3		1.6 mg/kg		1.2 mg/kg	0.00012 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	200-028-5	50-32-8		1.4 mg/kg		1.05 mg/kg	0.000105 %	✓	
7	benzo[b]fluoranthene	205-911-9	205-99-2		1.7 mg/kg		1.275 mg/kg	0.000127 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		1 mg/kg		0.75 mg/kg	0.000075 %	✓	
9	benzo[k]fluoranthene	205-916-6	207-08-9		0.51 mg/kg		0.383 mg/kg	0.0000383 %	✓	
10	beryllium { beryllium oxide }	215-133-1	1304-56-9		3.2 mg/kg	2.775	6.661 mg/kg	0.000666 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		6.6 mg/kg	13.43	66.479 mg/kg	0.00665 %	✓	
12	cadmium { cadmium sulfide }	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.41 mg/kg	0.000188 %	✓	
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		54 mg/kg	1.462	59.193 mg/kg	0.00592 %	✓	
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	215-607-8	1333-82-0		<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
15	chrysene	205-923-4	218-01-9		1.2 mg/kg		0.9 mg/kg	0.00009 %	✓	
16	copper { dicopper oxide; copper (I) oxide }	215-270-7	1317-39-1		240 mg/kg	1.126	202.66 mg/kg	0.0203 %	✓	

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
18	dibenz[a,h]anthracene				0.28	mg/kg		0.21	mg/kg	0.000021 %	✓	
	601-041-00-2	200-181-8	53-70-3									
19	fluoranthene				2.1	mg/kg		1.575	mg/kg	0.000158 %	✓	
		205-912-4	206-44-0									
20	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
21	indeno[123-cd]pyrene				0.93	mg/kg		0.698	mg/kg	0.0000698 %	✓	
		205-893-2	193-39-5									
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	210	mg/kg		157.5	mg/kg	0.0158 %	✓	
	082-001-00-6											
23	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
24	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
25	nickel { nickel dihydroxide }				46	mg/kg	1.579	54.493	mg/kg	0.00545 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
26	pH				7.3	pH		7.3	pH	7.3 pH		
			PH									
27	phenanthrene				1.3	mg/kg		0.975	mg/kg	0.0000975 %	✓	
		201-581-5	85-01-8									
28	pyrene				2	mg/kg		1.5	mg/kg	0.00015 %	✓	
		204-927-3	129-00-0									
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
30	zinc { zinc oxide }				2100	mg/kg	1.245	1960.425	mg/kg	0.196 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
31	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				61	mg/kg	1.785	81.672	mg/kg	0.00817 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
Total:										0.265 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: BH03--18082021-1.00



**Hazardous Waste**  
Classified as **17 05 03 \***  
in the List of Waste

Sample details

Sample name: <b>BH03--18082021-1.00</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>19%</b> (wet weight correction)	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

**HP 14: Ecotoxic** "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

**Aquatic Chronic 1; H410** "Very toxic to aquatic life with long lasting effects."

Because of determinand:

zinc oxide: (compound conc.: 0.373%)

Determinands

Moisture content: 19% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	53 mg/kg	1.32	56.682 mg/kg	0.00567 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.5 mg/kg		0.405 mg/kg	0.0000405 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.64 mg/kg		0.518 mg/kg	0.0000518 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		0.4 mg/kg		0.324 mg/kg	0.0000324 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.27 mg/kg		0.219 mg/kg	0.0000219 %	✓	
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.6 mg/kg	2.775	3.597 mg/kg	0.00036 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		12 mg/kg	13.43	130.54 mg/kg	0.0131 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	3.4 mg/kg	1.285	3.54 mg/kg	0.000275 %	✓	
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		55 mg/kg	1.462	65.112 mg/kg	0.00651 %	✓	


#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %			<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		920 mg/kg	1.126	839.012 mg/kg	0.0839 %		✓	
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene		205-912-4	206-44-0		0.72 mg/kg		0.583 mg/kg	0.0000583 %		✓	
20	fluorene		201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene		205-893-2	193-39-5		0.35 mg/kg		0.284 mg/kg	0.0000284 %		✓	
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	420 mg/kg		340.2 mg/kg	0.034 %		✓	
23	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		90 mg/kg	1.579	115.146 mg/kg	0.0115 %		✓	
26	pH			PH		7.9 pH		7.9 pH	7.9 pH			
27	phenanthrene		201-581-5	85-01-8		0.27 mg/kg		0.219 mg/kg	0.0000219 %		✓	
28	pyrene		204-927-3	129-00-0		0.66 mg/kg		0.535 mg/kg	0.0000535 %		✓	
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		3700 mg/kg	1.245	3730.408 mg/kg	0.373 %		✓	
31	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		84 mg/kg	1.785	121.464 mg/kg	0.0121 %		✓	
Total:									0.542 %			

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Hazardous result
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- 🧪 Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: TP01--17082021-1.00

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP01--17082021-1.00</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>21%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 21% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
		203-458-1, 200-863-5	107-06-2, 75-34-3							
2	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
3	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
4	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7							
5	arsenic { arsenic trioxide }				73 mg/kg	1.32	76.143 mg/kg	0.00761 %	✓	
		033-003-00-0 215-481-4	1327-53-3							
6	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		601-020-00-8 200-753-7	71-43-2							
7	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		601-033-00-9 200-280-6	56-55-3							
8	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		601-032-00-3 200-028-5	50-32-8							
9	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		601-034-00-4 205-911-9	205-99-2							
10	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
11	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		601-036-00-5 205-916-6	207-08-9							
12	beryllium { beryllium oxide }				3 mg/kg	2.775	6.578 mg/kg	0.000658 %	✓	
		004-003-00-8 215-133-1	1304-56-9							
13	boron { boron tribromide/trichloride/trifluoride (combined) }				8.2 mg/kg	13.43	87 mg/kg	0.0087 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2							
14	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
		048-010-00-4 215-147-8	1306-23-6							
15	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				55 mg/kg	1.462	63.505 mg/kg	0.00635 %	✓	
		215-160-9	1308-38-9							
16	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
		024-001-00-0 215-607-8	1333-82-0							

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	chrysene 601-048-00-0   205-923-4   218-01-9				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
18	copper { dicopper oxide; copper (I) oxide } 029-002-00-X   215-270-7   1317-39-1				300	mg/kg	1.126	266.836	mg/kg	0.0267 %	✓	
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
20	dibenz[a,h]anthracene 601-041-00-2   200-181-8   53-70-3				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
21	ethylbenzene 601-023-00-4   202-849-4   100-41-4				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
22	fluoranthene 205-912-4   206-44-0				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
23	fluorene 201-695-5   86-73-7				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24	indeno[123-cd]pyrene 205-893-2   193-39-5				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	730	mg/kg		576.7	mg/kg	0.0577 %	✓	
26	mercury { mercury dichloride } 080-010-00-X   231-299-8   7487-94-7				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
27	naphthalene 601-052-00-2   202-049-5   91-20-3				<0.0001	mg/kg		<0.0001	mg/kg	<0.00000001 %		<LOD
28	nickel { nickel dihydroxide } 028-008-00-X   235-008-5 [1]   12054-48-7 [1] 234-348-1 [2]   11113-74-9 [2]				91	mg/kg	1.579	113.55	mg/kg	0.0114 %	✓	
29	pH PH				8	pH		8	pH	8pH		
30	phenanthrene 201-581-5   85-01-8				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
31	phenol 604-001-00-2   203-632-7   108-95-2				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
32	pyrene 204-927-3   129-00-0				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
33	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
34	tetrachloroethylene 602-028-00-4   204-825-9   127-18-4				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
35	toluene 601-021-00-3   203-625-9   108-88-3				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
36	trichloroethylene; trichloroethene 602-027-00-9   201-167-4   79-01-6				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
37	xylene 601-022-00-9   202-422-2 [1]   95-47-6 [1] 203-396-5 [2]   106-42-3 [2] 203-576-3 [3]   108-38-3 [3] 215-535-7 [4]   1330-20-7 [4]				<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<LOD
38	zinc { zinc oxide } 030-013-00-7   215-222-5   1314-13-2				340	mg/kg	1.245	334.33	mg/kg	0.0334 %	✓	
39	hexachlorobenzene 602-065-00-6   204-273-9   118-74-1				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
40	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4] 604-004-00-9   203-577-9 [1]   108-39-4 [1] 202-423-8 [2]   95-48-7 [2] 203-398-6 [3]   106-44-5 [3] 215-293-2 [4]   1319-77-3 [4]				<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
41	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
42	vanadium { divanadium pentaoxide; vanadium pentoxide }				93	mg/kg	1.785	131.158	mg/kg	0.0131 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
43	1,1,1-trichloroethane; methyl chloroform				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-013-00-2	200-756-3	71-55-6									
44	1,1,2,2-tetrachloroethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5									
45	1,1,2-trichloroethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-014-00-8	201-166-9	79-00-5									
46	1,1-dichloroethylene; vinylidene chloride				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-025-00-8	200-864-0	75-35-4									
47	1,1-dichloropropene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-031-00-0	209-253-3	563-58-6									
48	1,2,3-trichlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		201-757-1	87-61-6									
49	1,2,4-trimethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-043-00-3	202-436-9	95-63-6									
50	1,2-dibromoethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-010-00-6	203-444-5	106-93-4									
51	1,2-dichlorobenzene; o-dichlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-034-00-7	202-425-9	95-50-1									
52	1,2-dichloropropane; propylene dichloride				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-020-00-0	201-152-2	78-87-5									
53	1,3-dichlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-067-00-7	208-792-1	541-73-1									
54	1,3-dichloropropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		205-531-3	142-28-9									
55	1,4-dichlorobenzene; p-dichlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-035-00-2	203-400-5	106-46-7									
56	2,2-dichloropropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		209-832-0	594-20-7									
57	bromodichloromethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		200-856-7	75-27-4									
58	bromomethane; methylbromide				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-002-00-2	200-813-2	74-83-9									
59	bromobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-060-00-9	203-623-8	108-86-1									
60	n-butylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		203-209-7	104-51-8									
61	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]									
62	chlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-033-00-1	203-628-5	108-90-7									
63	carbon tetrachloride; tetrachloromethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-008-00-5	200-262-8	56-23-5									
64	chloroethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-009-00-0	200-830-5	75-00-3									
65	chloroform; trichloromethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-006-00-4	200-663-8	67-66-3									
66	chloromethane; methyl chloride				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-001-00-7	200-817-4	74-87-3									
67	dibromochloromethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		204-704-0	124-48-1									
68	1,2-dibromo-3-chloropropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-021-00-6	202-479-3	96-12-8									
69	dibromomethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-003-00-8	200-824-2	74-95-3									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	M/C Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
70	hexachlorobutadiene	201-765-5	87-68-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
71	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
72	4-isopropyltoluene	202-796-7	99-87-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
73	sec-butylbenzene	205-227-0	135-98-8		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
74	styrene	601-026-00-0	202-851-5	100-42-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
75	trans-1,3-dichloropropene	431-460-4	10061-02-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
76	tert-butylbenzene	202-632-4	98-06-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
77	bromoform; tribromomethane	602-007-00-X	200-854-6	75-25-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
78	1,2,4-trichlorobenzene	602-087-00-6	204-428-0	120-82-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
79	1,1,1,2-tetrachloroethane	211-135-1	630-20-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
80	trichlorofluoromethane	200-892-3	75-69-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
81	mesitylene; 1,3,5-trimethylbenzene	601-025-00-5	203-604-4	108-67-8	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
82	vinyl chloride; chloroethylene	602-023-00-7	200-831-0	75-01-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
83	aniline	612-008-00-7	200-539-3	62-53-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
84	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
85	bis(2-chloroethyl) ether	603-029-00-2	203-870-1	111-44-4	<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
86	hexachloroethane	200-666-4	67-72-1		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
87	nitrobenzene	609-003-00-7	202-716-0	98-95-3	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
88	3,5,5-trimethylcyclohex-2-enone; isophorone	606-012-00-8	201-126-0	78-59-1	<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
89	2-nitrophenol	201-857-5	88-75-5		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
90	3,4-xylenol; [1] 2,5-xylenol; [2] 2,4-xylenol; [3] 2,3-xylenol; [4] 2,6-xylenol; [5] xylenol; [6] 2,4(or 2,5)-xylenol [7]	604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
91	bis(2-chloroethoxy)methane	203-920-2	111-91-1		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
92	2,4-dichlorophenol	604-011-00-7	204-429-6	120-83-2	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
93	4-chloroaniline	612-137-00-9	203-401-0	106-47-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
94	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol	604-014-00-3	200-431-6	59-50-7	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
95	2,4,6-trichlorophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
96	2,4,5-trichlorophenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
97	2-methyl naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-078-3	91-57-6							
98	2-chloronaphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-079-9	91-58-7							
99	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							
100	2,6-dinitrotoluene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	609-049-00-8	210-106-0	606-20-2							
101	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]							
102	dibenzofuran				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		205-071-3	132-64-9							
103	4-chlorophenylphenylether				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		230-281-7	7005-72-3							
104	diethyl phthalate				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		201-550-6	84-66-2							
105	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]							
106	azobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	611-001-00-6	203-102-5	103-33-3							
107	4-bromophenylphenylether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		202-952-4	101-55-3							
108	carbazole				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-696-0	86-74-8							
109	dibutyl phthalate; DBP				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
110	anthraquinone				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	606-151-00-4	201-549-0	84-65-1							
111	BBP; benzyl butyl phthalate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
112	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]							
113	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]							
114	cumene; [1] propylbenzene [2]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]							
Total:								0.167 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: TP02--20082021-0.80

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>TP02--20082021-0.80</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>23%</b> (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 23% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	215-481-4	1327-53-3		85 mg/kg	1.32	86.415 mg/kg	0.00864 %	✓	
5	benzene	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
6	benzo[a]anthracene	200-280-6	56-55-3		0.6 mg/kg		0.462 mg/kg	0.0000462 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	200-028-5	50-32-8		0.49 mg/kg		0.377 mg/kg	0.0000377 %	✓	
8	benzo[b]fluoranthene	205-911-9	205-99-2		0.57 mg/kg		0.439 mg/kg	0.0000439 %	✓	
9	benzo[ghi]perylene	205-883-8	191-24-2		0.39 mg/kg		0.3 mg/kg	0.00003 %	✓	
10	benzo[k]fluoranthene	205-916-6	207-08-9		0.32 mg/kg		0.246 mg/kg	0.0000246 %	✓	
11	beryllium { beryllium oxide }	215-133-1	1304-56-9		7.3 mg/kg	2.775	15.6 mg/kg	0.00156 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		17 mg/kg	13.43	175.799 mg/kg	0.0176 %	✓	
13	cadmium { cadmium sulfide }	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		56 mg/kg	1.462	63.022 mg/kg	0.0063 %	✓	
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	215-607-8	1333-82-0		<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
16	chrysene	205-923-4	218-01-9		0.6 mg/kg		0.462 mg/kg	0.0000462 %	✓	

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	copper { dicopper oxide; copper (I) oxide }				170	mg/kg	1.126	147.379	mg/kg	0.0147 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
19	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
20	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
21	fluoranthene				1	mg/kg		0.77	mg/kg	0.000077 %	✓	
		205-912-4	206-44-0									
22	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
23	indeno[123-cd]pyrene				0.32	mg/kg		0.246	mg/kg	0.0000246 %	✓	
		205-893-2	193-39-5									
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	270	mg/kg		207.9	mg/kg	0.0208 %	✓	
	082-001-00-6											
25	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
26	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
27	nickel { nickel dihydroxide }				81	mg/kg	1.579	98.513	mg/kg	0.00985 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
28	pH				8	pH		8	pH	8pH		
			PH									
29	phenanthrene				0.64	mg/kg		0.493	mg/kg	0.0000493 %	✓	
		201-581-5	85-01-8									
30	pyrene				0.84	mg/kg		0.647	mg/kg	0.0000647 %	✓	
		204-927-3	129-00-0									
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
32	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
33	TPH (C6 to C40) petroleum group				120	mg/kg		92.4	mg/kg	0.00924 %	✓	
			TPH									
34	xylene				<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
35	zinc { zinc oxide }				1300	mg/kg	1.245	1245.959	mg/kg	0.125 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
36	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				110	mg/kg	1.785	151.205	mg/kg	0.0151 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
Total:										0.23 %		

Key

User supplied data
Determinand values ignored for classification, see column 'Conc. Not Used' for reason
● Determinand defined or amended by HazWasteOnline (see Appendix A)
● Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD Below limit of detection
ND Not detected
CLP: Note 1 Only the metal concentration has been used for classification

**Supplementary Hazardous Property Information**

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Samples wet & unlikely to be hazardous.

Hazard Statements hit:

**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00924%)

Classification of sample: TP02--20082021-1.50

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>TP02--20082021-1.50</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>19%</b> (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 19% Wet Weight Moisture Correction applied (MC)

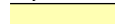



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		0.95 mg/kg		0.77 mg/kg	0.000077 %	✓	
2	acenaphthylene	205-917-1	208-96-8		0.58 mg/kg		0.47 mg/kg	0.000047 %	✓	
3	anthracene	204-371-1	120-12-7		3.7 mg/kg		2.997 mg/kg	0.0003 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	27 mg/kg	1.32	28.876 mg/kg	0.00289 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	12 mg/kg		9.72 mg/kg	0.000972 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	8.5 mg/kg		6.885 mg/kg	0.000689 %	✓	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	9.7 mg/kg		7.857 mg/kg	0.000786 %	✓	
9	benzo[ghi]perylene		205-883-8	191-24-2	5.7 mg/kg		4.617 mg/kg	0.000462 %	✓	
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	4.6 mg/kg		3.726 mg/kg	0.000373 %	✓	
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.3 mg/kg	2.775	2.922 mg/kg	0.000292 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	14 mg/kg	13.43	152.296 mg/kg	0.0152 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	25 mg/kg	1.462	29.597 mg/kg	0.00296 %	✓	
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	8.8 mg/kg		7.128 mg/kg	0.000713 %	✓	

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	copper { dicopper oxide; copper (I) oxide }				34	mg/kg	1.126	31.007	mg/kg	0.0031 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
19	dibenz[a,h]anthracene				1.6	mg/kg		1.296	mg/kg	0.00013 %	✓	
	601-041-00-2	200-181-8	53-70-3									
20	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
21	fluoranthene				21	mg/kg		17.01	mg/kg	0.0017 %	✓	
		205-912-4	206-44-0									
22	fluorene				1.6	mg/kg		1.296	mg/kg	0.00013 %	✓	
		201-695-5	86-73-7									
23	indeno[123-cd]pyrene				5.2	mg/kg		4.212	mg/kg	0.000421 %	✓	
		205-893-2	193-39-5									
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	57	mg/kg		46.17	mg/kg	0.00462 %	✓	
	082-001-00-6											
25	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
26	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
27	nickel { nickel dihydroxide }				24	mg/kg	1.579	30.705	mg/kg	0.00307 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
28	pH				8.2	pH		8.2	pH	8.2 pH		
			PH									
29	phenanthrene				11	mg/kg		8.91	mg/kg	0.000891 %	✓	
		201-581-5	85-01-8									
30	pyrene				17	mg/kg		13.77	mg/kg	0.00138 %	✓	
		204-927-3	129-00-0									
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
32	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
33	TPH (C6 to C40) petroleum group				270	mg/kg		218.7	mg/kg	0.0219 %	✓	
			TPH									
34	xylene				<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
35	zinc { zinc oxide }				290	mg/kg	1.245	292.383	mg/kg	0.0292 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
36	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				50	mg/kg	1.785	72.3	mg/kg	0.00723 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
Total:										0.1 %		



Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected

CLP: Note 1 Only the metal concentration has been used for classification

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### Supplementary Hazardous Property Information

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Samples wet & unlikely to be hazardous.

Hazard Statements hit:

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**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

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TPH (C6 to C40) petroleum group: (conc.: 0.0219%)

Classification of sample: TP02--20082021-2.50

**Hazardous Waste**  
 Classified as **17 05 03 \***  
 in the List of Waste

Sample details

Sample name: <b>TP02--20082021-2.50</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>18%</b> (wet weight correction)	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Samples wet & unlikely to be hazardous.

Hazard Statements hit:

**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.156%)

**HP 7: Carcinogenic** "waste which induces cancer or increases its incidence"

Hazard Statements hit:

**Carc. 1B; H350** "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.156%)

**HP 11: Mutagenic** "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

**Muta. 1B; H340** "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.156%)

Determinands

Moisture content: 18% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	1,1-dichloroethane and 1,2-dichloroethane (combined)	203-458-1, 200-863-5	107-06-2, 75-34-3		<0.002 mg/kg		<0.002 mg/kg	<0.000002 %		<LOD
2	acenaphthene	201-469-6	83-32-9		20 mg/kg		16.4 mg/kg	0.00164 %	✓	
3	acenaphthylene	205-917-1	208-96-8		4.1 mg/kg		3.362 mg/kg	0.000336 %	✓	
4	anthracene	204-371-1	120-12-7		57 mg/kg		46.74 mg/kg	0.00467 %	✓	
5	benzene	601-020-00-8 200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
6	benzo[a]anthracene				83 mg/kg		68.06 mg/kg	0.00681 %	✓	
	601-033-00-9	200-280-6	56-55-3							
7	benzo[a]pyrene; benzo[def]chrysene				59 mg/kg		48.38 mg/kg	0.00484 %	✓	
	601-032-00-3	200-028-5	50-32-8							
8	benzo[b]fluoranthene				63 mg/kg		51.66 mg/kg	0.00517 %	✓	
	601-034-00-4	205-911-9	205-99-2							
9	benzo[ghi]perylene				31 mg/kg		25.42 mg/kg	0.00254 %	✓	
		205-883-8	191-24-2							
10	benzo[k]fluoranthene				26 mg/kg		21.32 mg/kg	0.00213 %	✓	
	601-036-00-5	205-916-6	207-08-9							
11	chrysene				49 mg/kg		40.18 mg/kg	0.00402 %	✓	
	601-048-00-0	205-923-4	218-01-9							
12	dibenz[a,h]anthracene				8.5 mg/kg		6.97 mg/kg	0.000697 %	✓	
	601-041-00-2	200-181-8	53-70-3							
13	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
14	fluoranthene				190 mg/kg		155.8 mg/kg	0.0156 %	✓	
		205-912-4	206-44-0							
15	fluorene				34 mg/kg		27.88 mg/kg	0.00279 %	✓	
		201-695-5	86-73-7							
16	indeno[123-cd]pyrene				28 mg/kg		22.96 mg/kg	0.0023 %	✓	
		205-893-2	193-39-5							
17	naphthalene				5.7 mg/kg		4.674 mg/kg	0.000467 %	✓	
	601-052-00-2	202-049-5	91-20-3							
18	phenanthrene				190 mg/kg		155.8 mg/kg	0.0156 %	✓	
		201-581-5	85-01-8							
19	phenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
20	pyrene				150 mg/kg		123 mg/kg	0.0123 %	✓	
		204-927-3	129-00-0							
21	tetrachloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-028-00-4	204-825-9	127-18-4							
22	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
23	TPH (C6 to C40) petroleum group				1900 mg/kg		1558 mg/kg	0.156 %	✓	
			TPH							
24	trichloroethylene; trichloroethene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-027-00-9	201-167-4	79-01-6							
25	xylene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	601-022-00-9	202-422-2 [1]	95-47-6 [1]							
		203-396-5 [2]	106-42-3 [2]							
		203-576-3 [3]	108-38-3 [3]							
		215-535-7 [4]	1330-20-7 [4]							
26	hexachlorobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	602-065-00-6	204-273-9	118-74-1							
27	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	604-004-00-9	203-577-9 [1]	108-39-4 [1]							
		202-423-8 [2]	95-48-7 [2]							
		203-398-6 [3]	106-44-5 [3]							
		215-293-2 [4]	1319-77-3 [4]							
28	1,1,1-trichloroethane; methyl chloroform				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-013-00-2	200-756-3	71-55-6							
29	1,1,2,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5							
30	1,1,2-trichloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-014-00-8	201-166-9	79-00-5							
31	1,1-dichloroethylene; vinylidene chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-025-00-8	200-864-0	75-35-4							
32	1,1-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-031-00-0	209-253-3	563-58-6							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
33	1,2,3-trichlorobenzene	201-757-1	87-61-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
34	1,2,4-trimethylbenzene	202-436-9	95-63-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
35	1,2-dibromoethane	203-444-5	106-93-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
36	1,2-dichlorobenzene; o-dichlorobenzene	202-425-9	95-50-1		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
37	1,2-dichloropropane; propylene dichloride	201-152-2	78-87-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
38	1,3-dichlorobenzene	208-792-1	541-73-1		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
39	1,3-dichloropropane	205-531-3	142-28-9		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
40	1,4-dichlorobenzene; p-dichlorobenzene	203-400-5	106-46-7		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
41	2,2-dichloropropane	209-832-0	594-20-7		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
42	bromodichloromethane	200-856-7	75-27-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
43	bromomethane; methylbromide	200-813-2	74-83-9		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
44	bromobenzene	203-623-8	108-86-1		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
45	n-butylbenzene	203-209-7	104-51-8		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
46	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
47	chlorobenzene	203-628-5	108-90-7		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
48	carbon tetrachloride; tetrachloromethane	200-262-8	56-23-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
49	chloroethane	200-830-5	75-00-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
50	chloroform; trichloromethane	200-663-8	67-66-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
51	chloromethane; methyl chloride	200-817-4	74-87-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
52	dibromochloromethane	204-704-0	124-48-1		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
53	1,2-dibromo-3-chloropropane	202-479-3	96-12-8		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
54	dibromomethane	200-824-2	74-95-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
55	hexachlorobutadiene	201-765-5	87-68-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
56	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	216-653-1	1634-04-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
57	4-isopropyltoluene	202-796-7	99-87-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
58	sec-butylbenzene	205-227-0	135-98-8		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
59	styrene	202-851-5	100-42-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
60	trans-1,3-dichloropropene	431-460-4	10061-02-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
61	tert-butylbenzene	202-632-4	98-06-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
62	bromoform; tribromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-007-00-X	200-854-6	75-25-2							
63	1,2,4-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-087-00-6	204-428-0	120-82-1							
64	1,1,1,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		211-135-1	630-20-6							
65	trichlorofluoromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		200-892-3	75-69-4							
66	mesitylene; 1,3,5-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-025-00-5	203-604-4	108-67-8							
67	vinyl chloride; chloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-023-00-7	200-831-0	75-01-4							
68	aniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-008-00-7	200-539-3	62-53-3							
69	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]							
70	bis(2-chloroethyl) ether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	603-029-00-2	203-870-1	111-44-4							
71	hexachloroethane				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		200-666-4	67-72-1							
72	nitrobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	609-003-00-7	202-716-0	98-95-3							
73	3,5,5-trimethylcyclohex-2-enone; isophorone				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	606-012-00-8	201-126-0	78-59-1							
74	2-nitrophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-857-5	88-75-5							
75	3,4-xylenol; [1] 2,5-xylenol; [2] 2,4-xylenol; [3] 2,3-xylenol; [4] 2,6-xylenol; [5] xylenol; [6] 2,4(or 2,5)-xylenol [7]				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]							
76	bis(2-chloroethoxy)methane				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		203-920-2	111-91-1							
77	2,4-dichlorophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-011-00-7	204-429-6	120-83-2							
78	4-chloroaniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-137-00-9	203-401-0	106-47-8							
79	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-014-00-3	200-431-6	59-50-7							
80	2,4,6-trichlorophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
81	2,4,5-trichlorophenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
82	2-methyl naphthalene				6.3 mg/kg		5.166 mg/kg	0.000517 %	✓	
		202-078-3	91-57-6							
83	2-chloronaphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-079-9	91-58-7							
84	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							
85	2,6-dinitrotoluene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	609-049-00-8	210-106-0	606-20-2							
86	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]							




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
87	dibenzofuran				17 mg/kg		13.94 mg/kg	0.00139 %	✓	
		205-071-3	132-64-9							
88	4-chlorophenylphenylether				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		230-281-7	7005-72-3							
89	diethyl phthalate				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		201-550-6	84-66-2							
90	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]							
91	azobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	611-001-00-6	203-102-5	103-33-3							
92	4-bromophenylphenylether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		202-952-4	101-55-3							
93	carbazole				19 mg/kg		15.58 mg/kg	0.00156 %	✓	
		201-696-0	86-74-8							
94	dibutyl phthalate; DBP				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
95	anthraquinone				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	606-151-00-4	201-549-0	84-65-1							
96	BBP; benzyl butyl phthalate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
97	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]							
98	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]							
99	cumene; [1] propylbenzene [2]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]							
Total:								0.242 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Hazardous result
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- <LOD Below limit of detection
- ND Not detected

Classification of sample: TP02--20082021-3.30

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>TP02--20082021-3.30</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>15%</b> (wet weight correction)	

**Hazard properties**

None identified

**Determinands**

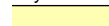



Moisture content: 15% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	84 mg/kg	1.32	94.271 mg/kg	0.00943 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.8 mg/kg	2.775	4.246 mg/kg	0.000425 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		2.2 mg/kg	13.43	25.114 mg/kg	0.00251 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		54 mg/kg	1.462	67.085 mg/kg	0.00671 %	✓	
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD


#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	copper { dicopper oxide; copper (I) oxide }				22	mg/kg	1.126	21.054	mg/kg	0.00211 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
19	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
20	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
21	fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0									
22	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
23	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5									
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	24	mg/kg		20.4	mg/kg	0.00204 %	✓	
	082-001-00-6											
25	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
26	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
27	nickel { nickel dihydroxide }				57	mg/kg	1.579	76.527	mg/kg	0.00765 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
28	pH				8.7	pH		8.7	pH	8.7 pH		
			PH									
29	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8									
30	pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0									
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
32	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
33	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
34	xylene				<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
35	zinc { zinc oxide }				250	mg/kg	1.245	264.502	mg/kg	0.0265 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
36	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				150	mg/kg	1.785	227.611	mg/kg	0.0228 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
Total:										0.0819 %		

Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP03--20082021-2.30

 **Hazardous Waste**  
 Classified as **17 05 03 \***  
 in the List of Waste

Sample details

Sample name:	LoW Code:
<b>TP03--20082021-2.30</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 03 * (Soil and stones containing hazardous substances)
<b>22%</b> (wet weight correction)	

Hazard properties

**HP 14: Ecotoxic** "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

**Aquatic Chronic 1; H410** "Very toxic to aquatic life with long lasting effects."

Because of determinand:

zinc oxide: (compound conc.: 0.631%)

Determinands

Moisture content: 22% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	IMC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.002 mg/kg		<0.002 mg/kg	<0.000002 %		<LOD
		203-458-1, 200-863-5	107-06-2, 75-34-3							
2	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
3	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
4	anthracene				0.22 mg/kg		0.172 mg/kg	0.0000172 %	✓	
		204-371-1	120-12-7							
5	arsenic { arsenic trioxide }				77 mg/kg	1.32	79.299 mg/kg	0.00793 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
6	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
7	benzo[a]anthracene				1 mg/kg		0.78 mg/kg	0.000078 %	✓	
	601-033-00-9	200-280-6	56-55-3							
8	benzo[a]pyrene; benzo[def]chrysene				0.84 mg/kg		0.655 mg/kg	0.0000655 %	✓	
	601-032-00-3	200-028-5	50-32-8							
9	benzo[b]fluoranthene				0.9 mg/kg		0.702 mg/kg	0.0000702 %	✓	
	601-034-00-4	205-911-9	205-99-2							
10	benzo[ghi]perylene				0.63 mg/kg		0.491 mg/kg	0.0000491 %	✓	
		205-883-8	191-24-2							
11	benzo[k]fluoranthene				0.53 mg/kg		0.413 mg/kg	0.0000413 %	✓	
	601-036-00-5	205-916-6	207-08-9							
12	beryllium { beryllium oxide }				2.3 mg/kg	2.775	4.979 mg/kg	0.000498 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
13	boron { boron tribromide/trichloride/trifluoride (combined) }				4.4 mg/kg	13.43	46.092 mg/kg	0.00461 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2							



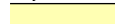




#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
14	cadmium { cadmium sulfide }			1	22	mg/kg	1.285	22.055	mg/kg	0.00172 %	✓	
	048-010-00-4	215-147-8	1306-23-6									
15	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				55	mg/kg	1.462	62.701	mg/kg	0.00627 %	✓	
		215-160-9	1308-38-9									
16	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
17	chrysene				0.89	mg/kg		0.694	mg/kg	0.0000694 %	✓	
	601-048-00-0	205-923-4	218-01-9									
18	copper { dicopper oxide; copper (I) oxide }				81	mg/kg	1.126	71.134	mg/kg	0.00711 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
20	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
21	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
22	fluoranthene				1.5	mg/kg		1.17	mg/kg	0.000117 %	✓	
		205-912-4	206-44-0									
23	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
24	indeno[123-cd]pyrene				0.55	mg/kg		0.429	mg/kg	0.0000429 %	✓	
		205-893-2	193-39-5									
25	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	190	mg/kg		148.2	mg/kg	0.0148 %	✓	
	082-001-00-6											
26	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
27	naphthalene				<0.0001	mg/kg		<0.0001	mg/kg	<0.00000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
28	nickel { nickel dihydroxide }				55	mg/kg	1.579	67.761	mg/kg	0.00678 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
29	pH				8.1	pH		8.1	pH	8.1 pH		
			PH									
30	phenanthrene				0.66	mg/kg		0.515	mg/kg	0.0000515 %	✓	
		201-581-5	85-01-8									
31	phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
32	pyrene				1.4	mg/kg		1.092	mg/kg	0.000109 %	✓	
		204-927-3	129-00-0									
33	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
34	tetrachloroethylene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-028-00-4	204-825-9	127-18-4									
35	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
36	TPH (C6 to C40) petroleum group				110	mg/kg		85.8	mg/kg	0.00858 %	✓	
			TPH									
37	trichloroethylene; trichloroethene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-027-00-9	201-167-4	79-01-6									
38	xylene				<0.004	mg/kg		<0.004	mg/kg	<0.0000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2]	95-47-6 [1] 106-42-3 [2]									

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
		203-576-3 [3] 215-535-7 [4]	108-38-3 [3] 1330-20-7 [4]									
39	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		6500 mg/kg	1.245	6310.7 mg/kg	0.631 %	✓		
40	hexachlorobenzene	602-065-00-6	204-273-9	118-74-1		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %			<LOD
41	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]	604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
42	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
43	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		95 mg/kg	1.785	132.282 mg/kg	0.0132 %	✓		
44	1,1,1-trichloroethane; methyl chloroform	602-013-00-2	200-756-3	71-55-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
45	1,1,2,2-tetrachloroethane	602-015-00-3	201-197-8	79-34-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
46	1,1,2-trichloroethane	602-014-00-8	201-166-9	79-00-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
47	1,1-dichloroethylene; vinylidene chloride	602-025-00-8	200-864-0	75-35-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
48	1,1-dichloropropene	602-031-00-0	209-253-3	563-58-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
49	1,2,3-trichlorobenzene		201-757-1	87-61-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
50	1,2,4-trimethylbenzene	601-043-00-3	202-436-9	95-63-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
51	1,2-dibromoethane	602-010-00-6	203-444-5	106-93-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
52	1,2-dichlorobenzene; o-dichlorobenzene	602-034-00-7	202-425-9	95-50-1		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
53	1,2-dichloropropane; propylene dichloride	602-020-00-0	201-152-2	78-87-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
54	1,3-dichlorobenzene	602-067-00-7	208-792-1	541-73-1		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
55	1,3-dichloropropane		205-531-3	142-28-9		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
56	1,4-dichlorobenzene; p-dichlorobenzene	602-035-00-2	203-400-5	106-46-7		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
57	2,2-dichloropropane		209-832-0	594-20-7		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
58	bromodichloromethane		200-856-7	75-27-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
59	bromomethane; methylbromide	602-002-00-2	200-813-2	74-83-9		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
60	bromobenzene	602-060-00-9	203-623-8	108-86-1		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
61	n-butylbenzene		203-209-7	104-51-8		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
62	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]	602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
63	chlorobenzene	602-033-00-1	203-628-5	108-90-7		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
64	carbon tetrachloride; tetrachloromethane	602-008-00-5	200-262-8	56-23-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
65	chloroethane	602-009-00-0	200-830-5	75-00-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
66	chloroform; trichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-006-00-4	200-663-8	67-66-3							
67	chloromethane; methyl chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-001-00-7	200-817-4	74-87-3							
68	dibromochloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		204-704-0	124-48-1							
69	1,2-dibromo-3-chloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-021-00-6	202-479-3	96-12-8							
70	dibromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-003-00-8	200-824-2	74-95-3							
71	hexachlorobutadiene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		201-765-5	87-68-3							
72	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
73	4-isopropyltoluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		202-796-7	99-87-6							
74	sec-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		205-227-0	135-98-8							
75	styrene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-026-00-0	202-851-5	100-42-5							
76	trans-1,3-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		431-460-4	10061-02-6							
77	tert-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		202-632-4	98-06-6							
78	bromoform; tribromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-007-00-X	200-854-6	75-25-2							
79	1,2,4-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-087-00-6	204-428-0	120-82-1							
80	1,1,1,2-tetrachloroethane				0.0017 mg/kg		0.0013 mg/kg	0.000000133 %	✓	
		211-135-1	630-20-6							
81	trichlorofluoromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		200-892-3	75-69-4							
82	mesitylene; 1,3,5-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-025-00-5	203-604-4	108-67-8							
83	vinyl chloride; chloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-023-00-7	200-831-0	75-01-4							
84	aniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-008-00-7	200-539-3	62-53-3							
85	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]							
86	bis(2-chloroethyl) ether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	603-029-00-2	203-870-1	111-44-4							
87	hexachloroethane				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		200-666-4	67-72-1							
88	nitrobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	609-003-00-7	202-716-0	98-95-3							
89	3,5,5-trimethylcyclohex-2-enone; isophorone				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	606-012-00-8	201-126-0	78-59-1							
90	2-nitrophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-857-5	88-75-5							
91	3,4-xyleneol; [1] 2,5-xyleneol; [2] 2,4-xyleneol; [3] 2,3-xyleneol; [4] 2,6-xyleneol; [5] xyleneol; [6] 2,4(or 2,5)-xyleneol [7]				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5]							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	M/C Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
		215-089-3 [6] 276-245-4 [7]	1300-71-6 [6] 71975-58-1 [7]							
92		bis(2-chloroethoxy)methane 203-920-2	111-91-1		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
93		2,4-dichlorophenol 604-011-00-7	204-429-6 120-83-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
94		4-chloroaniline 612-137-00-9	203-401-0 106-47-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
95		chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol 604-014-00-3	200-431-6 59-50-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
96		2,4,6-trichlorophenol 604-018-00-5	201-795-9 88-06-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
97		2,4,5-trichlorophenol 604-017-00-X	202-467-8 95-95-4		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
98		2-methyl naphthalene 202-078-3	91-57-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
99		2-chloronaphthalene 202-079-9	91-58-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
100		dimethyl phthalate 205-011-6	131-11-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
101		2,6-dinitrotoluene 609-049-00-8	210-106-0 606-20-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
102		2,4-dinitrotoluene; [1] dinitrotoluene [2] 609-007-00-9	204-450-0 [1] 246-836-1 [2]		121-14-2 [1] 25321-14-6 [2]		<0.2 mg/kg	<0.00002 %		<LOD
103		dibenzofuran 205-071-3	132-64-9		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
104		4-chlorophenylphenylether 230-281-7	7005-72-3		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
105		diethyl phthalate 201-550-6	84-66-2		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
106		o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3] 612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]		88-74-4 [1] 99-09-2 [2] 100-01-6 [3]		<0.2 mg/kg	<0.00002 %		<LOD
107		azobenzene 611-001-00-6	203-102-5 103-33-3		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
108		4-bromophenylphenylether 202-952-4	101-55-3		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
109		carbazole 201-696-0	86-74-8		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
110		dibutyl phthalate; DBP 607-318-00-4	201-557-4 84-74-2		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
111		anthraquinone 606-151-00-4	201-549-0 84-65-1		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
112		BBP; benzyl butyl phthalate 607-430-00-3	201-622-7 85-68-7		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
113		2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4] 602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]		95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]		<0.002 mg/kg	<0.0000002 %		<LOD
114		1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3] 602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]		540-59-0 [1] 156-59-2 [2] 156-60-5 [3]		<0.002 mg/kg	<0.0000002 %		<LOD
115		cumene; [1] propylbenzene [2] 601-024-00-X	202-704-5 [1] 203-132-9 [2]		98-82-8 [1] 103-65-1 [2]		<0.002 mg/kg	<0.0000002 %		<LOD
Total:								0.705 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1 Only the metal concentration has been used for classification	

**Supplementary Hazardous Property Information**

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because **Samples wet & unlikely to be hazardous.**

Hazard Statements hit:

**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00858%)



Classification of sample: tp04--20082021-0.50

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>tp04--20082021-0.50</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>9.9%</b> (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 9.9% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	49 mg/kg	1.32	58.291 mg/kg	0.00583 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	2.5 mg/kg	2.775	6.251 mg/kg	0.000625 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		2.6 mg/kg	13.43	31.461 mg/kg	0.00315 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		43 mg/kg	1.462	56.625 mg/kg	0.00566 %	✔	
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	190 mg/kg	1.126	192.741 mg/kg	0.0193 %	✔	

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
18	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
19	fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0									
20	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
21	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5									
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	830	mg/kg		747.83	mg/kg	0.0748 %	✓	
	082-001-00-6											
23	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
24	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
25	nickel { nickel dihydroxide }				57	mg/kg	1.579	81.118	mg/kg	0.00811 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
26	pH				8.8	pH		8.8	pH	8.8 pH		
			PH									
27	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8									
28	pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0									
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
30	zinc { zinc oxide }				660	mg/kg	1.245	740.182	mg/kg	0.074 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
31	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				77	mg/kg	1.785	123.851	mg/kg	0.0124 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
Total:										0.205 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- 🔗 Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP05--20082021-0.50

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>TP05--20082021-0.50</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>12%</b> (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
2	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
3	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
4	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
5	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
6	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.001 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- <LOD** Below limit of detection
- ND** Not detected

Classification of sample: TP05--20082021-2.00

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>TP05--20082021-2.00</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>29%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 29% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
		203-458-1, 200-863-5	107-06-2, 75-34-3							
2	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
3	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
4	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7							
5	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
6	benzo[a]anthracene				0.89 mg/kg		0.632 mg/kg	0.0000632 %	✔	
	601-033-00-9	200-280-6	56-55-3							
7	benzo[a]pyrene; benzo[def]chrysene				0.46 mg/kg		0.327 mg/kg	0.0000327 %	✔	
	601-032-00-3	200-028-5	50-32-8							
8	benzo[b]fluoranthene				0.54 mg/kg		0.383 mg/kg	0.0000383 %	✔	
	601-034-00-4	205-911-9	205-99-2							
9	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
10	benzo[k]fluoranthene				0.23 mg/kg		0.163 mg/kg	0.0000163 %	✔	
	601-036-00-5	205-916-6	207-08-9							
11	chrysene				0.69 mg/kg		0.49 mg/kg	0.000049 %	✔	
	601-048-00-0	205-923-4	218-01-9							
12	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
13	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
14	fluoranthene				0.66 mg/kg		0.469 mg/kg	0.0000469 %	✔	
		205-912-4	206-44-0							
15	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
16	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
17	naphthalene				<0.0001 mg/kg		<0.0001 mg/kg	<0.00000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
18	phenanthrene				0.46 mg/kg		0.327 mg/kg	0.0000327 %	✔	
		201-581-5	85-01-8							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
19	phenol 604-001-00-2   203-632-7   108-95-2				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
20	pyrene 204-927-3   129-00-0				0.67 mg/kg		0.476 mg/kg	0.0000476 %	✓	
21	tetrachloroethylene 602-028-00-4   204-825-9   127-18-4				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
22	toluene 601-021-00-3   203-625-9   108-88-3				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
23	TPH (C6 to C40) petroleum group TPH				460 mg/kg		326.6 mg/kg	0.0327 %	✓	
24	trichloroethylene; trichloroethene 602-027-00-9   201-167-4   79-01-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
25	xylene 601-022-00-9   202-422-2 [1]   95-47-6 [1] 203-396-5 [2]   106-42-3 [2] 203-576-3 [3]   108-38-3 [3] 215-535-7 [4]   1330-20-7 [4]				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
26	hexachlorobenzene 602-065-00-6   204-273-9   118-74-1				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
27	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4] 604-004-00-9   203-577-9 [1]   108-39-4 [1] 202-423-8 [2]   95-48-7 [2] 203-398-6 [3]   106-44-5 [3] 215-293-2 [4]   1319-77-3 [4]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
28	1,1,1-trichloroethane; methyl chloroform 602-013-00-2   200-756-3   71-55-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
29	1,1,2,2-tetrachloroethane 602-015-00-3   201-197-8   79-34-5				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
30	1,1,2-trichloroethane 602-014-00-8   201-166-9   79-00-5				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
31	1,1-dichloroethylene; vinylidene chloride 602-025-00-8   200-864-0   75-35-4				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
32	1,1-dichloropropene 602-031-00-0   209-253-3   563-58-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
33	1,2,3-trichlorobenzene 201-757-1   87-61-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
34	1,2,4-trimethylbenzene 601-043-00-3   202-436-9   95-63-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
35	1,2-dibromoethane 602-010-00-6   203-444-5   106-93-4				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
36	1,2-dichlorobenzene; o-dichlorobenzene 602-034-00-7   202-425-9   95-50-1				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
37	1,2-dichloropropane; propylene dichloride 602-020-00-0   201-152-2   78-87-5				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
38	1,3-dichlorobenzene 602-067-00-7   208-792-1   541-73-1				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
39	1,3-dichloropropane 205-531-3   142-28-9				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
40	1,4-dichlorobenzene; p-dichlorobenzene 602-035-00-2   203-400-5   106-46-7				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
41	2,2-dichloropropane 209-832-0   594-20-7				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
42	bromodichloromethane 200-856-7   75-27-4				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
43	bromomethane; methylbromide 602-002-00-2   200-813-2   74-83-9				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
44	bromobenzene 602-060-00-9   203-623-8   108-86-1				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
45	n-butylbenzene 203-209-7   104-51-8				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
46	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]							
47	chlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-033-00-1	203-628-5	108-90-7							
48	carbon tetrachloride; tetrachloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-008-00-5	200-262-8	56-23-5							
49	chloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-009-00-0	200-830-5	75-00-3							
50	chloroform; trichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-006-00-4	200-663-8	67-66-3							
51	chloromethane; methyl chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-001-00-7	200-817-4	74-87-3							
52	dibromochloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		204-704-0	124-48-1							
53	1,2-dibromo-3-chloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-021-00-6	202-479-3	96-12-8							
54	dibromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-003-00-8	200-824-2	74-95-3							
55	hexachlorobutadiene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		201-765-5	87-68-3							
56	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
57	4-isopropyltoluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		202-796-7	99-87-6							
58	sec-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		205-227-0	135-98-8							
59	styrene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-026-00-0	202-851-5	100-42-5							
60	trans-1,3-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		431-460-4	10061-02-6							
61	tert-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		202-632-4	98-06-6							
62	bromoform; tribromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-007-00-X	200-854-6	75-25-2							
63	1,2,4-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-087-00-6	204-428-0	120-82-1							
64	1,1,1,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		211-135-1	630-20-6							
65	trichlorofluoromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		200-892-3	75-69-4							
66	mesitylene; 1,3,5-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-025-00-5	203-604-4	108-67-8							
67	vinyl chloride; chloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-023-00-7	200-831-0	75-01-4							
68	aniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-008-00-7	200-539-3	62-53-3							
69	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]							
70	bis(2-chloroethyl) ether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	603-029-00-2	203-870-1	111-44-4							
71	hexachloroethane				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		200-666-4	67-72-1							
72	nitrobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	609-003-00-7	202-716-0	98-95-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
73	3,5,5-trimethylcyclohex-2-enone; isophorone				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	606-012-00-8	201-126-0	78-59-1							
74	2-nitrophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-857-5	88-75-5							
75	3,4-xyleneol; [1] 2,5-xyleneol; [2] 2,4-xyleneol; [3] 2,3-xyleneol; [4] 2,6-xyleneol; [5] xyleneol; [6] 2,4(or 2,5)-xyleneol [7]				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]							
76	bis(2-chloroethoxy)methane				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		203-920-2	111-91-1							
77	2,4-dichlorophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-011-00-7	204-429-6	120-83-2							
78	4-chloroaniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-137-00-9	203-401-0	106-47-8							
79	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-014-00-3	200-431-6	59-50-7							
80	2,4,6-trichlorophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
81	2,4,5-trichlorophenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
82	2-methyl naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-078-3	91-57-6							
83	2-chloronaphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-079-9	91-58-7							
84	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							
85	2,6-dinitrotoluene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	609-049-00-8	210-106-0	606-20-2							
86	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]							
87	dibenzofuran				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		205-071-3	132-64-9							
88	4-chlorophenylphenylether				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		230-281-7	7005-72-3							
89	diethyl phthalate				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		201-550-6	84-66-2							
90	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]							
91	azobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	611-001-00-6	203-102-5	103-33-3							
92	4-bromophenylphenylether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		202-952-4	101-55-3							
93	carbazole				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-696-0	86-74-8							
94	dibutyl phthalate; DBP				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
95	anthraquinone				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	606-151-00-4	201-549-0	84-65-1							
96	BBP; benzyl butyl phthalate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
97	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-040-00-X	202-424-3 [1] 203-580-5 [2]	95-49-8 [1] 108-41-8 [2]							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
		203-397-0 [3] 246-698-2 [4]	106-43-4 [3] 25168-05-2 [4]							
98		1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]								
	602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
99		cumene; [1] propylbenzene [2]								
	601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
Total:								0.0337 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection
ND	Not detected

Supplementary Hazardous Property Information

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Samples wet & unlikely to be hazardous.

Hazard Statements hit:

**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0327%)

Classification of sample: TP05--20082021-1.30

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>TP05--20082021-1.30</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>7.8%</b> (wet weight correction)	

**Hazard properties**

None identified

**Determinands**

Moisture content: 7.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
2	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
3	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
4	TPH (C6 to C40) petroleum group				680 mg/kg		626.96 mg/kg	0.0627 %	✔	
			TPH							
5	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
6	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.0627 %		

**Key**

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- <LOD** Below limit of detection
- ND** Not detected

**Supplementary Hazardous Property Information**

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Samples wet & unlikely to be hazardous.


Hazard Statements hit:

**Fam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0627%)

Classification of sample: TP06--20082021-0.70

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>TP06--20082021-0.70</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>8.2%</b> (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 8.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		0.67 mg/kg		0.615 mg/kg	0.0000615 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	66 mg/kg	1.32	79.996 mg/kg	0.008 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	1.7 mg/kg		1.561 mg/kg	0.000156 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	1.3 mg/kg		1.193 mg/kg	0.000119 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	1.5 mg/kg		1.377 mg/kg	0.000138 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		0.83 mg/kg		0.762 mg/kg	0.0000762 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.68 mg/kg		0.624 mg/kg	0.0000624 %	✓	
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5 mg/kg	2.775	3.822 mg/kg	0.000382 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		1.2 mg/kg	13.43	14.794 mg/kg	0.00148 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		56 mg/kg	1.462	75.136 mg/kg	0.00751 %	✓	
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	1.4 mg/kg		1.285 mg/kg	0.000129 %	✓	
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	40 mg/kg	1.126	41.343 mg/kg	0.00413 %	✓	




#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
18	dibenz[a,h]anthracene				0.29	mg/kg		0.266	mg/kg	0.0000266 %	✓	
	601-041-00-2	200-181-8	53-70-3									
19	fluoranthene				3	mg/kg		2.754	mg/kg	0.000275 %	✓	
		205-912-4	206-44-0									
20	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
21	indeno[123-cd]pyrene				0.77	mg/kg		0.707	mg/kg	0.0000707 %	✓	
		205-893-2	193-39-5									
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	73	mg/kg		67.014	mg/kg	0.0067 %	✓	
	082-001-00-6											
23	mercury { mercury dichloride }				2.4	mg/kg	1.353	2.982	mg/kg	0.000298 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
24	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
25	nickel { nickel dihydroxide }				36	mg/kg	1.579	52.199	mg/kg	0.00522 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
26	pH				8.6	pH		8.6	pH	8.6 pH		
			PH									
27	phenanthrene				2.3	mg/kg		2.111	mg/kg	0.000211 %	✓	
		201-581-5	85-01-8									
28	pyrene				2.6	mg/kg		2.387	mg/kg	0.000239 %	✓	
		204-927-3	129-00-0									
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
30	zinc { zinc oxide }				210	mg/kg	1.245	239.956	mg/kg	0.024 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
31	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				110	mg/kg	1.785	180.268	mg/kg	0.018 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
Total:										0.078 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP07--20082021-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>TP07--20082021-0.10</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>21%</b> (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 21% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	75 mg/kg	1.32	78.229 mg/kg	0.00782 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	8.2 mg/kg	2.775	17.979 mg/kg	0.0018 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		3.3 mg/kg	13.43	35.012 mg/kg	0.0035 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		72 mg/kg	1.462	83.133 mg/kg	0.00831 %	✓	
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	780 mg/kg	1.126	693.772 mg/kg	0.0694 %	✓	

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
18	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
19	fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0									
20	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
21	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5									
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	430	mg/kg		339.7	mg/kg	0.034 %	✓	
	082-001-00-6											
23	mercury { mercury dichloride }				0.5	mg/kg	1.353	0.535	mg/kg	0.0000535 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
24	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
25	nickel { nickel dihydroxide }				88	mg/kg	1.579	109.807	mg/kg	0.011 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
26	pH				8	pH		8	pH	8pH		
			PH									
27	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8									
28	pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0									
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
30	zinc { zinc oxide }				570	mg/kg	1.245	560.495	mg/kg	0.056 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
31	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				160	mg/kg	1.785	225.647	mg/kg	0.0226 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
Total:										0.215 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP07--20082021-2.70

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP07--20082021-2.70</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>16%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 16% Wet Weight Moisture Correction applied (MC)

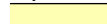



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	72 mg/kg	1.32	79.853 mg/kg	0.00799 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.9 mg/kg	2.775	4.429 mg/kg	0.000443 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		7.1 mg/kg	13.43	80.097 mg/kg	0.00801 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		55 mg/kg	1.462	67.524 mg/kg	0.00675 %	✓	
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	copper { dicopper oxide; copper (I) oxide }				42	mg/kg	1.126	39.721	mg/kg	0.00397 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
19	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
20	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
21	fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0									
22	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
23	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5									
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	83	mg/kg		69.72	mg/kg	0.00697 %	✓	
	082-001-00-6											
25	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
26	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
27	nickel { nickel dihydroxide }				44	mg/kg	1.579	58.378	mg/kg	0.00584 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
28	pH				7.8	pH		7.8	pH	7.8 pH		
			PH									
29	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8									
30	pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0									
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
32	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
33	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
34	xylene				<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
35	zinc { zinc oxide }				210	mg/kg	1.245	219.568	mg/kg	0.022 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
36	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				100	mg/kg	1.785	149.956	mg/kg	0.015 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
Total:										0.0787 %		




Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS01--18082021-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>WS01--18082021-0.10</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>8%</b> (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 8% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	21 mg/kg	1.32	25.509 mg/kg	0.00255 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.61 mg/kg		0.561 mg/kg	0.0000561 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.62 mg/kg		0.57 mg/kg	0.000057 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.75 mg/kg		0.69 mg/kg	0.000069 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		0.61 mg/kg		0.561 mg/kg	0.0000561 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.33 mg/kg		0.304 mg/kg	0.0000304 %	✓	
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.9 mg/kg	2.775	4.851 mg/kg	0.000485 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		2.6 mg/kg	13.43	32.125 mg/kg	0.00321 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		29 mg/kg	1.462	38.994 mg/kg	0.0039 %	✓	
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	0.6 mg/kg		0.552 mg/kg	0.0000552 %	✓	
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	28 mg/kg	1.126	29.003 mg/kg	0.0029 %	✓	

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
18	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
19	fluoranthene				0.94	mg/kg		0.865	mg/kg	0.0000865 %	✓	
		205-912-4	206-44-0									
20	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
21	indeno[123-cd]pyrene				0.53	mg/kg		0.488	mg/kg	0.0000488 %	✓	
		205-893-2	193-39-5									
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	69	mg/kg		63.48	mg/kg	0.00635 %	✓	
	082-001-00-6											
23	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
24	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
25	nickel { nickel dihydroxide }				19	mg/kg	1.579	27.61	mg/kg	0.00276 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
26	pH				8.1	pH		8.1	pH	8.1 pH		
			PH									
27	phenanthrene				0.29	mg/kg		0.267	mg/kg	0.0000267 %	✓	
		201-581-5	85-01-8									
28	pyrene				0.9	mg/kg		0.828	mg/kg	0.0000828 %	✓	
		204-927-3	129-00-0									
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
30	zinc { zinc oxide }				150	mg/kg	1.245	171.771	mg/kg	0.0172 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
31	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				50	mg/kg	1.785	82.119	mg/kg	0.00821 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
Total:										0.0489 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- ⚙ Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS02--18082021-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>WS02--18082021-0.20</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>4.6%</b> (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 4.6% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		0.26 mg/kg		0.248 mg/kg	0.0000248 %	✓	
2	acenaphthylene	205-917-1	208-96-8		1.1 mg/kg		1.049 mg/kg	0.000105 %	✓	
3	anthracene	204-371-1	120-12-7		1.4 mg/kg		1.336 mg/kg	0.000134 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	30 mg/kg	1.32	37.788 mg/kg	0.00378 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	2.7 mg/kg		2.576 mg/kg	0.000258 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	4.9 mg/kg		4.675 mg/kg	0.000467 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	5.5 mg/kg		5.247 mg/kg	0.000525 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		8.9 mg/kg		8.491 mg/kg	0.000849 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	1.4 mg/kg		1.336 mg/kg	0.000134 %	✓	
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.8 mg/kg	2.775	4.766 mg/kg	0.000477 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		1.5 mg/kg	13.43	19.218 mg/kg	0.00192 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		39 mg/kg	1.462	54.379 mg/kg	0.00544 %	✓	
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	2.2 mg/kg		2.099 mg/kg	0.00021 %	✓	
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	75 mg/kg	1.126	80.557 mg/kg	0.00806 %	✓	

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
18	dibenz[a,h]anthracene				1.4	mg/kg		1.336	mg/kg	0.000134 %	✓	
	601-041-00-2	200-181-8	53-70-3									
19	fluoranthene				3.9	mg/kg		3.721	mg/kg	0.000372 %	✓	
		205-912-4	206-44-0									
20	fluorene				0.31	mg/kg		0.296	mg/kg	0.000296 %	✓	
		201-695-5	86-73-7									
21	indeno[123-cd]pyrene				6.2	mg/kg		5.915	mg/kg	0.000591 %	✓	
		205-893-2	193-39-5									
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	280	mg/kg		267.12	mg/kg	0.0267 %	✓	
	082-001-00-6											
23	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
24	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
25	nickel { nickel dihydroxide }				64	mg/kg	1.579	96.438	mg/kg	0.00964 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
26	pH				8.1	pH		8.1	pH	8.1 pH		
			PH									
27	phenanthrene				2	mg/kg		1.908	mg/kg	0.000191 %	✓	
		201-581-5	85-01-8									
28	pyrene				3.6	mg/kg		3.434	mg/kg	0.000343 %	✓	
		204-927-3	129-00-0									
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
30	zinc { zinc oxide }				280	mg/kg	1.245	332.488	mg/kg	0.0332 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
31	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				82	mg/kg	1.785	139.651	mg/kg	0.014 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
Total:										0.108 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- ⚗ Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: WS02--18082021-0.80

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS02--18082021-0.80</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>10%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified


Determinands

Moisture content: 10% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	36 mg/kg	1.32	42.779 mg/kg	0.00428 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1 mg/kg	2.775	2.748 mg/kg	0.000275 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.9 mg/kg	13.43	10.878 mg/kg	0.00109 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		38 mg/kg	1.462	49.985 mg/kg	0.005 %	✔	
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	12 mg/kg	1.126	12.16 mg/kg	0.00122 %	✔	

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
18	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
19	fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0									
20	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
21	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5									
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	19	mg/kg		17.1	mg/kg	0.00171 %	✓	
	082-001-00-6											
23	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
24	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
25	nickel { nickel dihydroxide }				26	mg/kg	1.579	36.96	mg/kg	0.0037 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
26	pH				8.1	pH		8.1	pH	8.1 pH		
			PH									
27	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8									
28	pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0									
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
30	zinc { zinc oxide }				89	mg/kg	1.245	99.702	mg/kg	0.00997 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
31	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				72	mg/kg	1.785	115.68	mg/kg	0.0116 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
Total:										0.0396 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS03--18082021-1.00

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS03--18082021-1.00</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>13%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands


Moisture content: 13% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
2	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
3	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
4	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
5	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
6	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.001 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- <LOD Below limit of detection
- ND Not detected

Classification of sample: WS04--18082021-2.50

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>WS04--18082021-2.50</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>21%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 21% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.002 mg/kg		<0.002 mg/kg	<0.000002 %		<LOD
		203-458-1, 200-863-5	107-06-2, 75-34-3							
2	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
3	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
4	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7							
5	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
6	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
7	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
8	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
9	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
10	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
11	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
12	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
13	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
14	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
15	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
16	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
17	naphthalene				<0.0001 mg/kg		<0.0001 mg/kg	<0.00000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
18	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
19	phenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
20	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
21	tetrachloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-028-00-4	204-825-9	127-18-4							
22	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
23	trichloroethylene; trichloroethene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-027-00-9	201-167-4	79-01-6							
24	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
25	hexachlorobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	602-065-00-6	204-273-9	118-74-1							
26	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]							
27	1,1,1-trichloroethane; methyl chloroform				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-013-00-2	200-756-3	71-55-6							
28	1,1,2,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5							
29	1,1,2-trichloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-014-00-8	201-166-9	79-00-5							
30	1,1-dichloroethylene; vinylidene chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-025-00-8	200-864-0	75-35-4							
31	1,1-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-031-00-0	209-253-3	563-58-6							
32	1,2,3-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		201-757-1	87-61-6							
33	1,2,4-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-043-00-3	202-436-9	95-63-6							
34	1,2-dibromoethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-010-00-6	203-444-5	106-93-4							
35	1,2-dichlorobenzene; o-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-034-00-7	202-425-9	95-50-1							
36	1,2-dichloropropane; propylene dichloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-020-00-0	201-152-2	78-87-5							
37	1,3-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-067-00-7	208-792-1	541-73-1							
38	1,3-dichloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		205-531-3	142-28-9							
39	1,4-dichlorobenzene; p-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-035-00-2	203-400-5	106-46-7							
40	2,2-dichloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		209-832-0	594-20-7							
41	bromodichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		200-856-7	75-27-4							
42	bromomethane; methylbromide				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-002-00-2	200-813-2	74-83-9							
43	bromobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-060-00-9	203-623-8	108-86-1							
44	n-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		203-209-7	104-51-8							
45	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
46	chlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-033-00-1	203-628-5	108-90-7							
47	carbon tetrachloride; tetrachloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-008-00-5	200-262-8	56-23-5							
48	chloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-009-00-0	200-830-5	75-00-3							
49	chloroform; trichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-006-00-4	200-663-8	67-66-3							
50	chloromethane; methyl chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-001-00-7	200-817-4	74-87-3							
51	dibromochloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		204-704-0	124-48-1							
52	1,2-dibromo-3-chloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-021-00-6	202-479-3	96-12-8							
53	dibromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-003-00-8	200-824-2	74-95-3							
54	hexachlorobutadiene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		201-765-5	87-68-3							
55	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
56	4-isopropyltoluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		202-796-7	99-87-6							
57	sec-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		205-227-0	135-98-8							
58	styrene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-026-00-0	202-851-5	100-42-5							
59	trans-1,3-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		431-460-4	10061-02-6							
60	tert-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		202-632-4	98-06-6							
61	bromoform; tribromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-007-00-X	200-854-6	75-25-2							
62	1,2,4-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-087-00-6	204-428-0	120-82-1							
63	1,1,1,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		211-135-1	630-20-6							
64	trichlorofluoromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		200-892-3	75-69-4							
65	mesitylene; 1,3,5-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-025-00-5	203-604-4	108-67-8							
66	vinyl chloride; chloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-023-00-7	200-831-0	75-01-4							
67	aniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-008-00-7	200-539-3	62-53-3							
68	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]							
69	bis(2-chloroethyl) ether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	603-029-00-2	203-870-1	111-44-4							
70	hexachloroethane				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		200-666-4	67-72-1							
71	nitrobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	609-003-00-7	202-716-0	98-95-3							
72	3,5,5-trimethylcyclohex-2-enone; isophorone				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	606-012-00-8	201-126-0	78-59-1							
73	2-nitrophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-857-5	88-75-5							


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
74	3,4-xylene; [1] 2,5-xylene; [2] 2,4-xylene; [3] 2,3-xylene; [4] 2,6-xylene; [5] xylene; [6] 2,4(or 2,5)-xylene [7]				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]							
75	bis(2-chloroethoxy)methane				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		203-920-2	111-91-1							
76	2,4-dichlorophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-011-00-7	204-429-6	120-83-2							
77	4-chloroaniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-137-00-9	203-401-0	106-47-8							
78	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-014-00-3	200-431-6	59-50-7							
79	2,4,6-trichlorophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
80	2,4,5-trichlorophenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
81	2-methyl naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-078-3	91-57-6							
82	2-chloronaphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-079-9	91-58-7							
83	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							
84	2,6-dinitrotoluene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	609-049-00-8	210-106-0	606-20-2							
85	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]							
86	dibenzofuran				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		205-071-3	132-64-9							
87	4-chlorophenylphenylether				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		230-281-7	7005-72-3							
88	diethyl phthalate				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		201-550-6	84-66-2							
89	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]							
90	azobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	611-001-00-6	203-102-5	103-33-3							
91	4-bromophenylphenylether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		202-952-4	101-55-3							
92	carbazole				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-696-0	86-74-8							
93	dibutyl phthalate; DBP				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
94	anthraquinone				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	606-151-00-4	201-549-0	84-65-1							
95	BBP; benzyl butyl phthalate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
96	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
97	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-026-00-3	208-750-2 [1]	540-59-0 [1]							
		205-859-7 [2]	156-59-2 [2]							
		205-860-2 [3]	156-60-5 [3]							
98	cumene; [1] propylbenzene [2]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-024-00-X	202-704-5 [1]	98-82-8 [1]							
		203-132-9 [2]	103-65-1 [2]							
Total:								0.00075 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- <LOD** Below limit of detection
- ND** Not detected

Classification of sample: WS05--18082021-2.90

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>WS05--18082021-2.90</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>37%</b> (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 37% Wet Weight Moisture Correction applied (MC)

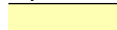



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	40 mg/kg	1.32	33.272 mg/kg	0.00333 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.39 mg/kg		0.246 mg/kg	0.0000246 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.3 mg/kg		0.189 mg/kg	0.0000189 %	✓	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.38 mg/kg		0.239 mg/kg	0.0000239 %	✓	
9	benzo[ghi]perylene	205-883-8	191-24-2		0.27 mg/kg		0.17 mg/kg	0.000017 %	✓	
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.21 mg/kg		0.132 mg/kg	0.0000132 %	✓	
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2 mg/kg	2.775	2.098 mg/kg	0.00021 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		3.9 mg/kg	13.43	32.998 mg/kg	0.0033 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		41 mg/kg	1.462	37.752 mg/kg	0.00378 %	✓	
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	0.38 mg/kg		0.239 mg/kg	0.0000239 %	✓	

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	copper { dicopper oxide; copper (I) oxide }				570	mg/kg	1.126	404.307	mg/kg	0.0404 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
19	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
20	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
21	fluoranthene				0.92	mg/kg		0.58	mg/kg	0.000058 %	✓	
		205-912-4	206-44-0									
22	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
23	indeno[123-cd]pyrene				0.24	mg/kg		0.151	mg/kg	0.0000151 %	✓	
		205-893-2	193-39-5									
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	60	mg/kg		37.8	mg/kg	0.00378 %	✓	
	082-001-00-6											
25	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
26	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
27	nickel { nickel dihydroxide }				33	mg/kg	1.579	32.838	mg/kg	0.00328 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
28	pH				7.7	pH		7.7	pH	7.7 pH		
			PH									
29	phenanthrene				0.91	mg/kg		0.573	mg/kg	0.0000573 %	✓	
		201-581-5	85-01-8									
30	pyrene				0.79	mg/kg		0.498	mg/kg	0.0000498 %	✓	
		204-927-3	129-00-0									
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
32	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
33	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
34	xylene				<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
35	zinc { zinc oxide }				130	mg/kg	1.245	101.942	mg/kg	0.0102 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
36	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				70	mg/kg	1.785	78.727	mg/kg	0.00787 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
Total:										0.0782 %		




Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS05--18082021-3.80

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS05--18082021-3.80</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>21%</b> (wet weight correction)	

**Hazard properties**

None identified

**Determinands**

Moisture content: 21% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		0.29 mg/kg		0.229 mg/kg	0.0000229 %	✓	
3	anthracene	204-371-1	120-12-7		0.51 mg/kg		0.403 mg/kg	0.0000403 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	25 mg/kg	1.32	26.076 mg/kg	0.00261 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	3.1 mg/kg		2.449 mg/kg	0.000245 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	2.8 mg/kg		2.212 mg/kg	0.000221 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	3.7 mg/kg		2.923 mg/kg	0.000292 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		2.5 mg/kg		1.975 mg/kg	0.000198 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	1.2 mg/kg		0.948 mg/kg	0.0000948 %	✓	
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.86 mg/kg	2.775	1.886 mg/kg	0.000189 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		5.7 mg/kg	13.43	60.475 mg/kg	0.00605 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		21 mg/kg	1.462	24.247 mg/kg	0.00242 %	✓	
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	2.8 mg/kg		2.212 mg/kg	0.000221 %	✓	
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	21 mg/kg	1.126	18.678 mg/kg	0.00187 %	✓	

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
18	dibenz[a,h]anthracene				0.6	mg/kg		0.474	mg/kg	0.0000474 %	✓	
	601-041-00-2	200-181-8	53-70-3									
19	fluoranthene				5.6	mg/kg		4.424	mg/kg	0.000442 %	✓	
		205-912-4	206-44-0									
20	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
21	indeno[123-cd]pyrene				2.1	mg/kg		1.659	mg/kg	0.000166 %	✓	
		205-893-2	193-39-5									
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	88	mg/kg		69.52	mg/kg	0.00695 %	✓	
	082-001-00-6											
23	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
24	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
25	nickel { nickel dihydroxide }				22	mg/kg	1.579	27.452	mg/kg	0.00275 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
26	pH				8	pH		8	pH	8pH		
			PH									
27	phenanthrene				2.2	mg/kg		1.738	mg/kg	0.000174 %	✓	
		201-581-5	85-01-8									
28	pyrene				5.2	mg/kg		4.108	mg/kg	0.000411 %	✓	
		204-927-3	129-00-0									
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
30	zinc { zinc oxide }				83	mg/kg	1.245	81.616	mg/kg	0.00816 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
31	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				51	mg/kg	1.785	71.925	mg/kg	0.00719 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
Total:										0.0415 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS06--19082021-1.80

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>WS06--19082021-1.80</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>40%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 40% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
		203-458-1, 200-863-5	107-06-2, 75-34-3							
2	acenaphthene				0.4 mg/kg		0.24 mg/kg	0.000024 %	✓	
		201-469-6	83-32-9							
3	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
4	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7							
5	arsenic { arsenic trioxide }				25 mg/kg	1.32	19.805 mg/kg	0.00198 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
6	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
7	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
8	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
9	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
10	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
11	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
12	beryllium { beryllium oxide }				1.6 mg/kg	2.775	2.664 mg/kg	0.000266 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
13	boron { boron tribromide/trichloride/trifluoride (combined) }				12 mg/kg	13.43	96.696 mg/kg	0.00967 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2							
14	cadmium { cadmium sulfide }			1	2.6 mg/kg	1.285	2.005 mg/kg	0.000156 %	✓	
	048-010-00-4	215-147-8	1306-23-6							
15	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				67 mg/kg	1.462	58.755 mg/kg	0.00588 %	✓	
		215-160-9	1308-38-9							
16	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	chrysene 601-048-00-0   205-923-4   218-01-9				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
18	copper { dicopper oxide; copper (I) oxide } 029-002-00-X   215-270-7   1317-39-1				150	mg/kg	1.126	101.33	mg/kg	0.0101 %	✓	
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
20	dibenz[a,h]anthracene 601-041-00-2   200-181-8   53-70-3				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
21	ethylbenzene 601-023-00-4   202-849-4   100-41-4				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
22	fluoranthene 205-912-4   206-44-0				0.64	mg/kg		0.384	mg/kg	0.0000384 %	✓	
23	fluorene 201-695-5   86-73-7				0.2	mg/kg		0.12	mg/kg	0.000012 %	✓	
24	indeno[123-cd]pyrene 205-893-2   193-39-5				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	370	mg/kg		222	mg/kg	0.0222 %	✓	
26	mercury { mercury dichloride } 080-010-00-X   231-299-8   7487-94-7				1	mg/kg	1.353	0.812	mg/kg	0.0000812 %	✓	
27	naphthalene 601-052-00-2   202-049-5   91-20-3				<0.0001	mg/kg		<0.0001	mg/kg	<0.00000001 %		<LOD
28	nickel { nickel dihydroxide } 028-008-00-X   235-008-5 [1]   12054-48-7 [1] 234-348-1 [2]   11113-74-9 [2]				63	mg/kg	1.579	59.705	mg/kg	0.00597 %	✓	
29	pH PH				7.7	pH		7.7	pH	7.7 pH		
30	phenanthrene 201-581-5   85-01-8				0.35	mg/kg		0.21	mg/kg	0.000021 %	✓	
31	phenol 604-001-00-2   203-632-7   108-95-2				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
32	pyrene 204-927-3   129-00-0				0.72	mg/kg		0.432	mg/kg	0.0000432 %	✓	
33	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
34	tetrachloroethylene 602-028-00-4   204-825-9   127-18-4				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
35	toluene 601-021-00-3   203-625-9   108-88-3				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
36	trichloroethylene; trichloroethene 602-027-00-9   201-167-4   79-01-6				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
37	xylene 601-022-00-9   202-422-2 [1]   95-47-6 [1] 203-396-5 [2]   106-42-3 [2] 203-576-3 [3]   108-38-3 [3] 215-535-7 [4]   1330-20-7 [4]				<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<LOD
38	zinc { zinc oxide } 030-013-00-7   215-222-5   1314-13-2				560	mg/kg	1.245	418.224	mg/kg	0.0418 %	✓	
39	hexachlorobenzene 602-065-00-6   204-273-9   118-74-1				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
40	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4] 604-004-00-9   203-577-9 [1]   108-39-4 [1] 202-423-8 [2]   95-48-7 [2] 203-398-6 [3]   106-44-5 [3] 215-293-2 [4]   1319-77-3 [4]				<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<LOD



#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
41	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
42	vanadium { divanadium pentaoxide; vanadium pentoxide }				36	mg/kg	1.785	38.56	mg/kg	0.00386 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
43	1,1,1-trichloroethane; methyl chloroform				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-013-00-2	200-756-3	71-55-6									
44	1,1,2,2-tetrachloroethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5									
45	1,1,2-trichloroethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-014-00-8	201-166-9	79-00-5									
46	1,1-dichloroethylene; vinylidene chloride				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-025-00-8	200-864-0	75-35-4									
47	1,1-dichloropropene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-031-00-0	209-253-3	563-58-6									
48	1,2,3-trichlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		201-757-1	87-61-6									
49	1,2,4-trimethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-043-00-3	202-436-9	95-63-6									
50	1,2-dibromoethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-010-00-6	203-444-5	106-93-4									
51	1,2-dichlorobenzene; o-dichlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-034-00-7	202-425-9	95-50-1									
52	1,2-dichloropropane; propylene dichloride				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-020-00-0	201-152-2	78-87-5									
53	1,3-dichlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-067-00-7	208-792-1	541-73-1									
54	1,3-dichloropropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		205-531-3	142-28-9									
55	1,4-dichlorobenzene; p-dichlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-035-00-2	203-400-5	106-46-7									
56	2,2-dichloropropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		209-832-0	594-20-7									
57	bromodichloromethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		200-856-7	75-27-4									
58	bromomethane; methylbromide				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-002-00-2	200-813-2	74-83-9									
59	bromobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-060-00-9	203-623-8	108-86-1									
60	n-butylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		203-209-7	104-51-8									
61	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]									
62	chlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-033-00-1	203-628-5	108-90-7									
63	carbon tetrachloride; tetrachloromethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-008-00-5	200-262-8	56-23-5									
64	chloroethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-009-00-0	200-830-5	75-00-3									
65	chloroform; trichloromethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-006-00-4	200-663-8	67-66-3									
66	chloromethane; methyl chloride				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-001-00-7	200-817-4	74-87-3									
67	dibromochloromethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		204-704-0	124-48-1									
68	1,2-dibromo-3-chloropropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-021-00-6	202-479-3	96-12-8									
69	dibromomethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-003-00-8	200-824-2	74-95-3									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
70	hexachlorobutadiene	201-765-5	87-68-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
71	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
72	4-isopropyltoluene	202-796-7	99-87-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
73	sec-butylbenzene	205-227-0	135-98-8		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
74	styrene	601-026-00-0	202-851-5	100-42-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
75	trans-1,3-dichloropropene	431-460-4	10061-02-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
76	tert-butylbenzene	202-632-4	98-06-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
77	bromoform; tribromomethane	602-007-00-X	200-854-6	75-25-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
78	1,2,4-trichlorobenzene	602-087-00-6	204-428-0	120-82-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
79	1,1,1,2-tetrachloroethane	211-135-1	630-20-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
80	trichlorofluoromethane	200-892-3	75-69-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
81	mesitylene; 1,3,5-trimethylbenzene	601-025-00-5	203-604-4	108-67-8	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
82	vinyl chloride; chloroethylene	602-023-00-7	200-831-0	75-01-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
83	aniline	612-008-00-7	200-539-3	62-53-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
84	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
85	bis(2-chloroethyl) ether	603-029-00-2	203-870-1	111-44-4	<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
86	hexachloroethane	200-666-4	67-72-1		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
87	nitrobenzene	609-003-00-7	202-716-0	98-95-3	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
88	3,5,5-trimethylcyclohex-2-enone; isophorone	606-012-00-8	201-126-0	78-59-1	<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
89	2-nitrophenol	201-857-5	88-75-5		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
90	3,4-xylenol; [1] 2,5-xylenol; [2] 2,4-xylenol; [3] 2,3-xylenol; [4] 2,6-xylenol; [5] xylenol; [6] 2,4(or 2,5)-xylenol [7]	604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
91	bis(2-chloroethoxy)methane	203-920-2	111-91-1		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
92	2,4-dichlorophenol	604-011-00-7	204-429-6	120-83-2	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
93	4-chloroaniline	612-137-00-9	203-401-0	106-47-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
94	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol	604-014-00-3	200-431-6	59-50-7	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
95	2,4,6-trichlorophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
96	2,4,5-trichlorophenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
97	2-methyl naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-078-3	91-57-6							
98	2-chloronaphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-079-9	91-58-7							
99	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							
100	2,6-dinitrotoluene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	609-049-00-8	210-106-0	606-20-2							
101	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]							
102	dibenzofuran				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		205-071-3	132-64-9							
103	4-chlorophenylphenylether				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		230-281-7	7005-72-3							
104	diethyl phthalate				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		201-550-6	84-66-2							
105	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]							
106	azobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	611-001-00-6	203-102-5	103-33-3							
107	4-bromophenylphenylether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		202-952-4	101-55-3							
108	carbazole				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-696-0	86-74-8							
109	dibutyl phthalate; DBP				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
110	anthraquinone				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	606-151-00-4	201-549-0	84-65-1							
111	BBP; benzyl butyl phthalate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
112	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]							
113	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]							
114	cumene; [1] propylbenzene [2]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]							
Total:								0.104 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS07--19082021-2.30

**Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS07--19082021-2.30</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>35%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 35% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.002 mg/kg		<0.002 mg/kg	<0.000002 %		<LOD
		203-458-1, 200-863-5	107-06-2, 75-34-3							
2	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
3	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
4	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7							
5	arsenic { arsenic trioxide }				34 mg/kg	1.32	29.179 mg/kg	0.00292 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
6	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
7	benzo[a]anthracene				0.39 mg/kg		0.254 mg/kg	0.0000254 %	✓	
	601-033-00-9	200-280-6	56-55-3							
8	benzo[a]pyrene; benzo[def]chrysene				0.33 mg/kg		0.215 mg/kg	0.0000215 %	✓	
	601-032-00-3	200-028-5	50-32-8							
9	benzo[b]fluoranthene				0.36 mg/kg		0.234 mg/kg	0.0000234 %	✓	
	601-034-00-4	205-911-9	205-99-2							
10	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
11	benzo[k]fluoranthene				0.26 mg/kg		0.169 mg/kg	0.0000169 %	✓	
	601-036-00-5	205-916-6	207-08-9							
12	beryllium { beryllium oxide }				1.4 mg/kg	2.775	2.526 mg/kg	0.000253 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
13	boron { boron tribromide/trichloride/trifluoride (combined) }				16 mg/kg	13.43	139.672 mg/kg	0.014 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2							
14	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6							
15	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				56 mg/kg	1.462	53.201 mg/kg	0.00532 %	✓	
		215-160-9	1308-38-9							
16	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
17	chrysene 601-048-00-0   205-923-4   218-01-9				0.39 mg/kg		0.254 mg/kg	0.0000254 %	✓	
18	copper { dicopper oxide; copper (I) oxide } 029-002-00-X   215-270-7   1317-39-1				73 mg/kg	1.126	53.423 mg/kg	0.00534 %	✓	
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
20	dibenz[a,h]anthracene 601-041-00-2   200-181-8   53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	ethylbenzene 601-023-00-4   202-849-4   100-41-4				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
22	fluoranthene   205-912-4   206-44-0				0.72 mg/kg		0.468 mg/kg	0.0000468 %	✓	
23	fluorene   201-695-5   86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
24	indeno[123-cd]pyrene   205-893-2   193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
25	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	600 mg/kg		390 mg/kg	0.039 %	✓	
26	mercury { mercury dichloride } 080-010-00-X   231-299-8   7487-94-7				0.5 mg/kg	1.353	0.44 mg/kg	0.000044 %	✓	
27	naphthalene 601-052-00-2   202-049-5   91-20-3				<0.0001 mg/kg		<0.0001 mg/kg	<0.00000001 %		<LOD
28	nickel { nickel dihydroxide } 028-008-00-X   235-008-5 [1]   12054-48-7 [1]   234-348-1 [2]   11113-74-9 [2]				55 mg/kg	1.579	56.467 mg/kg	0.00565 %	✓	
29	pH     PH				7.7 pH		7.7 pH	7.7 pH		
30	phenanthrene   201-581-5   85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	phenol 604-001-00-2   203-632-7   108-95-2				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
32	pyrene   204-927-3   129-00-0				0.67 mg/kg		0.436 mg/kg	0.0000436 %	✓	
33	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
34	tetrachloroethylene 602-028-00-4   204-825-9   127-18-4				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
35	toluene 601-021-00-3   203-625-9   108-88-3				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
36	TPH (C6 to C40) petroleum group     TPH				180 mg/kg		117 mg/kg	0.0117 %	✓	
37	trichloroethylene; trichloroethene 602-027-00-9   201-167-4   79-01-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
38	xylene 601-022-00-9   202-422-2 [1]   95-47-6 [1]   203-396-5 [2]   106-42-3 [2]   203-576-3 [3]   108-38-3 [3]   215-535-7 [4]   1330-20-7 [4]				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
39	zinc { zinc oxide } 030-013-00-7   215-222-5   1314-13-2				280 mg/kg	1.245	226.538 mg/kg	0.0227 %	✓	
40	hexachlorobenzene 602-065-00-6   204-273-9   118-74-1				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
41	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4] 604-004-00-9   203-577-9 [1]   108-39-4 [1]   202-423-8 [2]   95-48-7 [2]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
		203-398-6 [3] 215-293-2 [4]	106-44-5 [3] 1319-77-3 [4]								
42	monohydric phenols		P1186		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
43	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	44 mg/kg	1.785	51.056 mg/kg	0.00511 %	✓		
44	1,1,1-trichloroethane; methyl chloroform	602-013-00-2	200-756-3	71-55-6	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
45	1,1,2,2-tetrachloroethane	602-015-00-3	201-197-8	79-34-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
46	1,1,2-trichloroethane	602-014-00-8	201-166-9	79-00-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
47	1,1-dichloroethylene; vinylidene chloride	602-025-00-8	200-864-0	75-35-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
48	1,1-dichloropropene	602-031-00-0	209-253-3	563-58-6	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
49	1,2,3-trichlorobenzene		201-757-1	87-61-6	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
50	1,2,4-trimethylbenzene	601-043-00-3	202-436-9	95-63-6	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
51	1,2-dibromoethane	602-010-00-6	203-444-5	106-93-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
52	1,2-dichlorobenzene; o-dichlorobenzene	602-034-00-7	202-425-9	95-50-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
53	1,2-dichloropropane; propylene dichloride	602-020-00-0	201-152-2	78-87-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
54	1,3-dichlorobenzene	602-067-00-7	208-792-1	541-73-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
55	1,3-dichloropropane		205-531-3	142-28-9	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
56	1,4-dichlorobenzene; p-dichlorobenzene	602-035-00-2	203-400-5	106-46-7	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
57	2,2-dichloropropane		209-832-0	594-20-7	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
58	bromodichloromethane		200-856-7	75-27-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
59	bromomethane; methylbromide	602-002-00-2	200-813-2	74-83-9	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
60	bromobenzene	602-060-00-9	203-623-8	108-86-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
61	n-butylbenzene		203-209-7	104-51-8	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
62	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]	602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
63	chlorobenzene	602-033-00-1	203-628-5	108-90-7	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
64	carbon tetrachloride; tetrachloromethane	602-008-00-5	200-262-8	56-23-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
65	chloroethane	602-009-00-0	200-830-5	75-00-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
66	chloroform; trichloromethane	602-006-00-4	200-663-8	67-66-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
67	chloromethane; methyl chloride	602-001-00-7	200-817-4	74-87-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
68	dibromochloromethane		204-704-0	124-48-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
69	1,2-dibromo-3-chloropropane	602-021-00-6	202-479-3	96-12-8	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
70	dibromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-003-00-8	200-824-2	74-95-3							
71	hexachlorobutadiene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		201-765-5	87-68-3							
72	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
73	4-isopropyltoluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		202-796-7	99-87-6							
74	sec-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		205-227-0	135-98-8							
75	styrene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-026-00-0	202-851-5	100-42-5							
76	trans-1,3-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		431-460-4	10061-02-6							
77	tert-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		202-632-4	98-06-6							
78	bromoform; tribromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-007-00-X	200-854-6	75-25-2							
79	1,2,4-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-087-00-6	204-428-0	120-82-1							
80	1,1,1,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		211-135-1	630-20-6							
81	trichlorofluoromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		200-892-3	75-69-4							
82	mesitylene; 1,3,5-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-025-00-5	203-604-4	108-67-8							
83	vinyl chloride; chloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-023-00-7	200-831-0	75-01-4							
84	aniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-008-00-7	200-539-3	62-53-3							
85	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]							
86	bis(2-chloroethyl) ether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	603-029-00-2	203-870-1	111-44-4							
87	hexachloroethane				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		200-666-4	67-72-1							
88	nitrobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	609-003-00-7	202-716-0	98-95-3							
89	3,5,5-trimethylcyclohex-2-enone; isophorone				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	606-012-00-8	201-126-0	78-59-1							
90	2-nitrophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-857-5	88-75-5							
91	3,4-xyleneol; [1] 2,5-xyleneol; [2] 2,4-xyleneol; [3] 2,3-xyleneol; [4] 2,6-xyleneol; [5] xyleneol; [6] 2,4(or 2,5)-xyleneol [7]				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]							
92	bis(2-chloroethoxy)methane				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		203-920-2	111-91-1							
93	2,4-dichlorophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-011-00-7	204-429-6	120-83-2							
94	4-chloroaniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-137-00-9	203-401-0	106-47-8							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
95	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-014-00-3	200-431-6	59-50-7							
96	2,4,6-trichlorophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
97	2,4,5-trichlorophenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
98	2-methyl naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-078-3	91-57-6							
99	2-chloronaphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-079-9	91-58-7							
100	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							
101	2,6-dinitrotoluene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	609-049-00-8	210-106-0	606-20-2							
102	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]							
103	dibenzofuran				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		205-071-3	132-64-9							
104	4-chlorophenylphenylether				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		230-281-7	7005-72-3							
105	diethyl phthalate				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		201-550-6	84-66-2							
106	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]							
107	azobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	611-001-00-6	203-102-5	103-33-3							
108	4-bromophenylphenylether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		202-952-4	101-55-3							
109	carbazole				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-696-0	86-74-8							
110	dibutyl phthalate; DBP				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
111	anthraquinone				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	606-151-00-4	201-549-0	84-65-1							
112	BBP; benzyl butyl phthalate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
113	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]							
114	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]							
115	cumene; [1] propylbenzene [2]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]							
Total:								0.114 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

**Supplementary Hazardous Property Information**

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Samples wet & unlikely to be hazardous.

Hazard Statements hit:

**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0117%)

Classification of sample: WS08--19082021-3.40

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>WS08--19082021-3.40</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>14%</b> (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 14% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	1,1-dichloroethane and 1,2-dichloroethane (combined)	203-458-1, 200-863-5	107-06-2, 75-34-3		<0.002 mg/kg		<0.002 mg/kg	<0.000002 %		<LOD
2	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
5	benzene	601-020-00-8 200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9 200-280-6	56-55-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3 200-028-5	50-32-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4 205-911-9	205-99-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5 205-916-6	207-08-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
11	chrysene	601-048-00-0 205-923-4	218-01-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
12	dibenz[a,h]anthracene	601-041-00-2 200-181-8	53-70-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4 202-849-4	100-41-4		<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
14	fluoranthene	205-912-4	206-44-0		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
15	fluorene	201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
17	naphthalene	601-052-00-2 202-049-5	91-20-3		<0.0001 mg/kg		<0.0001 mg/kg	<0.0000001 %		<LOD
18	phenanthrene	201-581-5	85-01-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
19	phenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
20	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
21	tetrachloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-028-00-4	204-825-9	127-18-4							
22	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
23	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
24	trichloroethylene; trichloroethene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-027-00-9	201-167-4	79-01-6							
25	xylene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
26	hexachlorobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	602-065-00-6	204-273-9	118-74-1							
27	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]							
28	1,1,1-trichloroethane; methyl chloroform				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-013-00-2	200-756-3	71-55-6							
29	1,1,1,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5							
30	1,1,2-trichloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-014-00-8	201-166-9	79-00-5							
31	1,1-dichloroethylene; vinylidene chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-025-00-8	200-864-0	75-35-4							
32	1,1-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-031-00-0	209-253-3	563-58-6							
33	1,2,3-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		201-757-1	87-61-6							
34	1,2,4-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-043-00-3	202-436-9	95-63-6							
35	1,2-dibromoethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-010-00-6	203-444-5	106-93-4							
36	1,2-dichlorobenzene; o-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-034-00-7	202-425-9	95-50-1							
37	1,2-dichloropropane; propylene dichloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-020-00-0	201-152-2	78-87-5							
38	1,3-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-067-00-7	208-792-1	541-73-1							
39	1,3-dichloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		205-531-3	142-28-9							
40	1,4-dichlorobenzene; p-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-035-00-2	203-400-5	106-46-7							
41	2,2-dichloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		209-832-0	594-20-7							
42	bromodichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		200-856-7	75-27-4							
43	bromomethane; methylbromide				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-002-00-2	200-813-2	74-83-9							
44	bromobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-060-00-9	203-623-8	108-86-1							
45	n-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		203-209-7	104-51-8							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
46	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]							
47	chlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	602-033-00-1	203-628-5	108-90-7							
48	carbon tetrachloride; tetrachloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	602-008-00-5	200-262-8	56-23-5							
49	chloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	602-009-00-0	200-830-5	75-00-3							
50	chloroform; trichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	602-006-00-4	200-663-8	67-66-3							
51	chloromethane; methyl chloride				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	602-001-00-7	200-817-4	74-87-3							
52	dibromochloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
		204-704-0	124-48-1							
53	1,2-dibromo-3-chloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	602-021-00-6	202-479-3	96-12-8							
54	dibromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	602-003-00-8	200-824-2	74-95-3							
55	hexachlorobutadiene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
		201-765-5	87-68-3							
56	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
57	4-isopropyltoluene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
		202-796-7	99-87-6							
58	sec-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
		205-227-0	135-98-8							
59	styrene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	601-026-00-0	202-851-5	100-42-5							
60	trans-1,3-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
		431-460-4	10061-02-6							
61	tert-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
		202-632-4	98-06-6							
62	bromoform; tribromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	602-007-00-X	200-854-6	75-25-2							
63	1,2,4-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	602-087-00-6	204-428-0	120-82-1							
64	1,1,1,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
		211-135-1	630-20-6							
65	trichlorofluoromethane				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
		200-892-3	75-69-4							
66	mesitylene; 1,3,5-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	601-025-00-5	203-604-4	108-67-8							
67	vinyl chloride; chloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	602-023-00-7	200-831-0	75-01-4							
68	aniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-008-00-7	200-539-3	62-53-3							
69	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-008-00-0	202-433-2 [1]	95-57-8 [1]							
		203-402-6 [2]	106-48-9 [2]							
		203-582-6 [3]	108-43-0 [3]							
		246-691-4 [4]	25167-80-0 [4]							
70	bis(2-chloroethyl) ether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	603-029-00-2	203-870-1	111-44-4							
71	hexachloroethane				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		200-666-4	67-72-1							
72	nitrobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	609-003-00-7	202-716-0	98-95-3							


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
73	3,5,5-trimethylcyclohex-2-enone; isophorone				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	606-012-00-8	201-126-0	78-59-1							
74	2-nitrophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-857-5	88-75-5							
75	3,4-xyleneol; [1] 2,5-xyleneol; [2] 2,4-xyleneol; [3] 2,3-xyleneol; [4] 2,6-xyleneol; [5] xyleneol; [6] 2,4(or 2,5)-xyleneol [7]				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]							
76	bis(2-chloroethoxy)methane				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		203-920-2	111-91-1							
77	2,4-dichlorophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-011-00-7	204-429-6	120-83-2							
78	4-chloroaniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-137-00-9	203-401-0	106-47-8							
79	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-014-00-3	200-431-6	59-50-7							
80	2,4,6-trichlorophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
81	2,4,5-trichlorophenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
82	2-methyl naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-078-3	91-57-6							
83	2-chloronaphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-079-9	91-58-7							
84	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							
85	2,6-dinitrotoluene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	609-049-00-8	210-106-0	606-20-2							
86	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]							
87	dibenzofuran				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		205-071-3	132-64-9							
88	4-chlorophenylphenylether				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		230-281-7	7005-72-3							
89	diethyl phthalate				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		201-550-6	84-66-2							
90	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]							
91	azobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	611-001-00-6	203-102-5	103-33-3							
92	4-bromophenylphenylether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		202-952-4	101-55-3							
93	carbazole				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-696-0	86-74-8							
94	dibutyl phthalate; DBP				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
95	anthraquinone				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	606-151-00-4	201-549-0	84-65-1							
96	BBP; benzyl butyl phthalate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
97	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-040-00-X	202-424-3 [1] 203-580-5 [2]	95-49-8 [1] 108-41-8 [2]							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
		203-397-0 [3] 246-698-2 [4]	106-43-4 [3] 25168-05-2 [4]							
98	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3] 602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
99	cumene; [1] propylbenzene [2] 601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
Total:								0.00176 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- <LOD** Below limit of detection
- ND** Not detected

Classification of sample: WS09--19082021-2.50

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS09--19082021-2.50</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>10%</b> (wet weight correction)	

**Hazard properties**

None identified

**Determinands**

Moisture content: 10% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	48 mg/kg	1.32	57.038 mg/kg	0.0057 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.4 mg/kg	2.775	3.497 mg/kg	0.00035 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		2.9 mg/kg	13.43	35.052 mg/kg	0.00351 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		43 mg/kg	1.462	56.562 mg/kg	0.00566 %	✓	
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	21 mg/kg	1.126	21.279 mg/kg	0.00213 %	✓	




#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
18	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
19	fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0									
20	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
21	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5									
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	45	mg/kg		40.5	mg/kg	0.00405 %	✓	
	082-001-00-6											
23	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
24	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
25	nickel { nickel dihydroxide }				29	mg/kg	1.579	41.225	mg/kg	0.00412 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
26	pH				7.5	pH		7.5	pH	7.5 pH		
			PH									
27	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8									
28	pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0									
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
30	zinc { zinc oxide }				110	mg/kg	1.245	123.227	mg/kg	0.0123 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
31	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				78	mg/kg	1.785	125.32	mg/kg	0.0125 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
Total:										0.0512 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS09--19082021-3.00

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>WS09--19082021-3.00</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>8.3%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**





Moisture content: 8.3% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	45 mg/kg	1.32	54.483 mg/kg	0.00545 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.44 mg/kg		0.403 mg/kg	0.0000403 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.39 mg/kg		0.358 mg/kg	0.0000358 %	✓	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.49 mg/kg		0.449 mg/kg	0.0000449 %	✓	
9	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.2 mg/kg		0.183 mg/kg	0.0000183 %	✓	
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.3 mg/kg	2.775	3.308 mg/kg	0.000331 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		6.7 mg/kg	13.43	82.513 mg/kg	0.00825 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		39 mg/kg	1.462	52.27 mg/kg	0.00523 %	✓	
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	0.41 mg/kg		0.376 mg/kg	0.0000376 %	✓	

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	copper { dicopper oxide; copper (I) oxide }				21	mg/kg	1.126	21.681	mg/kg	0.00217 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
19	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
20	ethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
21	fluoranthene				0.52	mg/kg		0.477	mg/kg	0.0000477 %	✓	
		205-912-4	206-44-0									
22	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
23	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5									
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	62	mg/kg		56.854	mg/kg	0.00569 %	✓	
	082-001-00-6											
25	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
26	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
27	nickel { nickel dihydroxide }				27	mg/kg	1.579	39.107	mg/kg	0.00391 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
28	pH				7.7	pH		7.7	pH	7.7 pH		
			PH									
29	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8									
30	pyrene				0.55	mg/kg		0.504	mg/kg	0.0000504 %	✓	
		204-927-3	129-00-0									
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
32	toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
33	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
34	xylene				<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
35	zinc { zinc oxide }				130	mg/kg	1.245	148.382	mg/kg	0.0148 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
36	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				73	mg/kg	1.785	119.502	mg/kg	0.012 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
Total:										0.0599 %		

Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS09--19082021-3.80

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>WS09--19082021-3.80</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>7.5%</b> (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 7.5% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.002 mg/kg		<0.002 mg/kg	<0.000002 %		<LOD
		203-458-1, 200-863-5	107-06-2, 75-34-3							
2	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
3	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
4	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7							
5	arsenic { arsenic trioxide }				75 mg/kg	1.32	91.598 mg/kg	0.00916 %	✔	
	033-003-00-0	215-481-4	1327-53-3							
6	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
7	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
8	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
9	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
10	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
11	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
12	beryllium { beryllium oxide }				1.8 mg/kg	2.775	4.621 mg/kg	0.000462 %	✔	
	004-003-00-8	215-133-1	1304-56-9							
13	boron { boron tribromide/trichloride/trifluoride (combined) }				2.4 mg/kg	13.43	29.815 mg/kg	0.00298 %	✔	
			10294-33-4, 10294-34-5, 7637-07-2							
14	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6							
15	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				64 mg/kg	1.462	86.524 mg/kg	0.00865 %	✔	
		215-160-9	1308-38-9							
16	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
17	chrysene 601-048-00-0   205-923-4   218-01-9				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
18	copper { dicopper oxide; copper (I) oxide } 029-002-00-X   215-270-7   1317-39-1				9.2 mg/kg	1.126	9.581 mg/kg	0.000958 %	✓		
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
20	dibenz[a,h]anthracene 601-041-00-2   200-181-8   53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	ethylbenzene 601-023-00-4   202-849-4   100-41-4				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
22	fluoranthene 205-912-4   206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
23	fluorene 201-695-5   86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
24	indeno[123-cd]pyrene 205-893-2   193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	16 mg/kg		14.8 mg/kg	0.00148 %	✓		
26	mercury { mercury dichloride } 080-010-00-X   231-299-8   7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
27	naphthalene 601-052-00-2   202-049-5   91-20-3				<0.0001 mg/kg		<0.0001 mg/kg	<0.00000001 %			<LOD
28	nickel { nickel dihydroxide } 028-008-00-X   235-008-5 [1]   12054-48-7 [1] 234-348-1 [2]   11113-74-9 [2]				42 mg/kg	1.579	61.364 mg/kg	0.00614 %	✓		
29	pH PH				8.4 pH		8.4 pH	8.4 pH			
30	phenanthrene 201-581-5   85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
31	phenol 604-001-00-2   203-632-7   108-95-2				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
32	pyrene 204-927-3   129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
33	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
34	tetrachloroethylene 602-028-00-4   204-825-9   127-18-4				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
35	toluene 601-021-00-3   203-625-9   108-88-3				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
36	trichloroethylene; trichloroethene 602-027-00-9   201-167-4   79-01-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
37	xylene 601-022-00-9   202-422-2 [1]   95-47-6 [1] 203-396-5 [2]   106-42-3 [2] 203-576-3 [3]   108-38-3 [3] 215-535-7 [4]   1330-20-7 [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %			<LOD
38	zinc { zinc oxide } 030-013-00-7   215-222-5   1314-13-2				110 mg/kg	1.245	126.65 mg/kg	0.0127 %	✓		
39	hexachlorobenzene 602-065-00-6   204-273-9   118-74-1				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %			<LOD
40	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4] 604-004-00-9   203-577-9 [1]   108-39-4 [1] 202-423-8 [2]   95-48-7 [2] 203-398-6 [3]   106-44-5 [3] 215-293-2 [4]   1319-77-3 [4]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
41	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
42	vanadium { divanadium pentaoxide; vanadium pentoxide }				120	mg/kg	1.785	198.156	mg/kg	0.0198 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
43	1,1,1-trichloroethane; methyl chloroform				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-013-00-2	200-756-3	71-55-6									
44	1,1,2,2-tetrachloroethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5									
45	1,1,2-trichloroethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-014-00-8	201-166-9	79-00-5									
46	1,1-dichloroethylene; vinylidene chloride				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-025-00-8	200-864-0	75-35-4									
47	1,1-dichloropropene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-031-00-0	209-253-3	563-58-6									
48	1,2,3-trichlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		201-757-1	87-61-6									
49	1,2,4-trimethylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	601-043-00-3	202-436-9	95-63-6									
50	1,2-dibromoethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-010-00-6	203-444-5	106-93-4									
51	1,2-dichlorobenzene; o-dichlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-034-00-7	202-425-9	95-50-1									
52	1,2-dichloropropane; propylene dichloride				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-020-00-0	201-152-2	78-87-5									
53	1,3-dichlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-067-00-7	208-792-1	541-73-1									
54	1,3-dichloropropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		205-531-3	142-28-9									
55	1,4-dichlorobenzene; p-dichlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-035-00-2	203-400-5	106-46-7									
56	2,2-dichloropropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		209-832-0	594-20-7									
57	bromodichloromethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		200-856-7	75-27-4									
58	bromomethane; methylbromide				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-002-00-2	200-813-2	74-83-9									
59	bromobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-060-00-9	203-623-8	108-86-1									
60	n-butylbenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		203-209-7	104-51-8									
61	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]									
62	chlorobenzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-033-00-1	203-628-5	108-90-7									
63	carbon tetrachloride; tetrachloromethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-008-00-5	200-262-8	56-23-5									
64	chloroethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-009-00-0	200-830-5	75-00-3									
65	chloroform; trichloromethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-006-00-4	200-663-8	67-66-3									
66	chloromethane; methyl chloride				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-001-00-7	200-817-4	74-87-3									
67	dibromochloromethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		204-704-0	124-48-1									
68	1,2-dibromo-3-chloropropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-021-00-6	202-479-3	96-12-8									
69	dibromomethane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
	602-003-00-8	200-824-2	74-95-3									


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
70	hexachlorobutadiene	201-765-5	87-68-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
71	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
72	4-isopropyltoluene	202-796-7	99-87-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
73	sec-butylbenzene	205-227-0	135-98-8		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
74	styrene	601-026-00-0	202-851-5	100-42-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
75	trans-1,3-dichloropropene	431-460-4	10061-02-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
76	tert-butylbenzene	202-632-4	98-06-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
77	bromoform; tribromomethane	602-007-00-X	200-854-6	75-25-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
78	1,2,4-trichlorobenzene	602-087-00-6	204-428-0	120-82-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
79	1,1,1,2-tetrachloroethane	211-135-1	630-20-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
80	trichlorofluoromethane	200-892-3	75-69-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
81	mesitylene; 1,3,5-trimethylbenzene	601-025-00-5	203-604-4	108-67-8	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
82	vinyl chloride; chloroethylene	602-023-00-7	200-831-0	75-01-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
83	aniline	612-008-00-7	200-539-3	62-53-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
84	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
85	bis(2-chloroethyl) ether	603-029-00-2	203-870-1	111-44-4	<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
86	hexachloroethane	200-666-4	67-72-1		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
87	nitrobenzene	609-003-00-7	202-716-0	98-95-3	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
88	3,5,5-trimethylcyclohex-2-enone; isophorone	606-012-00-8	201-126-0	78-59-1	<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
89	2-nitrophenol	201-857-5	88-75-5		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
90	3,4-xylene; [1] 2,5-xylene; [2] 2,4-xylene; [3] 2,3-xylene; [4] 2,6-xylene; [5] xylene; [6] 2,4(or 2,5)-xylene [7]	604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
91	bis(2-chloroethoxy)methane	203-920-2	111-91-1		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
92	2,4-dichlorophenol	604-011-00-7	204-429-6	120-83-2	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
93	4-chloroaniline	612-137-00-9	203-401-0	106-47-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
94	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol	604-014-00-3	200-431-6	59-50-7	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
95	2,4,6-trichlorophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
96	2,4,5-trichlorophenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
97	2-methyl naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-078-3	91-57-6							
98	2-chloronaphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-079-9	91-58-7							
99	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							
100	2,6-dinitrotoluene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	609-049-00-8	210-106-0	606-20-2							
101	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]							
102	dibenzofuran				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		205-071-3	132-64-9							
103	4-chlorophenylphenylether				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		230-281-7	7005-72-3							
104	diethyl phthalate				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		201-550-6	84-66-2							
105	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]							
106	azobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	611-001-00-6	203-102-5	103-33-3							
107	4-bromophenylphenylether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		202-952-4	101-55-3							
108	carbazole				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-696-0	86-74-8							
109	dibutyl phthalate; DBP				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
110	anthraquinone				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	606-151-00-4	201-549-0	84-65-1							
111	BBP; benzyl butyl phthalate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
112	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]							
113	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]							
114	cumene; [1] propylbenzene [2]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]							
Total:								0.0638 %		

**Key**

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS10--18082021-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>WS10--18082021-0.20</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>7%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 7% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	31 mg/kg	1.32	38.065 mg/kg	0.00381 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.33 mg/kg		0.307 mg/kg	0.0000307 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.27 mg/kg		0.251 mg/kg	0.0000251 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.44 mg/kg		0.409 mg/kg	0.0000409 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.29 mg/kg		0.27 mg/kg	0.000027 %	✓	
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	<0.06 mg/kg	2.775	<0.167 mg/kg	<0.0000167 %		<LOD
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		1.2 mg/kg	13.43	14.988 mg/kg	0.0015 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		<1 mg/kg	1.462	<1.462 mg/kg	<0.000146 %		<LOD
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	0.39 mg/kg		0.363 mg/kg	0.0000363 %	✓	
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	<1 mg/kg	1.126	<1.126 mg/kg	<0.000113 %		<LOD




#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
18	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
19	fluoranthene				0.47	mg/kg		0.437	mg/kg	0.0000437 %	✓	
		205-912-4	206-44-0									
20	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
21	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5									
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	31	mg/kg		28.83	mg/kg	0.00288 %	✓	
	082-001-00-6											
23	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
24	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
25	nickel { nickel dihydroxide }				19	mg/kg	1.579	27.91	mg/kg	0.00279 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
26	pH				7.9	pH		7.9	pH	7.9 pH		
			PH									
27	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8									
28	pyrene				0.53	mg/kg		0.493	mg/kg	0.0000493 %	✓	
		204-927-3	129-00-0									
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
30	zinc { zinc oxide }				<1	mg/kg	1.245	<1.245	mg/kg	<0.000124 %		<LOD
	030-013-00-7	215-222-5	1314-13-2									
31	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				47	mg/kg	1.785	78.03	mg/kg	0.0078 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
Total:										0.0202 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS10--18082021-0.60

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS10--18082021-0.60</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>8.9%</b> (wet weight correction)	

**Hazard properties**

None identified


**Determinands**

Moisture content: 8.9% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	47 mg/kg	1.32	56.532 mg/kg	0.00565 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	1.4 mg/kg		1.275 mg/kg	0.000128 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	1.2 mg/kg		1.093 mg/kg	0.000109 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	1.4 mg/kg		1.275 mg/kg	0.000128 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		0.77 mg/kg		0.701 mg/kg	0.0000701 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.75 mg/kg		0.683 mg/kg	0.0000683 %	✓	
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5 mg/kg	2.775	3.793 mg/kg	0.000379 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.9 mg/kg	13.43	11.011 mg/kg	0.0011 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		34 mg/kg	1.462	45.27 mg/kg	0.00453 %	✓	
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.2 mg/kg	1.923	<2.308 mg/kg	<0.000231 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	0.94 mg/kg		0.856 mg/kg	0.0000856 %	✓	
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	98 mg/kg	1.126	100.517 mg/kg	0.0101 %	✓	

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
18	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
19	fluoranthene				2	mg/kg		1.822	mg/kg	0.000182 %	✓	
		205-912-4	206-44-0									
20	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
21	indeno[123-cd]pyrene				0.67	mg/kg		0.61	mg/kg	0.000061 %	✓	
		205-893-2	193-39-5									
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	280	mg/kg		255.08	mg/kg	0.0255 %	✓	
	082-001-00-6											
23	mercury { mercury dichloride }				1	mg/kg	1.353	1.233	mg/kg	0.000123 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
24	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
25	nickel { nickel dihydroxide }				30	mg/kg	1.579	43.168	mg/kg	0.00432 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
26	pH				8.1	pH		8.1	pH	8.1 pH		
			PH									
27	phenanthrene				0.66	mg/kg		0.601	mg/kg	0.0000601 %	✓	
		201-581-5	85-01-8									
28	pyrene				2	mg/kg		1.822	mg/kg	0.000182 %	✓	
		204-927-3	129-00-0									
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
	034-002-00-8											
30	zinc { zinc oxide }				550	mg/kg	1.245	623.664	mg/kg	0.0624 %	✓	
	030-013-00-7	215-222-5	1314-13-2									
31	monohydric phenols				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			P1186									
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				58	mg/kg	1.785	94.326	mg/kg	0.00943 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
Total:										0.125 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

## Appendix A: Classifier defined and non CLP determinands

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2 H319, STOT SE 3 H335, Skin Irrit. 2 H315, Aquatic Acute 1 H400, Aquatic Chronic 1 H410, Aquatic Chronic 2 H411

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4 H302, Acute Tox. 1 H330, Acute Tox. 1 H310, Eye Irrit. 2 H319, STOT SE 3 H335, Skin Irrit. 2 H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2 H319, STOT SE 3 H335, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400, Aquatic Chronic 1 H410

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 23 Jul 2015

Hazard Statements: Aquatic Acute 1 H400, Aquatic Chronic 1 H410

- **boron tribromide/trichloride/trifluoride (combined)** (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride

Data source: N/A

Data source date: 06 Aug 2015

Hazard Statements: EUH014, Acute Tox. 2 H330, Acute Tox. 2 H300, Skin Corr. 1A H314, Skin Corr. 1B H314

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database

Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4 H332, Acute Tox. 4 H302, Eye Irrit. 2 H319, STOT SE 3 H335, Skin Irrit. 2 H315, Resp. Sens. 1 H334, Skin Sens. 1 H317, Repr. 1B H360FD, Aquatic Acute 1 H400, Aquatic Chronic 1 H410

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

CLP index number: 006-007-00-5

Description/Comments: Conversion factor based on a worst case compound: sodium cyanide

Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)

Additional Hazard Statement(s): EUH032 >= 0.2 %

Reason for additional Hazards Statement(s):

14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Acute Tox. 4 H302, Aquatic Acute 1 H400, Aquatic Chronic 1 H410

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Aquatic Acute 1 H400, Aquatic Chronic 1 H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Carc. 2 H351

• **lead compounds with the exception of those specified elsewhere in this Annex**

CLP index number: 082-001-00-6

Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following CLP protocols, considers many simple lead compounds to be Carcinogenic category 2

Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)

Additional Hazard Statement(s): Carc. 2 H351

Reason for additional Hazards Statement(s):

03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium [www.reach-lead.eu/substanceinformation.html](http://www.reach-lead.eu/substanceinformation.html). Review date 29/09/2015

• **pH (CAS Number: PH)**

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

• **phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)**

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

• **pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)**

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

• **monohydric phenols (CAS Number: P1186)**

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)

Data source: CLP combined data

Data source date: 26 Mar 2019

Hazard Statements: Acute Tox. 3 H301 , Acute Tox. 3 H311 , Acute Tox. 3 H331 , Skin Corr. 1B H314 , Skin Corr. 1B H314 >= 3 % , Skin Irrit. 2 H315 1 £ conc. < 3 % , Eye Irrit. 2 H319 1 £ conc. < 3 % , Muta. 2 H341 , STOT RE 2 H373 , Aquatic Chronic 2 H411

• **1,1-dichloroethane and 1,2-dichloroethane (combined) (EC Number: 203-458-1, 200-863-5, CAS Number: 107-06-2, 75-34-3)**

Description/Comments: Combines the hazard statements and risk phrases for 1,1-dichloroethane and 1,2-dichloroethane

Data source: N/a

Data source date: 14 Oct 2016

Hazard Statements: Flam. Liq. 2 H225 , Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 1B H350 , Aquatic Chronic 3 H412

• **ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)**

CLP index number: 601-023-00-4

Description/Comments:

Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)

Additional Hazard Statement(s): Carc. 2 H351

Reason for additional Hazards Statement(s):

03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

• **TPH (C6 to C40) petroleum group (CAS Number: TPH)**

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

• **1,2,3-trichlorobenzene (EC Number: 201-757-1, CAS Number: 87-61-6)**

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , STOT SE 3 H336 , Aquatic Acute 1 H400 , Aquatic Chronic 3 H410



• **1,3-dichloropropane** (EC Number: 205-531-3, CAS Number: 142-28-9)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4 H332 , Flam. Liq. 2 H225 , Flam. Liq. 3 H226 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335

• **2,2-dichloropropane** (EC Number: 209-832-0, CAS Number: 594-20-7)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4 H332 , Flam. Liq. 2 H225 , Acute Tox. 4 H302 , Acute Tox. 4 H312 , Eye Irrit. 2 H319

• **bromodichloromethane** (EC Number: 200-856-7, CAS Number: 75-27-4)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Dam. 1 H318 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Muta. 1B H340 , Carc. 1B H350 , Repr. 1A H360

• **n-butylbenzene** (EC Number: 203-209-7, CAS Number: 104-51-8)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Flam. Liq. 3 H226 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

• **dibromochloromethane** (EC Number: 204-704-0, CAS Number: 124-48-1)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 4 H312 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Acute Tox. 4 H332 , STOT SE 3 H335 , STOT SE 3 H336 , Muta. 2 H341 , Aquatic Chronic 2 H411

• **hexachlorobutadiene** (EC Number: 201-765-5, CAS Number: 87-68-3)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 3 H301 , Acute Tox. 2 H310 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Eye Irrit. 2 H319 , Acute Tox. 2 H330 , Carc. 2 H351 , Repr. 2 H361 , STOT SE 2 H371 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

• **4-isopropyltoluene** (EC Number: 202-796-7, CAS Number: 99-87-6)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Chronic 2 H411

• **sec-butylbenzene** (EC Number: 205-227-0, CAS Number: 135-98-8)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Aquatic Chronic 2 H411

• **trans-1,3-dichloropropene** (EC Number: 431-460-4, CAS Number: 10061-02-6)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Flam. Liq. 3 H226 , Acute Tox. 3 H301 , Asp. Tox. 1 H304 , Acute Tox. 3 H311 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Eye Irrit. 2 H319 , Acute Tox. 4 H332 , STOT SE 3 H335 , Aquatic Chronic 1 H410

• **tert-butylbenzene** (EC Number: 202-632-4, CAS Number: 98-06-6)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Flam. Liq. 3 H226 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Acute Tox. 3 H331 , Acute Tox. 4 H332 , STOT SE 3 H335 , Asp. Tox. 1 H304 , Aquatic Chronic 2 H411

• **1,1,1,2-tetrachloroethane** (EC Number: 211-135-1, CAS Number: 630-20-6)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , Acute Tox. 3 H331 , Eye Dam. 1 H318 , Acute Tox. 4 H332 , Carc. 2 H351 , Acute Tox. 4 H312 , Aquatic Chronic 3 H412 , Skin Irrit. 2 H315

• **trichlorofluoromethane** (EC Number: 200-892-3, CAS Number: 75-69-4)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4 H312 , Ozone 1 H420

• **hexachloroethane** (EC Number: 200-666-4, CAS Number: 67-72-1)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , STOT RE 2 H373

• **2-nitrophenol** (EC Number: 201-857-5, CAS Number: 88-75-5)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 4 H312 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Acute Tox. 4 H332 , STOT SE 3 H335 , STOT RE 2 H373 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

• **bis(2-chloroethoxy)methane** (EC Number: 203-920-2, CAS Number: 111-91-1)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 3 H301 , Acute Tox. 4 H312 , Acute Tox. 1 H330 , Acute Tox. 2 H330 , STOT SE 1 H370 , STOT RE 2 H373

• **2-methyl naphthalene** (EC Number: 202-078-3, CAS Number: 91-57-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , STOT SE 3 H336 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

• **2-chloronaphthalene** (EC Number: 202-079-9, CAS Number: 91-58-7)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

• **dimethyl phthalate** (EC Number: 205-011-6, CAS Number: 131-11-3)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , Acute Tox. 3 H331 , STOT SE 3 H335 , STOT SE 3 H336 , Repr. 2 H361 , Aquatic Chronic 3 H412

• **dibenzofuran** (EC Number: 205-071-3, CAS Number: 132-64-9)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 4 H312 , Acute Tox. 4 H332 , Aquatic Chronic 2 H411

• **4-chlorophenylphenylether** (EC Number: 230-281-7, CAS Number: 7005-72-3)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Eye Dam. 1 H318 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

• **diethyl phthalate** (EC Number: 201-550-6, CAS Number: 84-66-2)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Skin Irrit. 2 H315 , Acute Tox. 3 H331 , Acute Tox. 3 H311 , STOT SE 3 H335 , STOT RE 2 H373 , Repr. 2 H361 , Acute Tox. 4 H302 , STOT SE 3 H336 , Skin Sens. 1 H317 , Aquatic Chronic 1 H410

• **4-bromophenylphenylether** (EC Number: 202-952-4, CAS Number: 101-55-3)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Eye Dam. 1 H318 , Eye Irrit. 2 H319 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

• **carbazole** (EC Number: 201-696-0, CAS Number: 86-74-8)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4 H302 , Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Muta. 2 H341 , Carc. 2 H351 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Acute Tox. 3 H331 , Acute Tox. 3 H311 , Acute Tox. 3 H301

## Appendix B: Rationale for selection of metal species

### arsenic {arsenic trioxide}

Worst case species based on hazard statements

### beryllium {beryllium oxide}

Worst case species based on hazard statements

### boron {boron tribromide/trichloride/trifluoride (combined)}

Worst case species based on hazard statements

### cadmium {cadmium sulfide}

Worst case species based on hazard statements

### chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Worst case species based on hazard statements

### chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case species based on hazard statements

### copper {dicopper oxide; copper (I) oxide}

Most likely common species

### cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

### lead {lead compounds with the exception of those specified elsewhere in this Annex}

Worst case species based on hazard statements

### mercury {mercury dichloride}

Worst case species based on hazard statements

### nickel {nickel dihydroxide}

Worst case species based on hazard statements

### selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on hazard statements

### zinc {zinc oxide}

Worst case species based on hazard statements

### vanadium {divanadium pentaoxide; vanadium pentoxide}

Worst case species based on hazard statements.

---

## Appendix C: Version

---

HazWasteOnline Classification Engine: **WM3 1st Edition v1.1, May 2018**

HazWasteOnline Classification Engine Version: 2021.246.4869.9247 (05 Sep 2021)

HazWasteOnline Database: 2021.246.4869.9247 (05 Sep 2021)

This classification utilises the following guidance and legislation:

**WM3 v1.1 - Waste Classification** - 1st Edition v1.1 - May 2018

**CLP Regulation** - Regulation 1272/2008/EC of 16 December 2008

**1st ATP** - Regulation 790/2009/EC of 10 August 2009

**2nd ATP** - Regulation 286/2011/EC of 10 March 2011

**3rd ATP** - Regulation 618/2012/EU of 10 July 2012

**4th ATP** - Regulation 487/2013/EU of 8 May 2013

**Correction to 1st ATP** - Regulation 758/2013/EU of 7 August 2013

**5th ATP** - Regulation 944/2013/EU of 2 October 2013

**6th ATP** - Regulation 605/2014/EU of 5 June 2014

**WFD Annex III replacement** - Regulation 1357/2014/EU of 18 December 2014

**Revised List of Waste 2014** - Decision 2014/955/EU of 18 December 2014

**7th ATP** - Regulation 2015/1221/EU of 24 July 2015

**8th ATP** - Regulation (EU) 2016/918 of 19 May 2016

**9th ATP** - Regulation (EU) 2016/1179 of 19 July 2016

**10th ATP** - Regulation (EU) 2017/776 of 4 May 2017

**HP14 amendment** - Regulation (EU) 2017/997 of 8 June 2017

**13th ATP** - Regulation (EU) 2018/1480 of 4 October 2018

**14th ATP** - Regulation (EU) 2020/217 of 4 October 2019

**15th ATP** - Regulation (EU) 2020/1182 of 19 May 2020

**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)**

**Regulations 2019** - UK: 2019 No. 720 of 27th March 2019

**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)**

**Regulations 2020** - UK: 2020 No. 1567 of 16th December 2020

**The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020** - UK:

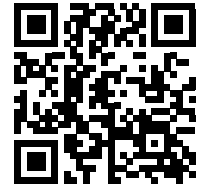
2020 No. 1540 of 16th December 2020

**POPs Regulation 2019** - Regulation (EU) 2019/1021 of 20 June 2019

# Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



84EAY-POW7D-FW234

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

## Job name

22-82372\_HWOL\_Results

## Description/Comments

i2 Lab Reports 22-82372, 22-82408, 22-82414, 22-82420, 22-83964, 22-83965, 22-83966 & 22-85537

## Project

19114

## Site

Begbroke

## Classified by

Name: **Nathan Thompson**  
 Date: **26 Oct 2022 18:55 GMT**  
 Telephone: **07557 345 513**

Company: **Hydrock Consultants Ltd**  
**Hawthorn Park**  
**Holdenby Road, Spratton**  
**Northampton**  
**NN6 8LD**

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

**HazWasteOnline™ Certification:**

**CERTIFIED**

**Course**  
 Hazardous Waste Classification

**Date**  
 22 Apr 2021

Next 3 year Refresher due by Apr 2024

## Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	WS213--28082022-0.10		Non Hazardous		2
2	WS213--22082022-0.50		Non Hazardous		4
3	WS205--22082022-0.20		Non Hazardous		6
4	WS205--22082022-0.60		Non Hazardous		8
5	WS209--22082022-0.30		Non Hazardous		10
6	WS214--22082022-0.10		Non Hazardous		12
7	WS203--23082022-0.10		Non Hazardous		14
8	WS204--23082022-0.20		Non Hazardous		16
9	WS204--23082022-0.60		Non Hazardous		18
10	WS217--23082022-0.10		Non Hazardous		20
11	WS226--23082022-0.20		Non Hazardous		22
12	WS227--25082022-0.30		Non Hazardous		24
13	HP210--25082022-0.20		Non Hazardous		26
14	HP208--25082022-0.30		Non Hazardous		29
15	HP208--25082022-0.80		Non Hazardous		32

## Related documents

#	Name	Description
1	22-82372_HWOL_Results.hwol	i2 Analytical .hwol file used to populate the Job
2	Hydrock Standard plus Cresol (ammended Lead)	waste stream template used to create this Job

## Report

Created by: Nathan Thompson

Created date: 26 Oct 2022 18:55 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	38
Appendix B: Rationale for selection of metal species	42
Appendix C: Version	42



Classification of sample: WS213--28082022-0.10

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS213--28082022-0.10</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>2.1%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 2.1% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	67	mg/kg	1.32	86.604	mg/kg	0.00866 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.6	mg/kg	2.775	4.347	mg/kg	0.000435 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.4	mg/kg	13.43	5.259	mg/kg	0.000526 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	69	mg/kg	1.462	100.847	mg/kg	0.0101 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	15	mg/kg	1.126	16.534	mg/kg	0.00165 %	✔	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	30 mg/kg		29.37 mg/kg	0.00294 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				40 mg/kg	1.579	61.853 mg/kg	0.00619 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.7 pH		7.7 pH	7.7 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				100 mg/kg	1.245	121.857 mg/kg	0.0122 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				250 mg/kg	1.785	436.924 mg/kg	0.0437 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0873 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS213--22082022-0.50

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS213--22082022-0.50</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>4.1%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
























Hazard properties

None identified

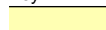





Determinands

Moisture content: 4.1% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	64 mg/kg	1.32	81.036 mg/kg	0.0081 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.6 mg/kg	2.775	4.258 mg/kg	0.000426 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.7 mg/kg	13.43	9.016 mg/kg	0.000902 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	58 mg/kg	1.462	84.77 mg/kg	0.00848 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	14 mg/kg	1.126	15.116 mg/kg	0.00151 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	20 mg/kg		19.18 mg/kg	0.00192 %	✓	
	082-001-00-6									
23	 mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel {  nickel dihydroxide }				38 mg/kg	1.579	57.56 mg/kg	0.00576 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc {  zinc oxide }				100 mg/kg	1.245	119.368 mg/kg	0.0119 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				110 mg/kg	1.785	188.319 mg/kg	0.0188 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0588 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS205--22082022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS205--22082022-0.20</b>	LoW Code: Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>11%</b> (wet weight correction)	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties


















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Determinands

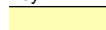





Moisture content: 11% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	35 mg/kg	1.32	41.128 mg/kg	0.00411 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.2 mg/kg		0.178 mg/kg	0.0000178 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.6 mg/kg	2.775	3.952 mg/kg	0.000395 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.9 mg/kg	13.43	10.757 mg/kg	0.00108 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	49 mg/kg	1.462	71.616 mg/kg	0.00716 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	0.18 mg/kg		0.16 mg/kg	0.000016 %	✓	
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	19 mg/kg	1.126	19.039 mg/kg	0.0019 %	✓	



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				0.25 mg/kg		0.223 mg/kg	0.0000222 %	✓	
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	40 mg/kg		35.6 mg/kg	0.00356 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				35 mg/kg	1.579	49.201 mg/kg	0.00492 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				0.28 mg/kg		0.249 mg/kg	0.0000249 %	✓	
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				120 mg/kg	1.245	132.935 mg/kg	0.0133 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				83 mg/kg	1.785	131.872 mg/kg	0.0132 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0506 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS205--22082022-0.60

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS205--22082022-0.60</b>	LoW Code: Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>15%</b> (wet weight correction)	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















**Hazard properties**

None identified

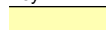





**Determinands**

Moisture content: 15% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	34 mg/kg	1.32	38.157 mg/kg	0.00382 %	✓		
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	2 mg/kg	2.775	4.718 mg/kg	0.000472 %	✓		
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.3 mg/kg	13.43	14.84 mg/kg	0.00148 %	✓		
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD	
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	64 mg/kg	1.462	93.54 mg/kg	0.00935 %			
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD	
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	19 mg/kg	1.126	18.183 mg/kg	0.00182 %	✓		

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	25 mg/kg		21.25 mg/kg	0.00213 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				45 mg/kg	1.579	60.416 mg/kg	0.00604 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				8 pH		8 pH	8pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				120 mg/kg	1.245	126.961 mg/kg	0.0127 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				100 mg/kg	1.785	151.741 mg/kg	0.0152 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0539 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS209--22082022-0.30

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS209--22082022-0.30</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>7.4%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified




**Determinands**

Moisture content: 7.4% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	36 mg/kg	1.32	44.014 mg/kg	0.0044 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1 mg/kg	2.775	2.827 mg/kg	0.000283 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.8 mg/kg	13.43	9.949 mg/kg	0.000995 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	38 mg/kg	1.462	55.539 mg/kg	0.00555 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	17 mg/kg	1.126	17.724 mg/kg	0.00177 %	✔	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	31 mg/kg		28.706 mg/kg	0.00287 %	✓	
	082-001-00-6									
23	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel { nickel dihydroxide }				25 mg/kg	1.579	36.565 mg/kg	0.00366 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.4 pH		7.4 pH	7.4 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc { zinc oxide }				95 mg/kg	1.245	109.497 mg/kg	0.0109 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				68 mg/kg	1.785	112.41 mg/kg	0.0112 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0426 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS214--22082022-0.10

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS214--22082022-0.10</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>2.8%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**
























None identified

**Determinands**

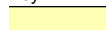





Moisture content: 2.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	63	mg/kg	1.32	80.851	mg/kg	0.00809 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.4	mg/kg	2.775	3.777	mg/kg	0.000378 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.1	mg/kg	13.43	14.359	mg/kg	0.00144 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	50	mg/kg	1.462	73.078	mg/kg	0.00731 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	15	mg/kg	1.126	16.415	mg/kg	0.00164 %	✓	




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	28 mg/kg		27.216 mg/kg	0.00272 %	✓	
	082-001-00-6									
23	 mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel {  nickel dihydroxide }				33 mg/kg	1.579	50.664 mg/kg	0.00507 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				8.1 pH		8.1 pH	8.1 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc {  zinc oxide }				96 mg/kg	1.245	116.147 mg/kg	0.0116 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				91 mg/kg	1.785	157.903 mg/kg	0.0158 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.055 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS203--23082022-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS203--23082022-0.10</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>2.8%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















**Hazard properties**

None identified

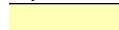





**Determinands**

Moisture content: 2.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	52	mg/kg	1.32	66.735	mg/kg	0.00667 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.4	mg/kg	2.775	3.777	mg/kg	0.000378 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.9	mg/kg	13.43	11.749	mg/kg	0.00117 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	48	mg/kg	1.462	70.155	mg/kg	0.00702 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	14	mg/kg	1.126	15.321	mg/kg	0.00153 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	35 mg/kg		34.02 mg/kg	0.0034 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				31 mg/kg	1.579	47.593 mg/kg	0.00476 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.7 pH		7.7 pH	7.7 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				86 mg/kg	1.245	104.048 mg/kg	0.0104 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				90 mg/kg	1.785	156.168 mg/kg	0.0156 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0519 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS204--23082022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS204--23082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>5.2%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















**Hazard properties**

None identified

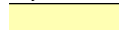





**Determinands**

Moisture content: 5.2% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	67	mg/kg	1.32	83.862	mg/kg	0.00839 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.6	mg/kg	2.775	4.21	mg/kg	0.000421 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	2.4	mg/kg	13.43	30.556	mg/kg	0.00306 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	56	mg/kg	1.462	81.847	mg/kg	0.00818 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	19	mg/kg	1.126	20.28	mg/kg	0.00203 %	✔	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	55 mg/kg		52.14 mg/kg	0.00521 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				39 mg/kg	1.579	58.397 mg/kg	0.00584 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				96 mg/kg	1.245	113.279 mg/kg	0.0113 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				100 mg/kg	1.785	169.236 mg/kg	0.0169 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0623 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS204--23082022-0.60

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS204--23082022-0.60</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>6.5%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 6.5% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	79	mg/kg	1.32	97.526	mg/kg	0.00975 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.6	mg/kg	2.775	4.152	mg/kg	0.000415 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.7	mg/kg	13.43	21.347	mg/kg	0.00213 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	60	mg/kg	1.462	87.693	mg/kg	0.00877 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	16	mg/kg	1.126	16.843	mg/kg	0.00168 %	✓	




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	34 mg/kg		31.79 mg/kg	0.00318 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				44 mg/kg	1.579	64.981 mg/kg	0.0065 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				8.1 pH		8.1 pH	8.1 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				92 mg/kg	1.245	107.07 mg/kg	0.0107 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				110 mg/kg	1.785	183.606 mg/kg	0.0184 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0624 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS217--23082022-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS217--23082022-0.10</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>2.4%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















Hazard properties

None identified

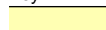





Determinands

Moisture content: 2.4% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	47 mg/kg	1.32	60.566 mg/kg	0.00606 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.3 mg/kg	2.775	3.521 mg/kg	0.000352 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.1 mg/kg	13.43	14.418 mg/kg	0.00144 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	47 mg/kg	1.462	68.693 mg/kg	0.00687 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	15 mg/kg	1.126	16.483 mg/kg	0.00165 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	30 mg/kg		29.28 mg/kg	0.00293 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				32 mg/kg	1.579	49.331 mg/kg	0.00493 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.6 pH		7.6 pH	7.6 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				110 mg/kg	1.245	133.632 mg/kg	0.0134 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				90 mg/kg	1.785	156.811 mg/kg	0.0157 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0542 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS226--23082022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS226--23082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>2.6%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)








**Hazard properties**

None identified







**Determinands**

Moisture content: 2.6% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	57	mg/kg	1.32	73.302	mg/kg	0.00733 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5	mg/kg	2.775	4.055	mg/kg	0.000405 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.2	mg/kg	13.43	2.616	mg/kg	0.000262 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	55	mg/kg	1.462	80.386	mg/kg	0.00804 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	17	mg/kg	1.126	18.642	mg/kg	0.00186 %	✔	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	32 mg/kg		31.168 mg/kg	0.00312 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				36 mg/kg	1.579	55.384 mg/kg	0.00554 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.7 pH		7.7 pH	7.7 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				92 mg/kg	1.245	111.536 mg/kg	0.0112 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				96 mg/kg	1.785	166.922 mg/kg	0.0167 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0553 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS227--25082022-0.30

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS227--25082022-0.30</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>2.8%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**




















None identified

**Determinands**

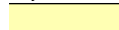





Moisture content: 2.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	43	mg/kg	1.32	55.184	mg/kg	0.00552 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1	mg/kg	2.775	2.967	mg/kg	0.000297 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.7	mg/kg	13.43	9.138	mg/kg	0.000914 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	40	mg/kg	1.462	58.462	mg/kg	0.00585 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	11	mg/kg	1.126	12.038	mg/kg	0.0012 %	✓	




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	31 mg/kg		30.132 mg/kg	0.00301 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				27 mg/kg	1.579	41.452 mg/kg	0.00415 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.3 pH		7.3 pH	7.3 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				76 mg/kg	1.245	91.95 mg/kg	0.00919 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				81 mg/kg	1.785	140.551 mg/kg	0.0141 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0451 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: HP210--25082022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>HP210--25082022-0.20</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
<b>6%</b> (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

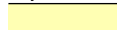





Moisture content: 6% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	35 mg/kg	1.32	43.439 mg/kg	0.00434 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.21 mg/kg		0.197 mg/kg	0.0000197 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.29 mg/kg		0.273 mg/kg	0.0000273 %	✓	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.39 mg/kg		0.367 mg/kg	0.0000367 %	✓	
9	benzo[ghi]perylene		205-883-8	191-24-2	0.29 mg/kg		0.273 mg/kg	0.0000273 %	✓	
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.18 mg/kg		0.169 mg/kg	0.0000169 %	✓	
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.98 mg/kg	2.775	2.557 mg/kg	0.000256 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.8 mg/kg	13.43	10.099 mg/kg	0.00101 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }			215-160-9	36 mg/kg	1.462	52.616 mg/kg	0.00526 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	0.18 mg/kg		0.169 mg/kg	0.0000169 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide }				14 mg/kg	1.126	14.817 mg/kg	0.00148 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
19	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
20	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
21	fluoranthene				0.35 mg/kg		0.329 mg/kg	0.0000329 %	✓	
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				0.24 mg/kg		0.226 mg/kg	0.0000226 %	✓	
		205-893-2	193-39-5							
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	34 mg/kg		31.96 mg/kg	0.0032 %	✓	
	082-001-00-6									
25	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
26	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
27	nickel { nickel dihydroxide }				24 mg/kg	1.579	35.634 mg/kg	0.00356 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
28	pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
29	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
30	pyrene				0.42 mg/kg		0.395 mg/kg	0.0000395 %	✓	
		204-927-3	129-00-0							
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
32	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
34	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
35	zinc { zinc oxide }				100 mg/kg	1.245	117.003 mg/kg	0.0117 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
36	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				61 mg/kg	1.785	102.363 mg/kg	0.0102 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.0432 %		

Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: HP208--25082022-0.30

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>HP208--25082022-0.30</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>14%</b> (wet weight correction)	

**Hazard properties**

None identified

**Determinands**

Moisture content: 14% Wet Weight Moisture Correction applied (MC)







#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	215-481-4	1327-53-3		34 mg/kg	1.32	38.606 mg/kg	0.00386 %	✓	
5	benzene	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	200-280-6	56-55-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	200-028-5	50-32-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	205-911-9	205-99-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	205-916-6	207-08-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
11	beryllium { beryllium oxide }	215-133-1	1304-56-9		0.96 mg/kg	2.775	2.291 mg/kg	0.000229 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		1.1 mg/kg	13.43	12.705 mg/kg	0.00127 %	✓	
13	cadmium { cadmium sulfide }	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		29 mg/kg	1.462	42.385 mg/kg	0.00424 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
16	chrysene	205-923-4	218-01-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide } 029-002-00-X   215-270-7   1317-39-1				14 mg/kg	1.126	13.556 mg/kg	0.00136 %	✓	
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
19	dibenz[a,h]anthracene 601-041-00-2   200-181-8   53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	ethylbenzene 601-023-00-4   202-849-4   100-41-4				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
21	fluoranthene 205-912-4   206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	fluorene 201-695-5   86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	indeno[123-cd]pyrene 205-893-2   193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
24	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	40 mg/kg		34.4 mg/kg	0.00344 %	✓	
25	mercury { mercury dichloride } 080-010-00-X   231-299-8   7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
26	naphthalene 601-052-00-2   202-049-5   91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
27	nickel { nickel dihydroxide } 028-008-00-X   235-008-5 [1]   12054-48-7 [1] 234-348-1 [2]   11113-74-9 [2]				21 mg/kg	1.579	28.526 mg/kg	0.00285 %	✓	
28	pH PH				8.3 pH		8.3 pH	8.3 pH		
29	phenanthrene 201-581-5   85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
30	pyrene 204-927-3   129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
32	toluene 601-021-00-3   203-625-9   108-88-3				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
33	TPH (C6 to C40) petroleum group TPH				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
34	xylene 601-022-00-9   202-422-2 [1]   95-47-6 [1] 203-396-5 [2]   106-42-3 [2] 203-576-3 [3]   108-38-3 [3] 215-535-7 [4]   1330-20-7 [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
35	zinc { zinc oxide } 030-013-00-7   215-222-5   1314-13-2				93 mg/kg	1.245	99.552 mg/kg	0.00996 %	✓	
36	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
37	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8   215-239-8   1314-62-1				56 mg/kg	1.785	85.975 mg/kg	0.0086 %	✓	
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X   216-653-1   1634-04-4				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
Total:								0.0377 %		




Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: HP208--25082022-0.80

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>HP208--25082022-0.80</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
<b>17%</b> (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	27 mg/kg	1.32	29.588 mg/kg	0.00296 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.81 mg/kg	2.775	1.866 mg/kg	0.000187 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.7 mg/kg	13.43	7.803 mg/kg	0.00078 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		20 mg/kg	1.462	29.231 mg/kg	0.00292 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	5.5 mg/kg	1.923	10.577 mg/kg	0.00106 %		
16	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide }				22 mg/kg	1.126	20.559 mg/kg	0.00206 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
19	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
20	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
21	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	65 mg/kg		53.95 mg/kg	0.0054 %	✓	
	082-001-00-6									
25	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
26	naphthalene				<0.0001 mg/kg		<0.0001 mg/kg	<0.00000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
27	nickel { nickel dihydroxide }				24 mg/kg	1.579	31.464 mg/kg	0.00315 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
28	pH				7.8 pH		7.8 pH	7.8 pH		
			PH							
29	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
30	phenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
31	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
32	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
33	tetrachloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-028-00-4	204-825-9	127-18-4							
34	carbon tetrachloride; tetrachloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-008-00-5	200-262-8	56-23-5							
35	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
36	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
37	trichloroethylene; trichloroethene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-027-00-9	201-167-4	79-01-6							
38	vinyl chloride; chloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-023-00-7	200-831-0	75-01-4							
39	xylene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
40	zinc { zinc oxide }				120 mg/kg	1.245	123.974 mg/kg	0.0124 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
41	hexachlorobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	602-065-00-6	204-273-9	118-74-1							

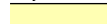





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
42	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]							
43	1,2-dichloroethane; ethylene dichloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-012-00-7	203-458-1	107-06-2							
44	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
45	vanadium { divanadium pentaoxide; vanadium pentoxide }				46 mg/kg	1.785	68.158 mg/kg	0.00682 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
46	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
47	1,1,1-trichloroethane; methyl chloroform				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-013-00-2	200-756-3	71-55-6							
48	1,1,2,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5							
49	1,1,2-trichloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-014-00-8	201-166-9	79-00-5							
50	1,1-dichloroethylene; vinylidene chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-025-00-8	200-864-0	75-35-4							
51	1,1-dichloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-011-00-1	200-863-5	75-34-3							
52	1,1-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-031-00-0	209-253-3	563-58-6							
53	1,2,3-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		201-757-1	87-61-6							
54	1,2,4-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-043-00-3	202-436-9	95-63-6							
55	1,2-dibromoethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-010-00-6	203-444-5	106-93-4							
56	1,2-dichlorobenzene; o-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-034-00-7	202-425-9	95-50-1							
57	1,2-dichloropropane; propylene dichloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-020-00-0	201-152-2	78-87-5							
58	1,3-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-067-00-7	208-792-1	541-73-1							
59	1,3-dichloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		205-531-3	142-28-9							
60	1,4-dichlorobenzene; p-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-035-00-2	203-400-5	106-46-7							
61	2,2-dichloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		209-832-0	594-20-7							
62	bromodichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		200-856-7	75-27-4							
63	bromomethane; methylbromide				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-002-00-2	200-813-2	74-83-9							
64	bromobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-060-00-9	203-623-8	108-86-1							
65	n-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		203-209-7	104-51-8							
66	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]							
67	chlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-033-00-1	203-628-5	108-90-7							
68	chloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-009-00-0	200-830-5	75-00-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
69	chloroform; trichloromethane 602-006-00-4 200-663-8 67-66-3				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
70	chloromethane; methyl chloride 602-001-00-7 200-817-4 74-87-3				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
71	dibromochloromethane 204-704-0 124-48-1				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
72	1,2-dibromo-3-chloropropane 602-021-00-6 202-479-3 96-12-8				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
73	dibromomethane 602-003-00-8 200-824-2 74-95-3				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
74	hexachlorobutadiene 201-765-5 87-68-3				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
75	4-isopropyltoluene 202-796-7 99-87-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
76	sec-butylbenzene 205-227-0 135-98-8				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
77	styrene 601-026-00-0 202-851-5 100-42-5				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
78	trans-1,3-dichloropropene 431-460-4 10061-02-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
79	tert-butylbenzene 202-632-4 98-06-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
80	bromoform; tribromomethane 602-007-00-X 200-854-6 75-25-2				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
81	1,2,4-trichlorobenzene 602-087-00-6 204-428-0 120-82-1				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
82	1,1,1,2-tetrachloroethane 211-135-1 630-20-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
83	trichlorofluoromethane 200-892-3 75-69-4				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
84	mesitylene; 1,3,5-trimethylbenzene 601-025-00-5 203-604-4 108-67-8				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
85	aniline 612-008-00-7 200-539-3 62-53-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
86	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4] 604-008-00-0 202-433-2 [1] 95-57-8 [1] 203-402-6 [2] 106-48-9 [2] 203-582-6 [3] 108-43-0 [3] 246-691-4 [4] 25167-80-0 [4]				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
87	bis(2-chloroethyl) ether 603-029-00-2 203-870-1 111-44-4				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
88	hexachloroethane 200-666-4 67-72-1				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
89	nitrobenzene 609-003-00-7 202-716-0 98-95-3				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
90	3,5,5-trimethylcyclohex-2-enone; isophorone 606-012-00-8 201-126-0 78-59-1				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
91	2-nitrophenol 201-857-5 88-75-5				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
92	3,4-xyleneol; [1] 2,5-xyleneol; [2] 2,4-xyleneol; [3] 2,3-xyleneol; [4] 2,6-xyleneol; [5] xyleneol; [6] 2,4(or 2,5)-xyleneol [7] 604-006-00-X 202-439-5 [1] 95-65-8 [1] 95-87-4 202-461-5 [2] [2] 105-67-9 [3] 203-321-6 [3] 526-75-0 [4] 208-395-3 [4] 576-26-1 [5] 209-400-1 [5] 1300-71-6 [6] 215-089-3 [6] 71975-58-1 [7] 276-245-4 [7]				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
93	bis(2-chloroethoxy)methane 203-920-2 111-91-1				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
94	2,4-dichlorophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-011-00-7	204-429-6	120-83-2							
95	4-chloroaniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-137-00-9	203-401-0	106-47-8							
96	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-014-00-3	200-431-6	59-50-7							
97	2,4,6-trichlorophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
98	2,4,5-trichlorophenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
99	2-methyl naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-078-3	91-57-6							
100	2-chloronaphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-079-9	91-58-7							
101	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							
102	2,6-dinitrotoluene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	609-049-00-8	210-106-0	606-20-2							
103	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]							
104	dibenzofuran				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		205-071-3	132-64-9							
105	4-chlorophenylphenylether				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		230-281-7	7005-72-3							
106	diethyl phthalate				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		201-550-6	84-66-2							
107	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]							
108	azobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	611-001-00-6	203-102-5	103-33-3							
109	4-bromophenylphenylether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		202-952-4	101-55-3							
110	carbazole				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-696-0	86-74-8							
111	dibutyl phthalate; DBP				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
112	anthraquinone				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	606-151-00-4	201-549-0	84-65-1							
113	BBP; benzyl butyl phthalate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
114	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]							
115	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]							
116	cumene; [1] propylbenzene [2]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]							
Total:								0.04 %		



Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1 Only the metal concentration has been used for classification	

**Supplementary Hazardous Property Information**

**HP 2: Oxidizing** "waste which may, generally by providing oxygen, cause or contribute to the combustion of other materials"

**Force this Hazardous property to non hazardous because** There isn't enough Metal and Cr(VI) to make the Metal chromate - but don't have hazardous levels in any case.

Hazard Statements hit:

**Ox. Sol. 1; H271** "May cause fire or explosion; strong oxidiser."

Because of determinand:

chromium(VI) oxide: (compound conc.: 0.00106%)

## Appendix A: Classifier defined and non GB MCL determinands

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 17 Jul 2015  
Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Aquatic Chronic 2; H411

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 17 Jul 2015  
Hazard Statements: Acute Tox. 4; H302, Acute Tox. 1; H330, Acute Tox. 1; H310, Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 17 Jul 2015  
Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 23 Jul 2015  
Hazard Statements: Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **boron tribromide/trichloride/trifluoride (combined)** (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride  
Data source: N/A  
Data source date: 06 Aug 2015  
Hazard Statements: EUH014, Acute Tox. 2; H330, Acute Tox. 2; H300, Skin Corr. 1A; H314, Skin Corr. 1B; H314

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>  
Data source date: 17 Jul 2015  
Hazard Statements: Acute Tox. 4; H332, Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Resp. Sens. 1; H334, Skin Sens. 1; H317, Repr. 1B; H360FD, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

GB MCL index number: 006-007-00-5  
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide  
Additional Hazard Statement(s): EUH032 >= 0.2 %  
Reason for additional Hazard(s) Statement(s):  
20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 21 Aug 2015  
Hazard Statements: Acute Tox. 4; H302, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Carc. 2; H351

• **lead compounds with the exception of those specified elsewhere in this Annex**

GB MCL index number: 082-001-00-6

Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium [www.reach-lead.eu/substanceinformation.html](http://www.reach-lead.eu/substanceinformation.html). Review date 29/09/2015

• **pH (CAS Number: PH)**

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

• **phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)**

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Carc. 2; H351, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Skin Irrit. 2; H315

• **pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)**

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

• **monohydric phenols (CAS Number: P1186)**

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)

Data source: CLP combined data

Data source date: 26 Mar 2019

Hazard Statements: Muta. 2; H341, Acute Tox. 3; H331, Acute Tox. 3; H311, Acute Tox. 3; H301, STOT RE 2; H373, Skin Corr. 1B; H314, Skin Corr. 1B; H314 >= 3%, Skin Irrit. 2; H315 1 £ conc. < 3%, Eye Irrit. 2; H319 1 £ conc. < 3%, Aquatic Chronic 2; H411

• **divanadium pentaoxide; vanadium pentoxide (EC Number: 215-239-8, CAS Number: 1314-62-1)**

EU CLP index number: 023-001-00-8

Description/Comments:

Additional Hazard Statement(s): None.

• **ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)**

GB MCL index number: 601-023-00-4

Description/Comments:

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

• **TPH (C6 to C40) petroleum group (CAS Number: TPH)**

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: Flam. Liq. 3; H226, Asp. Tox. 1; H304, STOT RE 2; H373, Muta. 1B; H340, Carc. 1B; H350, Repr. 2; H361d, Aquatic Chronic 2; H411

• **1,2,3-trichlorobenzene (EC Number: 201-757-1, CAS Number: 87-61-6)**

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302, Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335, STOT SE 3; H336, Aquatic Acute 1; H400, Aquatic Chronic 3; H410

• **1,3-dichloropropane (EC Number: 205-531-3, CAS Number: 142-28-9)**

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H332, Flam. Liq. 2; H225, Flam. Liq. 3; H226, Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335

• **2,2-dichloropropane** (EC Number: 209-832-0, CAS Number: 594-20-7)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H332 , Flam. Liq. 2; H225 , Acute Tox. 4; H302 , Acute Tox. 4; H312 , Eye Irrit. 2; H319

• **bromodichloromethane** (EC Number: 200-856-7, CAS Number: 75-27-4)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 1A; H360

• **n-butylbenzene** (EC Number: 203-209-7, CAS Number: 104-51-8)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **dibromochloromethane** (EC Number: 204-704-0, CAS Number: 124-48-1)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 4; H332 , STOT SE 3; H335 , STOT SE 3; H336 , Muta. 2; H341 , Aquatic Chronic 2; H411

• **hexachlorobutadiene** (EC Number: 201-765-5, CAS Number: 87-68-3)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 3; H301 , Acute Tox. 2; H310 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Irrit. 2; H319 , Acute Tox. 2; H330 , Carc. 2; H351 , Repr. 2; H361 , STOT SE 2; H371 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **4-isopropyltoluene** (EC Number: 202-796-7, CAS Number: 99-87-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Chronic 2; H411

• **sec-butylbenzene** (EC Number: 205-227-0, CAS Number: 135-98-8)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Aquatic Chronic 2; H411

• **trans-1,3-dichloropropene** (EC Number: 431-460-4, CAS Number: 10061-02-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Acute Tox. 3; H301 , Asp. Tox. 1; H304 , Acute Tox. 3; H311 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Irrit. 2; H319 , Acute Tox. 4; H332 , STOT SE 3; H335 , Aquatic Chronic 1; H410

• **tert-butylbenzene** (EC Number: 202-632-4, CAS Number: 98-06-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , Acute Tox. 4; H332 , STOT SE 3; H335 , Asp. Tox. 1; H304 , Aquatic Chronic 2; H411

• **1,1,1,2-tetrachloroethane** (EC Number: 211-135-1, CAS Number: 630-20-6)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , Eye Dam. 1; H318 , Acute Tox. 4; H332 , Carc. 2; H351 , Acute Tox. 4; H312 , Aquatic Chronic 3; H412 , Skin Irrit. 2; H315

• **trichlorofluoromethane** (EC Number: 200-892-3, CAS Number: 75-69-4)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H312 , Ozone 1; H420

• **hexachloroethane** (EC Number: 200-666-4, CAS Number: 67-72-1)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , STOT RE 2; H373

• **2-nitrophenol** (EC Number: 201-857-5, CAS Number: 88-75-5)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 4; H332 , STOT SE 3; H335 , STOT RE 2; H373 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **bis(2-chloroethoxy)methane** (EC Number: 203-920-2, CAS Number: 111-91-1)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 3; H301 , Acute Tox. 4; H312 , Acute Tox. 1; H330 , Acute Tox. 2; H330 , STOT SE 1; H370 , STOT RE 2; H373

• **2-methyl naphthalene** (EC Number: 202-078-3, CAS Number: 91-57-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , STOT SE 3; H336 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **2-chloronaphthalene** (EC Number: 202-079-9, CAS Number: 91-58-7)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

• **dimethyl phthalate** (EC Number: 205-011-6, CAS Number: 131-11-3)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , STOT SE 3; H335 , STOT SE 3; H336 , Repr. 2; H361 , Aquatic Chronic 3; H412

• **dibenzofuran** (EC Number: 205-071-3, CAS Number: 132-64-9)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Acute Tox. 4; H332 , Aquatic Chronic 2; H411

• **4-chlorophenylphenylether** (EC Number: 230-281-7, CAS Number: 7005-72-3)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **diethyl phthalate** (EC Number: 201-550-6, CAS Number: 84-66-2)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Skin Irrit. 2; H315 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , STOT SE 3; H335 , STOT RE 2; H373 , Repr. 2; H361 , Acute Tox. 4; H302 , STOT SE 3; H336 , Skin Sens. 1; H317 , Aquatic Chronic 1; H410

• **4-bromophenylphenylether** (EC Number: 202-952-4, CAS Number: 101-55-3)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **carbazole** (EC Number: 201-696-0, CAS Number: 86-74-8)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Muta. 2; H341 , Carc. 2; H351 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , Acute Tox. 3; H301

## Appendix B: Rationale for selection of metal species

### arsenic {arsenic trioxide}

Worst case species based on hazard statements

### beryllium {beryllium oxide}

Worst case species based on hazard statements

### boron {boron tribromide/trichloride/trifluoride (combined)}

Worst case species based on hazard statements

### cadmium {cadmium sulfide}

Worst case species based on hazard statements

### chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Worst case species based on hazard statements

### chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case species based on hazard statements

### copper {dicopper oxide; copper (I) oxide}

Most likely common species

### cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

### lead {lead compounds with the exception of those specified elsewhere in this Annex}

Worst case species based on hazard statements

### mercury {mercury dichloride}

Worst case species based on hazard statements

### nickel {nickel dihydroxide}

Worst case species based on hazard statements

### selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on hazard statements

### zinc {zinc oxide}

Worst case species based on hazard statements

### vanadium {divanadium pentaoxide; vanadium pentoxide}

Worst case species based on hazard statements.

## Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021

HazWasteOnline Classification Engine Version: 2022.263.5340.9974 (20 Sep 2022)

HazWasteOnline Database: 2022.273.5362.10003 (03 Oct 2022)



This classification utilises the following guidance and legislation:

**WM3 v1.2.GB - Waste Classification** - 1st Edition v1.2.GB - Oct 2021

**CLP Regulation** - Regulation 1272/2008/EC of 16 December 2008

**1st ATP** - Regulation 790/2009/EC of 10 August 2009

**2nd ATP** - Regulation 286/2011/EC of 10 March 2011

**3rd ATP** - Regulation 618/2012/EU of 10 July 2012

**4th ATP** - Regulation 487/2013/EU of 8 May 2013

**Correction to 1st ATP** - Regulation 758/2013/EU of 7 August 2013

**5th ATP** - Regulation 944/2013/EU of 2 October 2013

**6th ATP** - Regulation 605/2014/EU of 5 June 2014

**WFD Annex III replacement** - Regulation 1357/2014/EU of 18 December 2014

**Revised List of Waste 2014** - Decision 2014/955/EU of 18 December 2014

**7th ATP** - Regulation 2015/1221/EU of 24 July 2015

**8th ATP** - Regulation (EU) 2016/918 of 19 May 2016

**9th ATP** - Regulation (EU) 2016/1179 of 19 July 2016

**10th ATP** - Regulation (EU) 2017/776 of 4 May 2017

**HP14 amendment** - Regulation (EU) 2017/997 of 8 June 2017

**13th ATP** - Regulation (EU) 2018/1480 of 4 October 2018

**14th ATP** - Regulation (EU) 2020/217 of 4 October 2019

**15th ATP** - Regulation (EU) 2020/1182 of 19 May 2020

**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)**

**Regulations 2020** - UK: 2020 No. 1567 of 16th December 2020

**The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020** - UK:

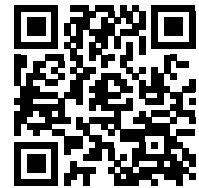
2020 No. 1540 of 16th December 2020

**GB MCL List** - version 1.1 of 09 June 2021

# Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



YXEKE-RL9L7-R8RDU

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

## Job name

22-82408\_HWOL\_Results

## Description/Comments

i2 Lab Reports 22-82372, 22-82408, 22-82414, 22-82420, 22-83964, 22-83965, 22-83966 & 22-85537

## Project

19114

## Site

Begbroke

## Classified by

Name: **Nathan Thompson**  
 Date: **26 Oct 2022 18:57 GMT**  
 Telephone: **07557 345 513**

Company: **Hydrock Consultants Ltd**  
**Hawthorn Park**  
**Holdenby Road, Spratton**  
**Northampton**  
**NN6 8LD**

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

**HazWasteOnline™ Certification:**

**CERTIFIED**

**Course**  
 Hazardous Waste Classification

**Date**  
 22 Apr 2021

Next 3 year Refresher due by Apr 2024

## Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	HP207--25082022-0.70		Non Hazardous		2
2	HP209--25082022-0.30		Non Hazardous		4
3	WS232--26082022-0.20		Non Hazardous		10
4	WS230--26082022-0.20		Non Hazardous		12
5	WS211--26082022-0.10		Non Hazardous		14
6	BH201--30082022-0.20		Non Hazardous		16
7	BH202--31082022-0.10		Non Hazardous		18
8	BH204--31082022-0.20		Non Hazardous		20
9	BH205--01092022-0.10		Non Hazardous		22
10	BH205--01092022-0.40		Non Hazardous		24
11	BH203--01092022-0.10		Non Hazardous		26
12	BH203--01092022-0.50		Non Hazardous		28
13	WS244--01092022-0.20		Non Hazardous		30
14	WS241--01092022-0.20		Non Hazardous		32
15	WS251--01092022-0.20		Non Hazardous		34

## Related documents

#	Name	Description
1	22-82408_HWOL_Results.hwol	i2 Analytical .hwol file used to populate the Job
2	Hydrock Standard plus Cresol (ammended Lead)	waste stream template used to create this Job

## Report

Created by: Nathan Thompson

Created date: 26 Oct 2022 18:57 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	36
Appendix B: Rationale for selection of metal species	40
Appendix C: Version	40

Classification of sample: HP207--25082022-0.70

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>HP207--25082022-0.70</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>9.1%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















**Hazard properties**

None identified

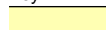





**Determinands**

Moisture content: 9.1% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	73	mg/kg	1.32	87.613	mg/kg	0.00876 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.6	mg/kg	2.775	4.036	mg/kg	0.000404 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.4	mg/kg	13.43	4.883	mg/kg	0.000488 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	58	mg/kg	1.462	84.77	mg/kg	0.00848 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	7.5	mg/kg	1.126	7.676	mg/kg	0.000768 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	17 mg/kg		15.453 mg/kg	0.00155 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				36 mg/kg	1.579	51.688 mg/kg	0.00517 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				8.2 pH		8.2 pH	8.2 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				89 mg/kg	1.245	100.699 mg/kg	0.0101 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				120 mg/kg	1.785	194.728 mg/kg	0.0195 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0561 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: HP209--25082022-0.30

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>HP209--25082022-0.30</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
<b>4.5%</b> (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 4.5% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	49 mg/kg	1.32	61.785 mg/kg	0.00618 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5 mg/kg	2.775	3.976 mg/kg	0.000398 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.9 mg/kg	13.43	11.543 mg/kg	0.00115 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }			215-160-9	1308-38-9	52 mg/kg	1.462	76.001 mg/kg	0.0076 %	
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide }				14 mg/kg	1.126	15.053 mg/kg	0.00151 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
19	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
20	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
21	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	16 mg/kg		15.28 mg/kg	0.00153 %	✓	
	082-001-00-6									
25	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
26	naphthalene				<0.0001 mg/kg		<0.0001 mg/kg	<0.00000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
27	nickel { nickel dihydroxide }				37 mg/kg	1.579	55.812 mg/kg	0.00558 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
28	pH				8.5 pH		8.5 pH	8.5 pH		
			PH							
29	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
30	phenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
31	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
32	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
33	tetrachloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-028-00-4	204-825-9	127-18-4							
34	carbon tetrachloride; tetrachloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-008-00-5	200-262-8	56-23-5							
35	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
36	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
37	trichloroethylene; trichloroethene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-027-00-9	201-167-4	79-01-6							
38	vinyl chloride; chloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-023-00-7	200-831-0	75-01-4							
39	xylene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
40	zinc { zinc oxide }				99 mg/kg	1.245	117.681 mg/kg	0.0118 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
41	hexachlorobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	602-065-00-6	204-273-9	118-74-1							









#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
42	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]							
43	1,2-dichloroethane; ethylene dichloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-012-00-7	203-458-1	107-06-2							
44	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
45	vanadium { divanadium pentaoxide; vanadium pentoxide }				98 mg/kg	1.785	167.075 mg/kg	0.0167 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
46	1,1,1-trichloroethane; methyl chloroform				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-013-00-2	200-756-3	71-55-6							
47	1,1,2,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5							
48	1,1,2-trichloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-014-00-8	201-166-9	79-00-5							
49	1,1-dichloroethylene; vinylidene chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-025-00-8	200-864-0	75-35-4							
50	1,1-dichloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-011-00-1	200-863-5	75-34-3							
51	1,1-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-031-00-0	209-253-3	563-58-6							
52	1,2,3-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		201-757-1	87-61-6							
53	1,2,4-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-043-00-3	202-436-9	95-63-6							
54	1,2-dibromoethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-010-00-6	203-444-5	106-93-4							
55	1,2-dichlorobenzene; o-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-034-00-7	202-425-9	95-50-1							
56	1,2-dichloropropane; propylene dichloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-020-00-0	201-152-2	78-87-5							
57	1,3-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-067-00-7	208-792-1	541-73-1							
58	1,3-dichloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		205-531-3	142-28-9							
59	1,4-dichlorobenzene; p-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-035-00-2	203-400-5	106-46-7							
60	2,2-dichloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		209-832-0	594-20-7							
61	bromodichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		200-856-7	75-27-4							
62	bromomethane; methylbromide				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-002-00-2	200-813-2	74-83-9							
63	bromobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-060-00-9	203-623-8	108-86-1							
64	n-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		203-209-7	104-51-8							
65	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]							
66	chlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-033-00-1	203-628-5	108-90-7							
67	chloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-009-00-0	200-830-5	75-00-3							
68	chloroform; trichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-006-00-4	200-663-8	67-66-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
69	chloromethane; methyl chloride 602-001-00-7 200-817-4 74-87-3				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
70	dibromochloromethane 204-704-0 124-48-1				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
71	1,2-dibromo-3-chloropropane 602-021-00-6 202-479-3 96-12-8				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
72	dibromomethane 602-003-00-8 200-824-2 74-95-3				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
73	hexachlorobutadiene 201-765-5 87-68-3				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
74	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
75	4-isopropyltoluene 202-796-7 99-87-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
76	sec-butylbenzene 205-227-0 135-98-8				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
77	styrene 601-026-00-0 202-851-5 100-42-5				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
78	trans-1,3-dichloropropene 431-460-4 10061-02-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
79	tert-butylbenzene 202-632-4 98-06-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
80	bromoform; tribromomethane 602-007-00-X 200-854-6 75-25-2				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
81	1,2,4-trichlorobenzene 602-087-00-6 204-428-0 120-82-1				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
82	1,1,1,2-tetrachloroethane 211-135-1 630-20-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
83	trichlorofluoromethane 200-892-3 75-69-4				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
84	mesitylene; 1,3,5-trimethylbenzene 601-025-00-5 203-604-4 108-67-8				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
85	aniline 612-008-00-7 200-539-3 62-53-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
86	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4] 604-008-00-0 202-433-2 [1] 95-57-8 [1] 203-402-6 [2] 106-48-9 [2] 203-582-6 [3] 108-43-0 [3] 246-691-4 [4] 25167-80-0 [4]				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
87	bis(2-chloroethyl) ether 603-029-00-2 203-870-1 111-44-4				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
88	hexachloroethane 200-666-4 67-72-1				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
89	nitrobenzene 609-003-00-7 202-716-0 98-95-3				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
90	3,5,5-trimethylcyclohex-2-enone; isophorone 606-012-00-8 201-126-0 78-59-1				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
91	2-nitrophenol 201-857-5 88-75-5				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
92	3,4-xyleneol; [1] 2,5-xyleneol; [2] 2,4-xyleneol; [3] 2,3-xyleneol; [4] 2,6-xyleneol; [5] xyleneol; [6] 2,4(or 2,5)-xyleneol [7] 604-006-00-X 202-439-5 [1] 95-65-8 [1] 202-461-5 [2] 2 105-67-9 [3] 203-321-6 [3] 526-75-0 [4] 208-395-3 [4] 576-26-1 [5] 209-400-1 [5] 1300-71-6 [6] 215-089-3 [6] 71975-58-1 [7] 276-245-4 [7]				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
93	bis(2-chloroethoxy)methane 203-920-2 111-91-1				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
94	2,4-dichlorophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-011-00-7	204-429-6	120-83-2							
95	4-chloroaniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-137-00-9	203-401-0	106-47-8							
96	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-014-00-3	200-431-6	59-50-7							
97	2,4,6-trichlorophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
98	2,4,5-trichlorophenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
99	2-methyl naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-078-3	91-57-6							
100	2-chloronaphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		202-079-9	91-58-7							
101	dimethyl phthalate				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-011-6	131-11-3							
102	2,6-dinitrotoluene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	609-049-00-8	210-106-0	606-20-2							
103	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]							
104	dibenzofuran				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		205-071-3	132-64-9							
105	4-chlorophenylphenylether				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		230-281-7	7005-72-3							
106	diethyl phthalate				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		201-550-6	84-66-2							
107	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]							
108	azobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	611-001-00-6	203-102-5	103-33-3							
109	4-bromophenylphenylether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		202-952-4	101-55-3							
110	carbazole				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-696-0	86-74-8							
111	dibutyl phthalate; DBP				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
112	anthraquinone				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	606-151-00-4	201-549-0	84-65-1							
113	BBP; benzyl butyl phthalate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	607-430-00-3	201-622-7	85-68-7							
114	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]							
115	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]							
116	cumene; [1] propylbenzene [2]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]							
Total:								0.055 %		

Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS232--26082022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS232--26082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>6.8%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















Hazard properties

None identified

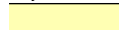





Determinands

Moisture content: 6.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	20 mg/kg	1.32	24.611 mg/kg	0.00246 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.87 mg/kg	2.775	2.25 mg/kg	0.000225 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.9 mg/kg	13.43	11.265 mg/kg	0.00113 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	32 mg/kg	1.462	46.77 mg/kg	0.00468 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	13 mg/kg	1.126	13.641 mg/kg	0.00136 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	25 mg/kg		23.3 mg/kg	0.00233 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				19 mg/kg	1.579	27.97 mg/kg	0.0028 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				8 pH		8 pH	8pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				59 mg/kg	1.245	68.444 mg/kg	0.00684 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				52 mg/kg	1.785	86.517 mg/kg	0.00865 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0314 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: WS230--26082022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS230--26082022-0.20</b>	LoW Code: Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>4.1%</b> (wet weight correction)	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















Hazard properties

None identified

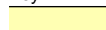





Determinands

Moisture content: 4.1% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	44	mg/kg	1.32	55.712	mg/kg	0.00557 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.3	mg/kg	2.775	3.46	mg/kg	0.000346 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.3	mg/kg	13.43	16.743	mg/kg	0.00167 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	44	mg/kg	1.462	64.308	mg/kg	0.00643 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	14	mg/kg	1.126	15.116	mg/kg	0.00151 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	26 mg/kg		24.934 mg/kg	0.00249 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				30 mg/kg	1.579	45.442 mg/kg	0.00454 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.6 pH		7.6 pH	7.6 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				89 mg/kg	1.245	106.238 mg/kg	0.0106 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				83 mg/kg	1.785	142.095 mg/kg	0.0142 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0483 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS211--26082022-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS211--26082022-0.10</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>3.6%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















Hazard properties

None identified

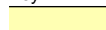





Determinands

Moisture content: 3.6% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	45	mg/kg	1.32	57.276	mg/kg	0.00573 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1	mg/kg	2.775	2.943	mg/kg	0.000294 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.7	mg/kg	13.43	9.063	mg/kg	0.000906 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	39	mg/kg	1.462	57.001	mg/kg	0.0057 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	13	mg/kg	1.126	14.11	mg/kg	0.00141 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	28 mg/kg		26.992 mg/kg	0.0027 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				27 mg/kg	1.579	41.111 mg/kg	0.00411 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				8.1 pH		8.1 pH	8.1 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				95 mg/kg	1.245	113.991 mg/kg	0.0114 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				71 mg/kg	1.785	122.185 mg/kg	0.0122 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0454 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: BH201--30082022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>BH201--30082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>3.5%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















Hazard properties

None identified

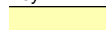





Determinands

Moisture content: 3.5% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	45	mg/kg	1.32	57.335	mg/kg	0.00573 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2	mg/kg	2.775	3.214	mg/kg	0.000321 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.7	mg/kg	13.43	9.072	mg/kg	0.000907 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	43	mg/kg	1.462	62.847	mg/kg	0.00628 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	13	mg/kg	1.126	14.124	mg/kg	0.00141 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	29 mg/kg		27.985 mg/kg	0.0028 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				29 mg/kg	1.579	44.202 mg/kg	0.00442 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				6.6 pH		6.6 pH	6.6 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				76 mg/kg	1.245	91.287 mg/kg	0.00913 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				80 mg/kg	1.785	137.816 mg/kg	0.0138 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0457 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: BH202--31082022-0.10

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>BH202--31082022-0.10</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>4.4%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















Hazard properties

None identified

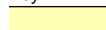





Determinands

Moisture content: 4.4% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	29	mg/kg	1.32	36.605	mg/kg	0.00366 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1	mg/kg	2.775	2.653	mg/kg	0.000265 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.4	mg/kg	13.43	5.136	mg/kg	0.000514 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	34	mg/kg	1.462	49.693	mg/kg	0.00497 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	11	mg/kg	1.126	11.84	mg/kg	0.00118 %	✔	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	20 mg/kg		19.12 mg/kg	0.00191 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				23 mg/kg	1.579	34.73 mg/kg	0.00347 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				8 pH		8 pH	8pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				71 mg/kg	1.245	84.486 mg/kg	0.00845 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				64 mg/kg	1.785	109.225 mg/kg	0.0109 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0363 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH204--31082022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>BH204--31082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>4.8%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















**Hazard properties**

None identified

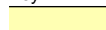





**Determinands**

Moisture content: 4.8% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	24 mg/kg	1.32	30.167 mg/kg	0.00302 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.85 mg/kg	2.775	2.246 mg/kg	0.000225 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.4 mg/kg	13.43	5.114 mg/kg	0.000511 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	31 mg/kg	1.462	45.308 mg/kg	0.00453 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	12 mg/kg	1.126	12.862 mg/kg	0.00129 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	14 mg/kg		13.328 mg/kg	0.00133 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				21 mg/kg	1.579	31.577 mg/kg	0.00316 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				8 pH		8 pH	8pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				66 mg/kg	1.245	78.208 mg/kg	0.00782 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				53 mg/kg	1.785	90.073 mg/kg	0.00901 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0318 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: BH205--01092022-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>BH205--01092022-0.10</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>8.2%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)








Hazard properties

None identified

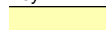





Determinands

Moisture content: 8.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	24	mg/kg	1.32	29.089	mg/kg	0.00291 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2	mg/kg	2.775	3.057	mg/kg	0.000306 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	2	mg/kg	13.43	24.657	mg/kg	0.00247 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	42	mg/kg	1.462	61.385	mg/kg	0.00614 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	15	mg/kg	1.126	15.503	mg/kg	0.00155 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	32 mg/kg		29.376 mg/kg	0.00294 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				29 mg/kg	1.579	42.049 mg/kg	0.0042 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.6 pH		7.6 pH	7.6 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				88 mg/kg	1.245	100.553 mg/kg	0.0101 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				64 mg/kg	1.785	104.883 mg/kg	0.0105 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.042 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: BH205--01092022-0.40

**Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>BH205--01092022-0.40</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>8.8%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















**Hazard properties**

None identified

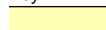





**Determinands**

Moisture content: 8.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	49	mg/kg	1.32	59.003	mg/kg	0.0059 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.4	mg/kg	2.775	3.544	mg/kg	0.000354 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.6	mg/kg	13.43	7.349	mg/kg	0.000735 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	49	mg/kg	1.462	71.616	mg/kg	0.00716 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	15	mg/kg	1.126	15.402	mg/kg	0.00154 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	16 mg/kg		14.592 mg/kg	0.00146 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				42 mg/kg	1.579	60.501 mg/kg	0.00605 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				8.5 pH		8.5 pH	8.5 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				73 mg/kg	1.245	82.868 mg/kg	0.00829 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				85 mg/kg	1.785	138.388 mg/kg	0.0138 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0462 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH203--01092022-0.10

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>BH203--01092022-0.10</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>3.8%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















Hazard properties

None identified

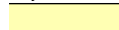





Determinands

Moisture content: 3.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	29 mg/kg	1.32	36.834 mg/kg	0.00368 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.98 mg/kg	2.775	2.616 mg/kg	0.000262 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.9 mg/kg	13.43	11.628 mg/kg	0.00116 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	33 mg/kg	1.462	48.231 mg/kg	0.00482 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	13 mg/kg	1.126	14.08 mg/kg	0.00141 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	27 mg/kg		25.974 mg/kg	0.0026 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				23 mg/kg	1.579	34.948 mg/kg	0.00349 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.1 pH		7.1 pH	7.1 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				73 mg/kg	1.245	87.411 mg/kg	0.00874 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				59 mg/kg	1.785	101.324 mg/kg	0.0101 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0372 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: BH203--01092022-0.50

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>BH203--01092022-0.50</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>4.2%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















Hazard properties

None identified

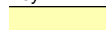





Determinands

Moisture content: 4.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	31	mg/kg	1.32	39.211	mg/kg	0.00392 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1	mg/kg	2.775	2.925	mg/kg	0.000292 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.1	mg/kg	13.43	14.153	mg/kg	0.00142 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	38	mg/kg	1.462	55.539	mg/kg	0.00555 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	10	mg/kg	1.126	10.786	mg/kg	0.00108 %	✔	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	18 mg/kg		17.244 mg/kg	0.00172 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				25 mg/kg	1.579	37.829 mg/kg	0.00378 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.5 pH		7.5 pH	7.5 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				74 mg/kg	1.245	88.24 mg/kg	0.00882 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				71 mg/kg	1.785	121.425 mg/kg	0.0121 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0397 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: WS244--01092022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS244--01092022-0.20</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
<b>4.7%</b> (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)








**Hazard properties**

None identified







**Determinands**

Moisture content: 4.7% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	20	mg/kg	1.32	25.165	mg/kg	0.00252 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.93	mg/kg	2.775	2.46	mg/kg	0.000246 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.4	mg/kg	13.43	5.12	mg/kg	0.000512 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	34	mg/kg	1.462	49.693	mg/kg	0.00497 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	16	mg/kg	1.126	17.168	mg/kg	0.00172 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	23 mg/kg		21.919 mg/kg	0.00219 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				21 mg/kg	1.579	31.611 mg/kg	0.00316 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.6 pH		7.6 pH	7.6 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				64 mg/kg	1.245	75.918 mg/kg	0.00759 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				52 mg/kg	1.785	88.467 mg/kg	0.00885 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0327 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS241--01092022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS241--01092022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>18%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
























Hazard properties

None identified

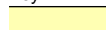





Determinands

Moisture content: 18% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	18	mg/kg	1.32	19.488	mg/kg	0.00195 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1	mg/kg	2.775	2.276	mg/kg	0.000228 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	3.5	mg/kg	13.43	38.544	mg/kg	0.00385 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	36	mg/kg	1.462	52.616	mg/kg	0.00526 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	21	mg/kg	1.126	19.388	mg/kg	0.00194 %	✔	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	33 mg/kg		27.06 mg/kg	0.00271 %	✓	
	082-001-00-6									
23	 mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel {  nickel dihydroxide }				24 mg/kg	1.579	31.085 mg/kg	0.00311 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.8 pH		7.8 pH	7.8 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc {  zinc oxide }				91 mg/kg	1.245	92.881 mg/kg	0.00929 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				55 mg/kg	1.785	80.512 mg/kg	0.00805 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0373 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS251--01092022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS251--01092022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>18%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified




Determinands

Moisture content: 18% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	16 mg/kg	1.32	17.323 mg/kg	0.00173 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.3 mg/kg	2.775	2.959 mg/kg	0.000296 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1 mg/kg	13.43	11.013 mg/kg	0.0011 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	45 mg/kg	1.462	65.77 mg/kg	0.00658 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	11 mg/kg	1.126	10.156 mg/kg	0.00102 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	20 mg/kg		16.4 mg/kg	0.00164 %	✓	
	082-001-00-6									
23	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel { nickel dihydroxide }				25 mg/kg	1.579	32.38 mg/kg	0.00324 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				8.1 pH		8.1 pH	8.1 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc { zinc oxide }				64 mg/kg	1.245	65.323 mg/kg	0.00653 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				64 mg/kg	1.785	93.687 mg/kg	0.00937 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0324 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



## Appendix A: Classifier defined and non GB MCL determinands

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 17 Jul 2015  
Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Aquatic Chronic 2; H411

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 17 Jul 2015  
Hazard Statements: Acute Tox. 4; H302, Acute Tox. 1; H330, Acute Tox. 1; H310, Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 17 Jul 2015  
Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 23 Jul 2015  
Hazard Statements: Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **boron tribromide/trichloride/trifluoride (combined)** (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride  
Data source: N/A  
Data source date: 06 Aug 2015  
Hazard Statements: EUH014, Acute Tox. 2; H330, Acute Tox. 2; H300, Skin Corr. 1A; H314, Skin Corr. 1B; H314

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>  
Data source date: 17 Jul 2015  
Hazard Statements: Acute Tox. 4; H332, Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Resp. Sens. 1; H334, Skin Sens. 1; H317, Repr. 1B; H360FD, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

GB MCL index number: 006-007-00-5  
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide  
Additional Hazard Statement(s): EUH032 >= 0.2 %  
Reason for additional Hazard(s) Statement(s):  
20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 21 Aug 2015  
Hazard Statements: Acute Tox. 4; H302, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Carc. 2; H351

• **lead compounds with the exception of those specified elsewhere in this Annex**

GB MCL index number: 082-001-00-6

Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium [www.reach-lead.eu/substanceinformation.html](http://www.reach-lead.eu/substanceinformation.html). Review date 29/09/2015

• **pH (CAS Number: PH)**

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

• **phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)**

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Carc. 2; H351, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Skin Irrit. 2; H315

• **pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)**

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

• **monohydric phenols (CAS Number: P1186)**

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)

Data source: CLP combined data

Data source date: 26 Mar 2019

Hazard Statements: Muta. 2; H341, Acute Tox. 3; H331, Acute Tox. 3; H311, Acute Tox. 3; H301, STOT RE 2; H373, Skin Corr. 1B; H314, Skin Corr. 1B; H314 >= 3%, Skin Irrit. 2; H315 1 £ conc. < 3%, Eye Irrit. 2; H319 1 £ conc. < 3%, Aquatic Chronic 2; H411

• **divanadium pentaoxide; vanadium pentoxide (EC Number: 215-239-8, CAS Number: 1314-62-1)**

EU CLP index number: 023-001-00-8

Description/Comments:

Additional Hazard Statement(s): None.

• **ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)**

GB MCL index number: 601-023-00-4

Description/Comments:

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

• **TPH (C6 to C40) petroleum group (CAS Number: TPH)**

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: Flam. Liq. 3; H226, Asp. Tox. 1; H304, STOT RE 2; H373, Muta. 1B; H340, Carc. 1B; H350, Repr. 2; H361d, Aquatic Chronic 2; H411

• **1,2,3-trichlorobenzene (EC Number: 201-757-1, CAS Number: 87-61-6)**

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302, Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335, STOT SE 3; H336, Aquatic Acute 1; H400, Aquatic Chronic 3; H410

• **1,3-dichloropropane (EC Number: 205-531-3, CAS Number: 142-28-9)**

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H332, Flam. Liq. 2; H225, Flam. Liq. 3; H226, Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335

• **2,2-dichloropropane** (EC Number: 209-832-0, CAS Number: 594-20-7)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H332 , Flam. Liq. 2; H225 , Acute Tox. 4; H302 , Acute Tox. 4; H312 , Eye Irrit. 2; H319

• **bromodichloromethane** (EC Number: 200-856-7, CAS Number: 75-27-4)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 1A; H360

• **n-butylbenzene** (EC Number: 203-209-7, CAS Number: 104-51-8)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **dibromochloromethane** (EC Number: 204-704-0, CAS Number: 124-48-1)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 4; H332 , STOT SE 3; H335 , STOT SE 3; H336 , Muta. 2; H341 , Aquatic Chronic 2; H411

• **hexachlorobutadiene** (EC Number: 201-765-5, CAS Number: 87-68-3)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 3; H301 , Acute Tox. 2; H310 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Irrit. 2; H319 , Acute Tox. 2; H330 , Carc. 2; H351 , Repr. 2; H361 , STOT SE 2; H371 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **4-isopropyltoluene** (EC Number: 202-796-7, CAS Number: 99-87-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Chronic 2; H411

• **sec-butylbenzene** (EC Number: 205-227-0, CAS Number: 135-98-8)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Aquatic Chronic 2; H411

• **trans-1,3-dichloropropene** (EC Number: 431-460-4, CAS Number: 10061-02-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Acute Tox. 3; H301 , Asp. Tox. 1; H304 , Acute Tox. 3; H311 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Irrit. 2; H319 , Acute Tox. 4; H332 , STOT SE 3; H335 , Aquatic Chronic 1; H410

• **tert-butylbenzene** (EC Number: 202-632-4, CAS Number: 98-06-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , Acute Tox. 4; H332 , STOT SE 3; H335 , Asp. Tox. 1; H304 , Aquatic Chronic 2; H411

• **1,1,1,2-tetrachloroethane** (EC Number: 211-135-1, CAS Number: 630-20-6)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , Eye Dam. 1; H318 , Acute Tox. 4; H332 , Carc. 2; H351 , Acute Tox. 4; H312 , Aquatic Chronic 3; H412 , Skin Irrit. 2; H315

• **trichlorofluoromethane** (EC Number: 200-892-3, CAS Number: 75-69-4)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H312 , Ozone 1; H420

• **hexachloroethane** (EC Number: 200-666-4, CAS Number: 67-72-1)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , STOT RE 2; H373

• **2-nitrophenol** (EC Number: 201-857-5, CAS Number: 88-75-5)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 4; H332 , STOT SE 3; H335 , STOT RE 2; H373 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **bis(2-chloroethoxy)methane** (EC Number: 203-920-2, CAS Number: 111-91-1)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 3; H301 , Acute Tox. 4; H312 , Acute Tox. 1; H330 , Acute Tox. 2; H330 , STOT SE 1; H370 , STOT RE 2; H373

• **2-methyl naphthalene** (EC Number: 202-078-3, CAS Number: 91-57-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , STOT SE 3; H336 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **2-chloronaphthalene** (EC Number: 202-079-9, CAS Number: 91-58-7)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

• **dimethyl phthalate** (EC Number: 205-011-6, CAS Number: 131-11-3)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , STOT SE 3; H335 , STOT SE 3; H336 , Repr. 2; H361 , Aquatic Chronic 3; H412

• **dibenzofuran** (EC Number: 205-071-3, CAS Number: 132-64-9)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Acute Tox. 4; H332 , Aquatic Chronic 2; H411

• **4-chlorophenylphenylether** (EC Number: 230-281-7, CAS Number: 7005-72-3)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **diethyl phthalate** (EC Number: 201-550-6, CAS Number: 84-66-2)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Skin Irrit. 2; H315 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , STOT SE 3; H335 , STOT RE 2; H373 , Repr. 2; H361 , Acute Tox. 4; H302 , STOT SE 3; H336 , Skin Sens. 1; H317 , Aquatic Chronic 1; H410

• **4-bromophenylphenylether** (EC Number: 202-952-4, CAS Number: 101-55-3)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **carbazole** (EC Number: 201-696-0, CAS Number: 86-74-8)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Muta. 2; H341 , Carc. 2; H351 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , Acute Tox. 3; H301

**Appendix B: Rationale for selection of metal species**

**arsenic {arsenic trioxide}**

Worst case species based on hazard statements

**beryllium {beryllium oxide}**

Worst case species based on hazard statements

**boron {boron tribromide/trichloride/trifluoride (combined)}**

Worst case species based on hazard statements

**cadmium {cadmium sulfide}**

Worst case species based on hazard statements

**chromium in chromium(III) compounds {chromium(III) oxide (worst case)}**

Worst case species based on hazard statements

**chromium in chromium(VI) compounds {chromium(VI) oxide}**

Worst case species based on hazard statements

**copper {dicopper oxide; copper (I) oxide}**

Most likely common species

**cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}**

Worst case species

**lead {lead compounds with the exception of those specified elsewhere in this Annex}**

Worst case species based on hazard statements

**mercury {mercury dichloride}**

Worst case species based on hazard statements

**nickel {nickel dihydroxide}**

Worst case species based on hazard statements

**selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}**

Worst case species based on hazard statements

**zinc {zinc oxide}**

Worst case species based on hazard statements

**vanadium {divanadium pentaoxide; vanadium pentoxide}**

Worst case species based on hazard statements.

**Appendix C: Version**

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021

HazWasteOnline Classification Engine Version: 2022.263.5340.9974 (20 Sep 2022)

HazWasteOnline Database: 2022.273.5362.10003 (03 Oct 2022)

This classification utilises the following guidance and legislation:

**WM3 v1.2.GB - Waste Classification** - 1st Edition v1.2.GB - Oct 2021

**CLP Regulation** - Regulation 1272/2008/EC of 16 December 2008

**1st ATP** - Regulation 790/2009/EC of 10 August 2009

**2nd ATP** - Regulation 286/2011/EC of 10 March 2011

**3rd ATP** - Regulation 618/2012/EU of 10 July 2012

**4th ATP** - Regulation 487/2013/EU of 8 May 2013

**Correction to 1st ATP** - Regulation 758/2013/EU of 7 August 2013

**5th ATP** - Regulation 944/2013/EU of 2 October 2013

**6th ATP** - Regulation 605/2014/EU of 5 June 2014

**WFD Annex III replacement** - Regulation 1357/2014/EU of 18 December 2014

**Revised List of Waste 2014** - Decision 2014/955/EU of 18 December 2014

**7th ATP** - Regulation 2015/1221/EU of 24 July 2015

**8th ATP** - Regulation (EU) 2016/918 of 19 May 2016

**9th ATP** - Regulation (EU) 2016/1179 of 19 July 2016

**10th ATP** - Regulation (EU) 2017/776 of 4 May 2017

**HP14 amendment** - Regulation (EU) 2017/997 of 8 June 2017

**13th ATP** - Regulation (EU) 2018/1480 of 4 October 2018

**14th ATP** - Regulation (EU) 2020/217 of 4 October 2019

**15th ATP** - Regulation (EU) 2020/1182 of 19 May 2020

**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)**

**Regulations 2020** - UK: 2020 No. 1567 of 16th December 2020

**The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020** - UK:

2020 No. 1540 of 16th December 2020

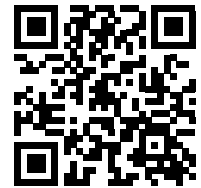
**GB MCL List** - version 1.1 of 09 June 2021



# Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



3BNL1-ENK7P-417CZ

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

## Job name

22-82414\_HWOL\_Results

## Description/Comments

i2 Lab Reports 22-82372, 22-82408, 22-82414, 22-82420, 22-83964, 22-83965, 22-83966 & 22-85537

## Project

19114

## Site

Begbroke

## Classified by

Name: **Nathan Thompson**  
 Date: **26 Oct 2022 18:59 GMT**  
 Telephone: **07557 345 513**

Company: **Hydrock Consultants Ltd**  
**Hawthorn Park**  
**Holdenby Road, Spratton**  
**Northampton**  
**NN6 8LD**

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

## HazWasteOnline™ Certification:

**CERTIFIED**

## Course

Hazardous Waste Classification

## Date

22 Apr 2021

Next 3 year Refresher due by Apr 2024

## Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	WS215--25082022-0.20		Non Hazardous		2
2	WS208--25082022-0.10		Non Hazardous		4
3	WS208--25082022-0.50		Non Hazardous		6
4	WS210--25082022-0.10		Non Hazardous		8
5	WS222--25082022-0.20		Non Hazardous		10
6	WS207--25082022-0.10		Non Hazardous		12
7	WS201--30082022-0.20		Non Hazardous		14
8	WS202--30082022-0.20		Non Hazardous		16
9	WS216--30082022-0.20		Non Hazardous		18
10	WS216--30082022-0.50		Non Hazardous		20
11	WS212--30082022-0.20		Non Hazardous		22
12	WS202--30082022-1.10		Non Hazardous		24
13	WS231--31082022-0.20		Non Hazardous		26
14	WS238--31082022-0.20		Non Hazardous		28
15	WS238--31082022-0.60		Non Hazardous		30

## Related documents

#	Name	Description
1	22-82414_HWOL_Results.hwol	i2 Analytical .hwol file used to populate the Job
2	Hydrock Standard plus Cresol (ammended Lead)	waste stream template used to create this Job

## Report

Created by: Nathan Thompson

Created date: 26 Oct 2022 18:59 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	32
Appendix B: Rationale for selection of metal species	33
Appendix C: Version	34

Classification of sample: WS215--25082022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS215--25082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>22%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 22% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	25	mg/kg	1.32	25.746	mg/kg	0.00257 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5	mg/kg	2.775	3.247	mg/kg	0.000325 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	4.2	mg/kg	13.43	43.997	mg/kg	0.0044 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	47	mg/kg	1.462	68.693	mg/kg	0.00687 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	19	mg/kg	1.126	16.686	mg/kg	0.00167 %	✔	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	32 mg/kg		24.96 mg/kg	0.0025 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				30 mg/kg	1.579	36.96 mg/kg	0.0037 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.6 pH		7.6 pH	7.6 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				85 mg/kg	1.245	82.525 mg/kg	0.00825 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				72 mg/kg	1.785	100.256 mg/kg	0.01 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0412 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS208--25082022-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS208--25082022-0.10</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>12%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















Hazard properties

None identified

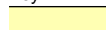





Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	36	mg/kg	1.32	41.828	mg/kg	0.00418 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.8	mg/kg	2.775	4.396	mg/kg	0.00044 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1	mg/kg	13.43	11.818	mg/kg	0.00118 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %	<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	54	mg/kg	1.462	78.924	mg/kg	0.00789 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	23	mg/kg	1.126	22.788	mg/kg	0.00228 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	36 mg/kg		31.68 mg/kg	0.00317 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				37 mg/kg	1.579	51.429 mg/kg	0.00514 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.3 pH		7.3 pH	7.3 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				93 mg/kg	1.245	101.867 mg/kg	0.0102 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				86 mg/kg	1.785	135.103 mg/kg	0.0135 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0489 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS208--25082022-0.50

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS208--25082022-0.50</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
<b>23%</b> (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**
























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**Determinands**

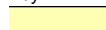





Moisture content: 23% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	27 mg/kg	1.32	27.45 mg/kg	0.00274 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	2.1 mg/kg	2.775	4.488 mg/kg	0.000449 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.3 mg/kg	13.43	3.102 mg/kg	0.00031 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	55 mg/kg	1.462	80.386 mg/kg	0.00804 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	25 mg/kg	1.126	21.673 mg/kg	0.00217 %	✓	



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	21 mg/kg		16.17 mg/kg	0.00162 %	✓	
	082-001-00-6									
23	 mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel {  nickel dihydroxide }				52 mg/kg	1.579	63.243 mg/kg	0.00632 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				8.2 pH		8.2 pH	8.2 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc {  zinc oxide }				65 mg/kg	1.245	62.298 mg/kg	0.00623 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				57 mg/kg	1.785	78.352 mg/kg	0.00784 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0366 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS210--25082022-0.10

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS210--25082022-0.10</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>9.3%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




**Hazard properties**

None identified

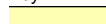





**Determinands**

Moisture content: 9.3% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	26	mg/kg	1.32	31.136	mg/kg	0.00311 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.7	mg/kg	2.775	4.279	mg/kg	0.000428 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	2.9	mg/kg	13.43	35.325	mg/kg	0.00353 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	55	mg/kg	1.462	80.386	mg/kg	0.00804 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	18	mg/kg	1.126	18.381	mg/kg	0.00184 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	31 mg/kg		28.117 mg/kg	0.00281 %	✓	
	082-001-00-6									
23	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel { nickel dihydroxide }				33 mg/kg	1.579	47.276 mg/kg	0.00473 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.3 pH		7.3 pH	7.3 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc { zinc oxide }				94 mg/kg	1.245	106.122 mg/kg	0.0106 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				81 mg/kg	1.785	131.152 mg/kg	0.0131 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0491 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS222--25082022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS222--25082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>3.2%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















Hazard properties

None identified

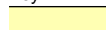





Determinands

Moisture content: 3.2% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	41 mg/kg	1.32	52.401 mg/kg	0.00524 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1 mg/kg	2.775	2.955 mg/kg	0.000296 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.3 mg/kg	13.43	3.9 mg/kg	0.00039 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	39 mg/kg	1.462	57.001 mg/kg	0.0057 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	14 mg/kg	1.126	15.258 mg/kg	0.00153 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	27 mg/kg		26.136 mg/kg	0.00261 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				27 mg/kg	1.579	41.282 mg/kg	0.00413 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				77 mg/kg	1.245	92.776 mg/kg	0.00928 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				73 mg/kg	1.785	126.148 mg/kg	0.0126 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0427 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS207--25082022-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS207--25082022-0.10</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>17%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties








None identified

Determinands

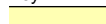





Moisture content: 17% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	29	mg/kg	1.32	31.78	mg/kg	0.00318 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5	mg/kg	2.775	3.455	mg/kg	0.000346 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.9	mg/kg	13.43	10.032	mg/kg	0.001 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	47	mg/kg	1.462	68.693	mg/kg	0.00687 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	17	mg/kg	1.126	15.886	mg/kg	0.00159 %	✓	



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	28 mg/kg		23.24 mg/kg	0.00232 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				31 mg/kg	1.579	40.641 mg/kg	0.00406 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.6 pH		7.6 pH	7.6 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				82 mg/kg	1.245	84.715 mg/kg	0.00847 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				78 mg/kg	1.785	115.573 mg/kg	0.0116 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0403 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS201--30082022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS201--30082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>13%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
























Hazard properties

None identified

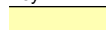





Determinands

Moisture content: 13% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	19	mg/kg	1.32	21.825	mg/kg	0.00218 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.6	mg/kg	2.775	3.863	mg/kg	0.000386 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.3	mg/kg	13.43	15.189	mg/kg	0.00152 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	43	mg/kg	1.462	62.847	mg/kg	0.00628 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	21	mg/kg	1.126	20.57	mg/kg	0.00206 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	20 mg/kg		17.4 mg/kg	0.00174 %	✓	
	082-001-00-6									
23	 mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel {  nickel dihydroxide }				32 mg/kg	1.579	43.973 mg/kg	0.0044 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				8.4 pH		8.4 pH	8.4 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc {  zinc oxide }				88 mg/kg	1.245	95.295 mg/kg	0.00953 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				65 mg/kg	1.785	100.952 mg/kg	0.0101 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0391 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS202--30082022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS202--30082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>7.4%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.4% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	28	mg/kg	1.32	34.233	mg/kg	0.00342 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.3	mg/kg	2.775	3.341	mg/kg	0.000334 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.6	mg/kg	13.43	19.898	mg/kg	0.00199 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	46	mg/kg	1.462	67.232	mg/kg	0.00672 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	15	mg/kg	1.126	15.639	mg/kg	0.00156 %	✔	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	21 mg/kg		19.446 mg/kg	0.00194 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				29 mg/kg	1.579	42.416 mg/kg	0.00424 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				81 mg/kg	1.245	93.361 mg/kg	0.00934 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				73 mg/kg	1.785	120.675 mg/kg	0.0121 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0425 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS216--30082022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS216--30082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>3.9%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**




















None identified

**Determinands**

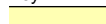





Moisture content: 3.9% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	65 mg/kg	1.32	82.474 mg/kg	0.00825 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.9 mg/kg	2.775	5.068 mg/kg	0.000507 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.9 mg/kg	13.43	11.616 mg/kg	0.00116 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	65 mg/kg	1.462	95.001 mg/kg	0.0095 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	18 mg/kg	1.126	19.476 mg/kg	0.00195 %	✓	



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	26 mg/kg		24.986 mg/kg	0.0025 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				49 mg/kg	1.579	74.377 mg/kg	0.00744 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				110 mg/kg	1.245	131.579 mg/kg	0.0132 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				120 mg/kg	1.785	205.868 mg/kg	0.0206 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.066 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS216--30082022-0.50

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS216--30082022-0.50</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>8.2%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)








Hazard properties

None identified

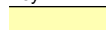





Determinands

Moisture content: 8.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	93	mg/kg	1.32	112.721	mg/kg	0.0113 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	2.5	mg/kg	2.775	6.369	mg/kg	0.000637 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.4	mg/kg	13.43	4.931	mg/kg	0.000493 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	100	mg/kg	1.462	146.156	mg/kg	0.0146 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	20	mg/kg	1.126	20.671	mg/kg	0.00207 %	✔	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	22 mg/kg		20.196 mg/kg	0.00202 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				57 mg/kg	1.579	82.649 mg/kg	0.00826 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				8.2 pH		8.2 pH	8.2 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				130 mg/kg	1.245	148.544 mg/kg	0.0149 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				190 mg/kg	1.785	311.372 mg/kg	0.0311 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0863 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS212--30082022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS212--30082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>4.1%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















Hazard properties

None identified

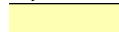





Determinands

Moisture content: 4.1% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	62	mg/kg	1.32	78.504	mg/kg	0.00785 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5	mg/kg	2.775	3.992	mg/kg	0.000399 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	2.2	mg/kg	13.43	28.335	mg/kg	0.00283 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	54	mg/kg	1.462	78.924	mg/kg	0.00789 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	17	mg/kg	1.126	18.355	mg/kg	0.00184 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	26 mg/kg		24.934 mg/kg	0.00249 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				37 mg/kg	1.579	56.045 mg/kg	0.0056 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.6 pH		7.6 pH	7.6 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				94 mg/kg	1.245	112.206 mg/kg	0.0112 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				96 mg/kg	1.785	164.351 mg/kg	0.0164 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0575 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS202--30082022-1.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS202--30082022-1.10</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>11%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties




















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Determinands

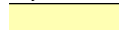





Moisture content: 11% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	48	mg/kg	1.32	56.404	mg/kg	0.00564 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5	mg/kg	2.775	3.705	mg/kg	0.000371 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.7	mg/kg	13.43	8.367	mg/kg	0.000837 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	48	mg/kg	1.462	70.155	mg/kg	0.00702 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	18	mg/kg	1.126	18.037	mg/kg	0.0018 %	✓	




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	21 mg/kg		18.69 mg/kg	0.00187 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				49 mg/kg	1.579	68.882 mg/kg	0.00689 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				8.2 pH		8.2 pH	8.2 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				87 mg/kg	1.245	96.378 mg/kg	0.00964 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				92 mg/kg	1.785	146.171 mg/kg	0.0146 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0496 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS231--31082022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>WS231--31082022-0.20</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
<b>2.3%</b> (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















Hazard properties

None identified

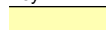





Determinands

Moisture content: 2.3% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	30 mg/kg	1.32	38.699 mg/kg	0.00387 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.88 mg/kg	2.775	2.386 mg/kg	0.000239 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.7 mg/kg	13.43	9.185 mg/kg	0.000918 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	29 mg/kg	1.462	42.385 mg/kg	0.00424 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	14 mg/kg	1.126	15.4 mg/kg	0.00154 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	21 mg/kg		20.517 mg/kg	0.00205 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				27 mg/kg	1.579	41.666 mg/kg	0.00417 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				65 mg/kg	1.245	79.046 mg/kg	0.0079 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				51 mg/kg	1.785	88.95 mg/kg	0.0089 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0347 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS238--31082022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>WS238--31082022-0.20</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
<b>5.2%</b> (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified




Determinands

Moisture content: 5.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	48 mg/kg	1.32	60.08 mg/kg	0.00601 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.3 mg/kg	2.775	3.42 mg/kg	0.000342 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	2 mg/kg	13.43	25.463 mg/kg	0.00255 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	47 mg/kg	1.462	68.693 mg/kg	0.00687 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	16 mg/kg	1.126	17.077 mg/kg	0.00171 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	22 mg/kg		20.856 mg/kg	0.00209 %	✓	
	082-001-00-6									
23	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel { nickel dihydroxide }				34 mg/kg	1.579	50.91 mg/kg	0.00509 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.8 pH		7.8 pH	7.8 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc { zinc oxide }				94 mg/kg	1.245	110.919 mg/kg	0.0111 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				94 mg/kg	1.785	159.081 mg/kg	0.0159 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0526 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS238--31082022-0.60

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS238--31082022-0.60</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>6.2%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

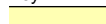


Moisture content: 6.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	44	mg/kg	1.32	54.492	mg/kg	0.00545 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1	mg/kg	2.775	2.864	mg/kg	0.000286 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.7	mg/kg	13.43	8.818	mg/kg	0.000882 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	40	mg/kg	1.462	58.462	mg/kg	0.00585 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	15	mg/kg	1.126	15.841	mg/kg	0.00158 %	✓	



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	19 mg/kg		17.822 mg/kg	0.00178 %	✓	
	082-001-00-6									
23	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel { nickel dihydroxide }				28 mg/kg	1.579	41.484 mg/kg	0.00415 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				8 pH		8 pH	8pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc { zinc oxide }				83 mg/kg	1.245	96.906 mg/kg	0.00969 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				79 mg/kg	1.785	132.286 mg/kg	0.0132 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0438 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

## Appendix A: Classifier defined and non GB MCL determinands

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 17 Jul 2015  
Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Aquatic Chronic 2; H411

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 17 Jul 2015  
Hazard Statements: Acute Tox. 4; H302, Acute Tox. 1; H330, Acute Tox. 1; H310, Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 17 Jul 2015  
Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 23 Jul 2015  
Hazard Statements: Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **boron tribromide/trichloride/trifluoride (combined)** (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride  
Data source: N/A  
Data source date: 06 Aug 2015  
Hazard Statements: EUH014, Acute Tox. 2; H330, Acute Tox. 2; H300, Skin Corr. 1A; H314, Skin Corr. 1B; H314

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>  
Data source date: 17 Jul 2015  
Hazard Statements: Acute Tox. 4; H332, Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Resp. Sens. 1; H334, Skin Sens. 1; H317, Repr. 1B; H360FD, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

GB MCL index number: 006-007-00-5  
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide  
Additional Hazard Statement(s): EUH032 >= 0.2 %  
Reason for additional Hazard(s) Statement(s):  
20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 21 Aug 2015  
Hazard Statements: Acute Tox. 4; H302, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Carc. 2; H351

• **lead compounds with the exception of those specified elsewhere in this Annex**

GB MCL index number: 082-001-00-6  
Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2  
Additional Hazard Statement(s): Carc. 2; H351  
Reason for additional Hazards Statement(s):  
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium  
www.reach-lead.eu/substanceinformation.html. Review date 29/09/2015

• **pH (CAS Number: PH)**

Description/Comments: Appendix C4  
Data source: WM3 1st Edition 2015  
Data source date: 25 May 2015  
Hazard Statements: None.

• **phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)**

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Carc. 2; H351, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Skin Irrit. 2; H315

• **pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)**

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 21 Aug 2015  
Hazard Statements: Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

• **monohydric phenols (CAS Number: P1186)**

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)  
Data source: CLP combined data  
Data source date: 26 Mar 2019  
Hazard Statements: Muta. 2; H341, Acute Tox. 3; H331, Acute Tox. 3; H311, Acute Tox. 3; H301, STOT RE 2; H373, Skin Corr. 1B; H314, Skin Corr. 1B; H314 >= 3 %, Skin Irrit. 2; H315 1 £ conc. < 3 %, Eye Irrit. 2; H319 1 £ conc. < 3 %, Aquatic Chronic 2; H411

**divanadium pentaoxide; vanadium pentoxide (EC Number: 215-239-8, CAS Number: 1314-62-1)**

EU CLP index number: 023-001-00-8  
Description/Comments:  
Additional Hazard Statement(s): None.

**Appendix B: Rationale for selection of metal species**

**arsenic {arsenic trioxide}**

Worst case species based on hazard statements

**beryllium {beryllium oxide}**

Worst case species based on hazard statements

**boron {boron tribromide/trichloride/trifluoride (combined)}**

Worst case species based on hazard statements

**cadmium {cadmium sulfide}**

Worst case species based on hazard statements

**chromium in chromium(III) compounds {chromium(III) oxide (worst case)}**

Worst case species based on hazard statements

**chromium in chromium(VI) compounds {chromium(VI) oxide}**

Worst case species based on hazard statements

**copper {dicopper oxide; copper (I) oxide}**

Most likely common species

**cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}**

Worst case species

---

**lead {lead compounds with the exception of those specified elsewhere in this Annex}**

Worst case species based on hazard statements

**mercury {mercury dichloride}**

Worst case species based on hazard statements

**nickel {nickel dihydroxide}**

Worst case species based on hazard statements

**selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}**

Worst case species based on hazard statements

**zinc {zinc oxide}**

Worst case species based on hazard statements

**vanadium {divanadium pentaoxide; vanadium pentoxide}**

Worst case species based on hazard statements.

---

**Appendix C: Version**

HazWasteOnline Classification Engine: **WM3 1st Edition v1.2.GB - Oct 2021**

HazWasteOnline Classification Engine Version: 2022.263.5340.9974 (20 Sep 2022)

HazWasteOnline Database: 2022.273.5362.10003 (03 Oct 2022)

This classification utilises the following guidance and legislation:

**WM3 v1.2.GB - Waste Classification** - 1st Edition v1.2.GB - Oct 2021

**CLP Regulation** - Regulation 1272/2008/EC of 16 December 2008

**1st ATP** - Regulation 790/2009/EC of 10 August 2009

**2nd ATP** - Regulation 286/2011/EC of 10 March 2011

**3rd ATP** - Regulation 618/2012/EU of 10 July 2012

**4th ATP** - Regulation 487/2013/EU of 8 May 2013

**Correction to 1st ATP** - Regulation 758/2013/EU of 7 August 2013

**5th ATP** - Regulation 944/2013/EU of 2 October 2013

**6th ATP** - Regulation 605/2014/EU of 5 June 2014

**WFD Annex III replacement** - Regulation 1357/2014/EU of 18 December 2014

**Revised List of Waste 2014** - Decision 2014/955/EU of 18 December 2014

**7th ATP** - Regulation 2015/1221/EU of 24 July 2015

**8th ATP** - Regulation (EU) 2016/918 of 19 May 2016

**9th ATP** - Regulation (EU) 2016/1179 of 19 July 2016

**10th ATP** - Regulation (EU) 2017/776 of 4 May 2017

**HP14 amendment** - Regulation (EU) 2017/997 of 8 June 2017

**13th ATP** - Regulation (EU) 2018/1480 of 4 October 2018

**14th ATP** - Regulation (EU) 2020/217 of 4 October 2019

**15th ATP** - Regulation (EU) 2020/1182 of 19 May 2020

**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)**

**Regulations 2020** - UK: 2020 No. 1567 of 16th December 2020

**The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020** - UK:

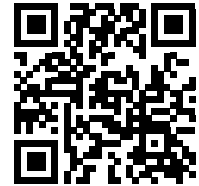
2020 No. 1540 of 16th December 2020

**GB MCL List** - version 1.1 of 09 June 2021

# Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



CLY2W-BOPRB-0VQWQ

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

## Job name

22-82420\_HWOL\_Results

## Description/Comments

i2 Lab Reports 22-82372, 22-82408, 22-82414, 22-82420, 22-83964, 22-83965, 22-83966 & 22-85537

## Project

19114

## Site

Begbroke

## Classified by

Name: **Nathan Thompson**  
 Date: **26 Oct 2022 19:01 GMT**  
 Telephone: **07557 345 513**

Company: **Hydrock Consultants Ltd**  
**Hawthorn Park**  
**Holdenby Road, Spratton**  
**Northampton**  
**NN6 8LD**

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

## HazWasteOnline™ Certification:

**CERTIFIED**

## Course

Hazardous Waste Classification

## Date

22 Apr 2021

Next 3 year Refresher due by Apr 2024

## Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	WS250--01092022-0.20		Non Hazardous		2
2	WS227--23082022-0.70		Non Hazardous		5
3	WS243--02092022-0.40		Non Hazardous		7
4	WS245--02092022-0.50		Non Hazardous		10
5	WS246--02092022-0.20		Non Hazardous		12
6	WS237--02092022-0.20		Non Hazardous		14
7	WS229--02092022-0.10		Non Hazardous		16
8	WS243--02092022-0.20		Non Hazardous		18
9	WS245--02092022-0.20		Non Hazardous		20
10	WS206--24082022-0.20		Non Hazardous		22
11	WS218--24082022-0.10		Non Hazardous		24
12	WS218--24082022-0.60		Non Hazardous		26
13	WS223--24082022-0.10		Non Hazardous		28
14	WS219--24082022-0.20		Non Hazardous		31
15	WS220--24082022-0.10		Non Hazardous		33

## Related documents

#	Name	Description
1	22-82420_HWOL_Results.hwol	i2 Analytical .hwol file used to populate the Job
2	Hydrock Standard plus Cresol (ammended Lead)	waste stream template used to create this Job

## Report

Created by: Nathan Thompson

Created date: 26 Oct 2022 19:01 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	35
Appendix B: Rationale for selection of metal species	36
Appendix C: Version	37

Classification of sample: WS250--01092022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>WS250--01092022-0.20</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>6.2%</b> (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 6.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	17	mg/kg	1.32	21.054	mg/kg	0.00211 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.99	mg/kg	2.775	2.577	mg/kg	0.000258 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.7	mg/kg	13.43	21.415	mg/kg	0.00214 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	38	mg/kg	1.462	55.539	mg/kg	0.00555 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	1.9	mg/kg	1.923	3.654	mg/kg	0.000365 %		
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	11	mg/kg	1.126	11.617	mg/kg	0.00116 %	✔	



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	22 mg/kg		20.636 mg/kg	0.00206 %	✓	
	082-001-00-6									
23	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel { nickel dihydroxide }				21 mg/kg	1.579	31.113 mg/kg	0.00311 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.7 pH		7.7 pH	7.7 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc { zinc oxide }				66 mg/kg	1.245	77.058 mg/kg	0.00771 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium { divanadium pentaoxide; vanadium pentoxide }				57 mg/kg	1.785	95.447 mg/kg	0.00954 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0346 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- 🧪 Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- 📄 Newer version of determinand available
- 🇪🇺 This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

**HP 2: Oxidizing** "waste which may, generally by providing oxygen, cause or contribute to the combustion of other materials"

**Force this Hazardous property to non hazardous because** There isn't enough Metal and Cr(VI) to make the Metal chromate - but you don't have hazardous levels in any case.

---


Hazard Statements hit:

**Ox. Sol. 1; H271** "May cause fire or explosion; strong oxidiser."

Because of determinand:

chromium(VI) oxide: (compound conc.: 0.00036%)

Classification of sample: WS227--23082022-0.70

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>WS227--23082022-0.70</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>3.4%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 3.4% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	37 mg/kg	1.32	47.191 mg/kg	0.00472 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1 mg/kg	2.775	2.949 mg/kg	0.000295 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.3 mg/kg	13.43	3.892 mg/kg	0.000389 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	39 mg/kg	1.462	57.001 mg/kg	0.0057 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	11 mg/kg	1.126	11.964 mg/kg	0.0012 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	18 mg/kg		17.388 mg/kg	0.00174 %		✓	
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				26 mg/kg	1.579	39.671 mg/kg	0.00397 %		✓	
26	pH PH				7.8 pH		7.8 pH	7.8 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				68 mg/kg	1.245	81.763 mg/kg	0.00818 %		✓	
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				72 mg/kg	1.785	124.163 mg/kg	0.0124 %		✓	
Total:									0.0395 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS243--02092022-0.40

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS243--02092022-0.40</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>6.2%</b>	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 6.2% Wet Weight Moisture Correction applied (MC)







#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	215-481-4	1327-53-3		58 mg/kg	1.32	71.831 mg/kg	0.00718 %	✓	
5	benzene	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	200-280-6	56-55-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	200-028-5	50-32-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	205-911-9	205-99-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	205-916-6	207-08-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
11	beryllium { beryllium oxide }	215-133-1	1304-56-9		1.6 mg/kg	2.775	4.165 mg/kg	0.000417 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		2 mg/kg	13.43	25.195 mg/kg	0.00252 %	✓	
13	cadmium { cadmium sulfide }	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		63 mg/kg	1.462	92.078 mg/kg	0.00921 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
16	chrysene	205-923-4	218-01-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide }				17 mg/kg	1.126	17.953 mg/kg	0.0018 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
19	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
20	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
21	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	18 mg/kg		16.884 mg/kg	0.00169 %	✓	
	082-001-00-6									
25	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
26	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
27	nickel { nickel dihydroxide }				39 mg/kg	1.579	57.781 mg/kg	0.00578 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
28	pH		PH		7.9 pH		7.9 pH	7.9 pH		
29	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
30	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
32	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
33	TPH (C6 to C40) petroleum group		TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
34	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
35	zinc { zinc oxide }				98 mg/kg	1.245	114.419 mg/kg	0.0114 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
36	monohydric phenols		P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				110 mg/kg	1.785	184.195 mg/kg	0.0184 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.0604 %		




Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS245--02092022-0.50

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS245--02092022-0.50</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>9.9%</b> (wet weight correction)	
























**Hazard properties**

None identified

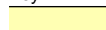





**Determinands**

Moisture content: 9.9% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	31	mg/kg	1.32	36.878	mg/kg	0.00369 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2	mg/kg	2.775	3.001	mg/kg	0.0003 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.3	mg/kg	13.43	3.63	mg/kg	0.000363 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	42	mg/kg	1.462	61.385	mg/kg	0.00614 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	11	mg/kg	1.126	11.159	mg/kg	0.00112 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	14 mg/kg		12.614 mg/kg	0.00126 %	✓	
	082-001-00-6									
23	 mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel {  nickel dihydroxide }				42 mg/kg	1.579	59.771 mg/kg	0.00598 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc {  zinc oxide }				54 mg/kg	1.245	60.56 mg/kg	0.00606 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				71 mg/kg	1.785	114.2 mg/kg	0.0114 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0372 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS246--02092022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS246--02092022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>7.2%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)








Hazard properties

None identified







Determinands

Moisture content: 7.2% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	23 mg/kg	1.32	28.181 mg/kg	0.00282 %	✓		
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2 mg/kg	2.775	3.091 mg/kg	0.000309 %	✓		
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.6 mg/kg	13.43	19.941 mg/kg	0.00199 %	✓		
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD	
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	44 mg/kg	1.462	64.308 mg/kg	0.00643 %			
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD	
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	17 mg/kg	1.126	17.762 mg/kg	0.00178 %	✓		

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	20 mg/kg		18.56 mg/kg	0.00186 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				27 mg/kg	1.579	39.576 mg/kg	0.00396 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.6 pH		7.6 pH	7.6 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				97 mg/kg	1.245	112.044 mg/kg	0.0112 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				64 mg/kg	1.785	106.026 mg/kg	0.0106 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0419 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS237--02092022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS237--02092022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>2.5%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 2.5% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	48	mg/kg	1.32	61.791	mg/kg	0.00618 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.3	mg/kg	2.775	3.518	mg/kg	0.000352 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.9	mg/kg	13.43	11.785	mg/kg	0.00118 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	45	mg/kg	1.462	65.77	mg/kg	0.00658 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	15	mg/kg	1.126	16.466	mg/kg	0.00165 %	✓	



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	31 mg/kg		30.225 mg/kg	0.00302 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				29 mg/kg	1.579	44.66 mg/kg	0.00447 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.6 pH		7.6 pH	7.6 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				86 mg/kg	1.245	104.369 mg/kg	0.0104 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				83 mg/kg	1.785	144.466 mg/kg	0.0144 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0492 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS229--02092022-0.10

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS229--02092022-0.10</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>3.2%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 3.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	48	mg/kg	1.32	61.348	mg/kg	0.00613 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.4	mg/kg	2.775	3.761	mg/kg	0.000376 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.7	mg/kg	13.43	9.1	mg/kg	0.00091 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	48	mg/kg	1.462	70.155	mg/kg	0.00702 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	15	mg/kg	1.126	16.348	mg/kg	0.00163 %	✔	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	28 mg/kg		27.104 mg/kg	0.00271 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				33 mg/kg	1.579	50.456 mg/kg	0.00505 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.5 pH		7.5 pH	7.5 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				90 mg/kg	1.245	108.439 mg/kg	0.0108 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				120 mg/kg	1.785	207.367 mg/kg	0.0207 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0563 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS243--02092022-0.20

**Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS243--02092022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>3.4%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
























**Hazard properties**

None identified

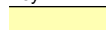





**Determinands**

Moisture content: 3.4% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	52	mg/kg	1.32	66.323	mg/kg	0.00663 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.3	mg/kg	2.775	3.485	mg/kg	0.000349 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.4	mg/kg	13.43	18.163	mg/kg	0.00182 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	46	mg/kg	1.462	67.232	mg/kg	0.00672 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	21	mg/kg	1.126	22.84	mg/kg	0.00228 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	29 mg/kg		28.014 mg/kg	0.0028 %	✓	
	082-001-00-6									
23	 mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel {  nickel dihydroxide }				34 mg/kg	1.579	51.877 mg/kg	0.00519 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc {  zinc oxide }				120 mg/kg	1.245	144.287 mg/kg	0.0144 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				84 mg/kg	1.785	144.857 mg/kg	0.0145 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0556 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS245--02092022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS245--02092022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>8.2%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties




















None identified

Determinands

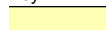





Moisture content: 8.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	18	mg/kg	1.32	21.817	mg/kg	0.00218 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1	mg/kg	2.775	2.803	mg/kg	0.00028 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.4	mg/kg	13.43	17.26	mg/kg	0.00173 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	37	mg/kg	1.462	54.078	mg/kg	0.00541 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	11	mg/kg	1.126	11.369	mg/kg	0.00114 %	✓	




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	19 mg/kg		17.442 mg/kg	0.00174 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				24 mg/kg	1.579	34.8 mg/kg	0.00348 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				71 mg/kg	1.245	81.128 mg/kg	0.00811 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				55 mg/kg	1.785	90.134 mg/kg	0.00901 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.034 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS206--24082022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS206--24082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>4.2%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)








Hazard properties

None identified

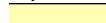





Determinands

Moisture content: 4.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	64	mg/kg	1.32	80.952	mg/kg	0.0081 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.4	mg/kg	2.775	3.722	mg/kg	0.000372 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	2.7	mg/kg	13.43	34.738	mg/kg	0.00347 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	52	mg/kg	1.462	76.001	mg/kg	0.0076 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	16	mg/kg	1.126	17.258	mg/kg	0.00173 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	36 mg/kg		34.488 mg/kg	0.00345 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				34 mg/kg	1.579	51.447 mg/kg	0.00514 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.7 pH		7.7 pH	7.7 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				110 mg/kg	1.245	131.168 mg/kg	0.0131 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				110 mg/kg	1.785	188.123 mg/kg	0.0188 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0627 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS218--24082022-0.10

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS218--24082022-0.10</b>	LoW Code: Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>1.9%</b> (wet weight correction)	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 1.9% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	48	mg/kg	1.32	62.171	mg/kg	0.00622 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.3	mg/kg	2.775	3.539	mg/kg	0.000354 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.5	mg/kg	13.43	6.587	mg/kg	0.000659 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	47	mg/kg	1.462	68.693	mg/kg	0.00687 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	12	mg/kg	1.126	13.254	mg/kg	0.00133 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	31 mg/kg		30.411 mg/kg	0.00304 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				30 mg/kg	1.579	46.485 mg/kg	0.00465 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.6 pH		7.6 pH	7.6 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				84 mg/kg	1.245	102.569 mg/kg	0.0103 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				83 mg/kg	1.785	145.355 mg/kg	0.0145 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0488 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS218--24082022-0.60

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS218--24082022-0.60</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>3.6%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**








None identified

**Determinands**







Moisture content: 3.6% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	51	mg/kg	1.32	64.912	mg/kg	0.00649 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2	mg/kg	2.775	3.211	mg/kg	0.000321 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.6	mg/kg	13.43	7.768	mg/kg	0.000777 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	43	mg/kg	1.462	62.847	mg/kg	0.00628 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	11	mg/kg	1.126	11.939	mg/kg	0.00119 %	✓	



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	23 mg/kg		22.172 mg/kg	0.00222 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				29 mg/kg	1.579	44.156 mg/kg	0.00442 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.8 pH		7.8 pH	7.8 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				87 mg/kg	1.245	104.392 mg/kg	0.0104 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				79 mg/kg	1.785	135.953 mg/kg	0.0136 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0467 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS223--24082022-0.10

**Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS223--24082022-0.10</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>3.6%</b> (wet weight correction)	

**Hazard properties**

None identified

**Determinands**

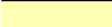





Moisture content: 3.6% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	59 mg/kg	1.32	75.095 mg/kg	0.00751 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5 mg/kg	2.775	4.013 mg/kg	0.000401 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		1.8 mg/kg	13.43	23.304 mg/kg	0.00233 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		53 mg/kg	1.462	77.462 mg/kg	0.00775 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide }				17 mg/kg	1.126	18.451 mg/kg	0.00185 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
19	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
20	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
21	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	28 mg/kg		26.992 mg/kg	0.0027 %	✓	
	082-001-00-6									
25	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
26	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
27	nickel { nickel dihydroxide }				35 mg/kg	1.579	53.292 mg/kg	0.00533 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
28	pH				7.5 pH		7.5 pH	7.5 pH		
			PH							
29	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
30	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
32	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
34	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
35	zinc { zinc oxide }				120 mg/kg	1.245	143.989 mg/kg	0.0144 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
36	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				97 mg/kg	1.785	166.929 mg/kg	0.0167 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.0609 %		

Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS219--24082022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>WS219--24082022-0.20</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>4.7%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 4.7% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	27 mg/kg	1.32	33.973 mg/kg	0.0034 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.81 mg/kg	2.775	2.142 mg/kg	0.000214 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.6 mg/kg	13.43	7.679 mg/kg	0.000768 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	30 mg/kg	1.462	43.847 mg/kg	0.00438 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	14 mg/kg	1.126	15.022 mg/kg	0.0015 %	✓	


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	23 mg/kg		21.919 mg/kg	0.00219 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				20 mg/kg	1.579	30.105 mg/kg	0.00301 %	✓		
26	pH PH				7.9 pH		7.9 pH	7.9 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				73 mg/kg	1.245	86.594 mg/kg	0.00866 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				49 mg/kg	1.785	83.363 mg/kg	0.00834 %	✓		
Total:									0.0334 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: WS220--24082022-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS220--24082022-0.10</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>4.6%</b> (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 4.6% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	22 mg/kg	1.32	27.711 mg/kg	0.00277 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.91 mg/kg	2.775	2.409 mg/kg	0.000241 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.5 mg/kg	13.43	6.406 mg/kg	0.000641 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	32 mg/kg	1.462	46.77 mg/kg	0.00468 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	14 mg/kg	1.126	15.037 mg/kg	0.0015 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	25 mg/kg		23.85 mg/kg	0.00239 %		✓	
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				21 mg/kg	1.579	31.644 mg/kg	0.00316 %		✓	
26	pH PH				7.9 pH		7.9 pH	7.9 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				65 mg/kg	1.245	77.185 mg/kg	0.00772 %		✓	
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				53 mg/kg	1.785	90.263 mg/kg	0.00903 %		✓	
Total:									0.033 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

## Appendix A: Classifier defined and non GB MCL determinands

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 23 Jul 2015

Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **boron tribromide/trichloride/trifluoride (combined)** (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride

Data source: N/A

Data source date: 06 Aug 2015

Hazard Statements: EUH014 , Acute Tox. 2; H330 , Acute Tox. 2; H300 , Skin Corr. 1A; H314 , Skin Corr. 1B; H314

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database

Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H332 , Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Resp. Sens. 1; H334 , Skin Sens. 1; H317 , Repr. 1B; H360FD , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

GB MCL index number: 006-007-00-5

Description/Comments: Conversion factor based on a worst case compound: sodium cyanide

Additional Hazard Statement(s): EUH032 >= 0.2 %

Reason for additional Hazards Statement(s):

20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Carc. 2; H351

• **lead compounds with the exception of those specified elsewhere in this Annex**

GB MCL index number: 082-001-00-6

Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium [www.reach-lead.eu/substanceinformation.html](http://www.reach-lead.eu/substanceinformation.html). Review date 29/09/2015

• **pH (CAS Number: PH)**

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

• **phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)**

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Carc. 2; H351, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Skin Irrit. 2; H315

• **pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)**

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

• **monohydric phenols (CAS Number: P1186)**

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)

Data source: CLP combined data

Data source date: 26 Mar 2019

Hazard Statements: Muta. 2; H341, Acute Tox. 3; H331, Acute Tox. 3; H311, Acute Tox. 3; H301, STOT RE 2; H373, Skin Corr. 1B; H314, Skin Corr. 1B; H314 >= 3 %, Skin Irrit. 2; H315 1 £ conc. < 3 %, Eye Irrit. 2; H319 1 £ conc. < 3 %, Aquatic Chronic 2; H411

**divanadium pentaoxide; vanadium pentoxide (EC Number: 215-239-8, CAS Number: 1314-62-1)**

EU CLP index number: 023-001-00-8

Description/Comments:

Additional Hazard Statement(s): None.

• **ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)**

GB MCL index number: 601-023-00-4

Description/Comments:

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

• **TPH (C6 to C40) petroleum group (CAS Number: TPH)**

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: Flam. Liq. 3; H226, Asp. Tox. 1; H304, STOT RE 2; H373, Muta. 1B; H340, Carc. 1B; H350, Repr. 2; H361d, Aquatic Chronic 2; H411

**Appendix B: Rationale for selection of metal species**

**arsenic {arsenic trioxide}**

Worst case species based on hazard statements

**beryllium {beryllium oxide}**

Worst case species based on hazard statements

**boron {boron tribromide/trichloride/trifluoride (combined)}**

Worst case species based on hazard statements

**cadmium {cadmium sulfide}**

Worst case species based on hazard statements

**chromium in chromium(III) compounds {chromium(III) oxide (worst case)}**

Worst case species based on hazard statements

**chromium in chromium(VI) compounds {chromium(VI) oxide}**

Worst case species based on hazard statements

**copper {dicopper oxide; copper (I) oxide}**

Most likely common species

**cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}**

Worst case species

**lead {lead compounds with the exception of those specified elsewhere in this Annex}**

Worst case species based on hazard statements

**mercury {mercury dichloride}**

Worst case species based on hazard statements

**nickel {nickel dihydroxide}**

Worst case species based on hazard statements

**selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}**

Worst case species based on hazard statements

**zinc {zinc oxide}**

Worst case species based on hazard statements

**vanadium {divanadium pentaoxide; vanadium pentoxide}**

Worst case species based on hazard statements.

**Appendix C: Version**

HazWasteOnline Classification Engine: **WM3 1st Edition v1.2.GB - Oct 2021**  
 HazWasteOnline Classification Engine Version: 2022.263.5340.9974 (20 Sep 2022)  
 HazWasteOnline Database: 2022.273.5362.10003 (03 Oct 2022)

This classification utilises the following guidance and legislation:

**WM3 v1.2.GB - Waste Classification** - 1st Edition v1.2.GB - Oct 2021

**CLP Regulation** - Regulation 1272/2008/EC of 16 December 2008

**1st ATP** - Regulation 790/2009/EC of 10 August 2009

**2nd ATP** - Regulation 286/2011/EC of 10 March 2011

**3rd ATP** - Regulation 618/2012/EU of 10 July 2012

**4th ATP** - Regulation 487/2013/EU of 8 May 2013

**Correction to 1st ATP** - Regulation 758/2013/EU of 7 August 2013

**5th ATP** - Regulation 944/2013/EU of 2 October 2013

**6th ATP** - Regulation 605/2014/EU of 5 June 2014

**WFD Annex III replacement** - Regulation 1357/2014/EU of 18 December 2014

**Revised List of Waste 2014** - Decision 2014/955/EU of 18 December 2014

**7th ATP** - Regulation 2015/1221/EU of 24 July 2015

**8th ATP** - Regulation (EU) 2016/918 of 19 May 2016

**9th ATP** - Regulation (EU) 2016/1179 of 19 July 2016

**10th ATP** - Regulation (EU) 2017/776 of 4 May 2017

**HP14 amendment** - Regulation (EU) 2017/997 of 8 June 2017

**13th ATP** - Regulation (EU) 2018/1480 of 4 October 2018

**14th ATP** - Regulation (EU) 2020/217 of 4 October 2019

**15th ATP** - Regulation (EU) 2020/1182 of 19 May 2020

**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)**

**Regulations 2020** - UK: 2020 No. 1567 of 16th December 2020

**The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020** - UK:

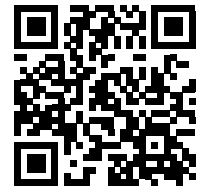
2020 No. 1540 of 16th December 2020

**GB MCL List** - version 1.1 of 09 June 2021

# Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



K3G5Y-Q1R8J-B2ACP

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

## Job name

22-83964\_HWOL\_Results

## Description/Comments

i2 Lab Reports 22-82372, 22-82408, 22-82414, 22-82420, 22-83964, 22-83965, 22-83966 & 22-85537

## Project

19114

## Site

Begbroke

## Classified by

Name: **Nathan Thompson**  
 Date: **26 Oct 2022 19:03 GMT**  
 Telephone: **07557 345 513**

Company: **Hydrock Consultants Ltd**  
**Hawthorn Park**  
**Holdenby Road, Spratton**  
**Northampton**  
**NN6 8LD**

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

**HazWasteOnline™ Certification:**

**CERTIFIED**

**Course**  
 Hazardous Waste Classification

**Date**  
 22 Apr 2021

Next 3 year Refresher due by Apr 2024

## Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	TP224--08092022-0.50		Non Hazardous		2
2	TP232--07092022-0.20		Non Hazardous		4
3	TP234--07092022-0.20		Non Hazardous		6
4	TP230--07092022-0.20		Non Hazardous		8
5	TP231--07092022-0.20		Non Hazardous		11
6	TP201--09092022-0.70		Non Hazardous		13
7	TP205--09092022-0.15		Non Hazardous		15
8	TP211--09092022-0.15		Non Hazardous		17
9	WS249--06092022-0.10		Non Hazardous		19
10	WS252--06092022-0.10		Non Hazardous		21
11	WS252--06092022-0.40		Non Hazardous		23
12	WS239--06092022-0.10		Non Hazardous		25
13	WS248--06092022-0.10		Non Hazardous		27
14	TP227--05092022-0.20		Non Hazardous		29
15	TP221--05092022-0.20		Non Hazardous		31

## Related documents

#	Name	Description
1	22-83964_HWOL_Results.hwol	i2 Analytical .hwol file used to populate the Job
2	Hydrock Standard plus Cresol (ammended Lead)	waste stream template used to create this Job

## Report

Created by: Nathan Thompson

Created date: 26 Oct 2022 19:03 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	33
Appendix B: Rationale for selection of metal species	34
Appendix C: Version	35



Classification of sample: TP224--08092022-0.50

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>TP224--08092022-0.50</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>7.1%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















**Hazard properties**

None identified

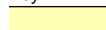





**Determinands**

Moisture content: 7.1% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	29 mg/kg	1.32	35.571 mg/kg	0.00356 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1 mg/kg	2.775	2.836 mg/kg	0.000284 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.8 mg/kg	13.43	9.981 mg/kg	0.000998 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	45 mg/kg	1.462	65.77 mg/kg	0.00658 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	16 mg/kg	1.126	16.735 mg/kg	0.00167 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	19 mg/kg		17.651 mg/kg	0.00177 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				23 mg/kg	1.579	33.749 mg/kg	0.00337 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				62 mg/kg	1.245	71.693 mg/kg	0.00717 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				69 mg/kg	1.785	114.432 mg/kg	0.0114 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0378 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP232--07092022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>TP232--07092022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>13%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















**Hazard properties**

None identified

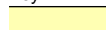





**Determinands**

Moisture content: 13% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	20	mg/kg	1.32	22.974	mg/kg	0.0023 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.3	mg/kg	2.775	3.139	mg/kg	0.000314 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	2	mg/kg	13.43	23.368	mg/kg	0.00234 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	42	mg/kg	1.462	61.385	mg/kg	0.00614 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	19	mg/kg	1.126	18.611	mg/kg	0.00186 %	✔	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	33 mg/kg		28.71 mg/kg	0.00287 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				25 mg/kg	1.579	34.354 mg/kg	0.00344 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.6 pH		7.6 pH	7.6 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				92 mg/kg	1.245	99.627 mg/kg	0.00996 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				61 mg/kg	1.785	94.74 mg/kg	0.00947 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0396 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP234--07092022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>TP234--07092022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>12%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
























Hazard properties

None identified

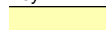





Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	15 mg/kg	1.32	17.428 mg/kg	0.00174 %	✓		
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.96 mg/kg	2.775	2.345 mg/kg	0.000234 %	✓		
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.1 mg/kg	13.43	13 mg/kg	0.0013 %	✓		
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD	
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	38 mg/kg	1.462	55.539 mg/kg	0.00555 %			
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD	
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	12 mg/kg	1.126	11.889 mg/kg	0.00119 %	✓		


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	22 mg/kg		19.36 mg/kg	0.00194 %	✓	
	082-001-00-6									
23	 mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel {  nickel dihydroxide }				18 mg/kg	1.579	25.019 mg/kg	0.0025 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.3 pH		7.3 pH	7.3 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc {  zinc oxide }				58 mg/kg	1.245	63.53 mg/kg	0.00635 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				53 mg/kg	1.785	83.261 mg/kg	0.00833 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0301 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: TP230--07092022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>TP230--07092022-0.20</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>8.6%</b> (wet weight correction)	

Hazard properties

None identified

Determinands

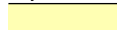





Moisture content: 8.6% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	14 mg/kg	1.32	16.895 mg/kg	0.00169 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.8 mg/kg	2.775	2.029 mg/kg	0.000203 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.3 mg/kg	13.43	3.683 mg/kg	0.000368 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		31 mg/kg	1.462	45.308 mg/kg	0.00453 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide }				11 mg/kg	1.126	11.32 mg/kg	0.00113 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
19	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
20	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
21	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	19 mg/kg		17.366 mg/kg	0.00174 %	✓	
	082-001-00-6									
25	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
26	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
27	nickel { nickel dihydroxide }				17 mg/kg	1.579	24.542 mg/kg	0.00245 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
28	pH				7.7 pH		7.7 pH	7.7 pH		
			PH							
29	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
30	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
32	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
34	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
35	zinc { zinc oxide }				53 mg/kg	1.245	60.296 mg/kg	0.00603 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
36	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				46 mg/kg	1.785	75.056 mg/kg	0.00751 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.0276 %		

Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP231--07092022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>TP231--07092022-0.20</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>8.2%</b> (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 8.2% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	15 mg/kg	1.32	18.181 mg/kg	0.00182 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.88 mg/kg	2.775	2.242 mg/kg	0.000224 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		1.3 mg/kg	13.43	16.027 mg/kg	0.0016 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	36 mg/kg	1.462	52.616 mg/kg	0.00526 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	14 mg/kg	1.126	14.47 mg/kg	0.00145 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	22 mg/kg		20.196 mg/kg	0.00202 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				17 mg/kg	1.579	24.65 mg/kg	0.00246 %	✓		
26	pH PH				7.9 pH		7.9 pH	7.9 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				61 mg/kg	1.245	69.701 mg/kg	0.00697 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				49 mg/kg	1.785	80.301 mg/kg	0.00803 %	✓		
Total:									0.0308 %		

**Key**

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP201--09092022-0.70

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>TP201--09092022-0.70</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>5.8%</b> (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 5.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	83 mg/kg	1.32	103.231 mg/kg	0.0103 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.8 mg/kg	2.775	4.706 mg/kg	0.000471 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.2 mg/kg	13.43	2.53 mg/kg	0.000253 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		66 mg/kg	1.462	96.463 mg/kg	0.00965 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	17 mg/kg	1.126	18.03 mg/kg	0.0018 %	✓	




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	18 mg/kg		16.956 mg/kg	0.0017 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				48 mg/kg	1.579	71.419 mg/kg	0.00714 %	✓		
26	pH PH				8.4 pH		8.4 pH	8.4 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				130 mg/kg	1.245	152.428 mg/kg	0.0152 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				130 mg/kg	1.785	218.614 mg/kg	0.0219 %	✓		
Total:									0.0694 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP205--09092022-0.15

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP205--09092022-0.15</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>5.3%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 5.3% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	54 mg/kg	1.32	67.519 mg/kg	0.00675 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5 mg/kg	2.775	3.942 mg/kg	0.000394 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.5 mg/kg	13.43	6.359 mg/kg	0.000636 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	53 mg/kg	1.462	77.462 mg/kg	0.00775 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	22 mg/kg	1.126	23.457 mg/kg	0.00235 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	31 mg/kg		29.357 mg/kg	0.00294 %		✓	
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				35 mg/kg	1.579	52.353 mg/kg	0.00524 %		✓	
26	pH PH				7.8 pH		7.8 pH	7.8 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				100 mg/kg	1.245	117.874 mg/kg	0.0118 %		✓	
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				97 mg/kg	1.785	163.985 mg/kg	0.0164 %		✓	
Total:									0.0551 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP211--09092022-0.15

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>TP211--09092022-0.15</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>4.5%</b> (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 4.5% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	39 mg/kg	1.32	49.176 mg/kg	0.00492 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1 mg/kg	2.775	2.915 mg/kg	0.000292 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.7 mg/kg	13.43	8.978 mg/kg	0.000898 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	40 mg/kg	1.462	58.462 mg/kg	0.00585 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	16 mg/kg	1.126	17.204 mg/kg	0.00172 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	32 mg/kg		30.56 mg/kg	0.00306 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				25 mg/kg	1.579	37.711 mg/kg	0.00377 %	✓		
26	pH PH				7.9 pH		7.9 pH	7.9 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				70 mg/kg	1.245	83.209 mg/kg	0.00832 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				75 mg/kg	1.785	127.864 mg/kg	0.0128 %	✓		
Total:									0.0425 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS249--06092022-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS249--06092022-0.10</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>4.4%</b> (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 4.4% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	18 mg/kg	1.32	22.72 mg/kg	0.00227 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.81 mg/kg	2.775	2.149 mg/kg	0.000215 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.5 mg/kg	13.43	6.42 mg/kg	0.000642 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	32 mg/kg	1.462	46.77 mg/kg	0.00468 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	8.9 mg/kg	1.126	9.58 mg/kg	0.000958 %	✓	




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	15 mg/kg		14.34 mg/kg	0.00143 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				16 mg/kg	1.579	24.16 mg/kg	0.00242 %	✓		
26	pH PH				6.9 pH		6.9 pH	6.9 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				40 mg/kg	1.245	47.598 mg/kg	0.00476 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				51 mg/kg	1.785	87.038 mg/kg	0.0087 %	✓		
Total:									0.027 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS252--06092022-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS252--06092022-0.10</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>9.3%</b> (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 9.3% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	24 mg/kg	1.32	28.741 mg/kg	0.00287 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2 mg/kg	2.775	3.021 mg/kg	0.000302 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		1.8 mg/kg	13.43	21.926 mg/kg	0.00219 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		44 mg/kg	1.462	64.308 mg/kg	0.00643 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	14 mg/kg	1.126	14.297 mg/kg	0.00143 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	23 mg/kg		20.861 mg/kg	0.00209 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				26 mg/kg	1.579	37.248 mg/kg	0.00372 %	✓		
26	pH PH				7.9 pH		7.9 pH	7.9 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				76 mg/kg	1.245	85.801 mg/kg	0.00858 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				68 mg/kg	1.785	110.103 mg/kg	0.011 %	✓		
Total:									0.0395 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS252--06092022-0.40

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS252--06092022-0.40</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>12%</b> (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	38 mg/kg	1.32	44.152 mg/kg	0.00442 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2 mg/kg	2.775	2.931 mg/kg	0.000293 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.5 mg/kg	13.43	5.909 mg/kg	0.000591 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	45 mg/kg	1.462	65.77 mg/kg	0.00658 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	8.5 mg/kg	1.126	8.422 mg/kg	0.000842 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	13 mg/kg		11.44 mg/kg	0.00114 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				26 mg/kg	1.579	36.139 mg/kg	0.00361 %	✓		
26	pH PH				8.1 pH		8.1 pH	8.1 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				45 mg/kg	1.245	49.291 mg/kg	0.00493 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				74 mg/kg	1.785	116.251 mg/kg	0.0116 %	✓		
Total:									0.0349 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS239--06092022-0.10

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS239--06092022-0.10</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>7.7%</b>	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 7.7% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	13 mg/kg	1.32	15.843 mg/kg	0.00158 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.64 mg/kg	2.775	1.639 mg/kg	0.000164 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		1 mg/kg	13.43	12.396 mg/kg	0.00124 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	23 mg/kg	1.462	33.616 mg/kg	0.00336 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	11 mg/kg	1.126	11.431 mg/kg	0.00114 %	✓	




#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	23 mg/kg		21.229 mg/kg	0.00212 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				15 mg/kg	1.579	21.868 mg/kg	0.00219 %	✓		
26	pH PH				8 pH		8 pH	8pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				48 mg/kg	1.245	55.146 mg/kg	0.00551 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				41 mg/kg	1.785	67.557 mg/kg	0.00676 %	✓		
Total:									0.025 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS248--06092022-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>WS248--06092022-0.10</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>9.1%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 9.1% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	14 mg/kg	1.32	16.802 mg/kg	0.00168 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.86 mg/kg	2.775	2.17 mg/kg	0.000217 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.5 mg/kg	13.43	6.104 mg/kg	0.00061 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	33 mg/kg	1.462	48.231 mg/kg	0.00482 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	13 mg/kg	1.126	13.305 mg/kg	0.00133 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	55 mg/kg		49.995 mg/kg	0.005 %		✓	
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				17 mg/kg	1.579	24.408 mg/kg	0.00244 %		✓	
26	pH PH				6.8 pH		6.8 pH	6.8 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				52 mg/kg	1.245	58.835 mg/kg	0.00588 %		✓	
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				49 mg/kg	1.785	79.514 mg/kg	0.00795 %		✓	
Total:									0.0309 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP227--05092022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP227--05092022-0.20</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>4.5%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 4.5% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	36 mg/kg	1.32	45.393 mg/kg	0.00454 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1 mg/kg	2.775	2.65 mg/kg	0.000265 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		1.1 mg/kg	13.43	14.108 mg/kg	0.00141 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		38 mg/kg	1.462	55.539 mg/kg	0.00555 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	16 mg/kg	1.126	17.204 mg/kg	0.00172 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	20 mg/kg		19.1 mg/kg	0.00191 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				25 mg/kg	1.579	37.711 mg/kg	0.00377 %	✓		
26	pH PH				8.1 pH		8.1 pH	8.1 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				89 mg/kg	1.245	105.794 mg/kg	0.0106 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				72 mg/kg	1.785	122.749 mg/kg	0.0123 %	✓		
Total:									0.0429 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP221--05092022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>TP221--05092022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>3.9%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 3.9% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	41 mg/kg	1.32	52.022 mg/kg	0.0052 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2 mg/kg	2.775	3.201 mg/kg	0.00032 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.5 mg/kg	13.43	6.453 mg/kg	0.000645 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		43 mg/kg	1.462	62.847 mg/kg	0.00628 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	20 mg/kg	1.126	21.64 mg/kg	0.00216 %	✓	



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	34 mg/kg		32.674 mg/kg	0.00327 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				28 mg/kg	1.579	42.501 mg/kg	0.00425 %	✓		
26	pH PH				7.5 pH		7.5 pH	7.5 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				91 mg/kg	1.245	108.851 mg/kg	0.0109 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				74 mg/kg	1.785	126.952 mg/kg	0.0127 %	✓		
Total:									0.0466 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

## Appendix A: Classifier defined and non GB MCL determinands

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 23 Jul 2015

Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **boron tribromide/trichloride/trifluoride (combined)** (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride

Data source: N/A

Data source date: 06 Aug 2015

Hazard Statements: EUH014 , Acute Tox. 2; H330 , Acute Tox. 2; H300 , Skin Corr. 1A; H314 , Skin Corr. 1B; H314

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database

Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H332 , Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Resp. Sens. 1; H334 , Skin Sens. 1; H317 , Repr. 1B; H360FD , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

GB MCL index number: 006-007-00-5

Description/Comments: Conversion factor based on a worst case compound: sodium cyanide

Additional Hazard Statement(s): EUH032 >= 0.2 %

Reason for additional Hazards Statement(s):

20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Carc. 2; H351

• **lead compounds with the exception of those specified elsewhere in this Annex**

GB MCL index number: 082-001-00-6

Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium [www.reach-lead.eu/substanceinformation.html](http://www.reach-lead.eu/substanceinformation.html). Review date 29/09/2015

• **pH (CAS Number: PH)**

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

• **phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)**

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Carc. 2; H351, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Skin Irrit. 2; H315

• **pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)**

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

• **monohydric phenols (CAS Number: P1186)**

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)

Data source: CLP combined data

Data source date: 26 Mar 2019

Hazard Statements: Muta. 2; H341, Acute Tox. 3; H331, Acute Tox. 3; H311, Acute Tox. 3; H301, STOT RE 2; H373, Skin Corr. 1B; H314, Skin Corr. 1B; H314 >= 3 %, Skin Irrit. 2; H315 1 £ conc. < 3 %, Eye Irrit. 2; H319 1 £ conc. < 3 %, Aquatic Chronic 2; H411

**divanadium pentaoxide; vanadium pentoxide (EC Number: 215-239-8, CAS Number: 1314-62-1)**

EU CLP index number: 023-001-00-8

Description/Comments:

Additional Hazard Statement(s): None.

• **ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)**

GB MCL index number: 601-023-00-4

Description/Comments:

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

• **TPH (C6 to C40) petroleum group (CAS Number: TPH)**

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: Flam. Liq. 3; H226, Asp. Tox. 1; H304, STOT RE 2; H373, Muta. 1B; H340, Carc. 1B; H350, Repr. 2; H361d, Aquatic Chronic 2; H411

**Appendix B: Rationale for selection of metal species**

**arsenic {arsenic trioxide}**

Worst case species based on hazard statements

**beryllium {beryllium oxide}**

Worst case species based on hazard statements

**boron {boron tribromide/trichloride/trifluoride (combined)}**

Worst case species based on hazard statements

**cadmium {cadmium sulfide}**

Worst case species based on hazard statements

**chromium in chromium(III) compounds {chromium(III) oxide (worst case)}**

Worst case species based on hazard statements

**chromium in chromium(VI) compounds {chromium(VI) oxide}**

Worst case species based on hazard statements

**copper {dicopper oxide; copper (I) oxide}**

Most likely common species

**cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}**

Worst case species

**lead {lead compounds with the exception of those specified elsewhere in this Annex}**

Worst case species based on hazard statements

**mercury {mercury dichloride}**

Worst case species based on hazard statements

**nickel {nickel dihydroxide}**

Worst case species based on hazard statements

**selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}**

Worst case species based on hazard statements

**zinc {zinc oxide}**

Worst case species based on hazard statements

**vanadium {divanadium pentaoxide; vanadium pentoxide}**

Worst case species based on hazard statements.

**Appendix C: Version**

HazWasteOnline Classification Engine: **WM3 1st Edition v1.2.GB - Oct 2021**

HazWasteOnline Classification Engine Version: 2022.263.5340.9974 (20 Sep 2022)

HazWasteOnline Database: 2022.273.5362.10003 (03 Oct 2022)

This classification utilises the following guidance and legislation:

**WM3 v1.2.GB - Waste Classification** - 1st Edition v1.2.GB - Oct 2021

**CLP Regulation** - Regulation 1272/2008/EC of 16 December 2008

**1st ATP** - Regulation 790/2009/EC of 10 August 2009

**2nd ATP** - Regulation 286/2011/EC of 10 March 2011

**3rd ATP** - Regulation 618/2012/EU of 10 July 2012

**4th ATP** - Regulation 487/2013/EU of 8 May 2013

**Correction to 1st ATP** - Regulation 758/2013/EU of 7 August 2013

**5th ATP** - Regulation 944/2013/EU of 2 October 2013

**6th ATP** - Regulation 605/2014/EU of 5 June 2014

**WFD Annex III replacement** - Regulation 1357/2014/EU of 18 December 2014

**Revised List of Waste 2014** - Decision 2014/955/EU of 18 December 2014

**7th ATP** - Regulation 2015/1221/EU of 24 July 2015

**8th ATP** - Regulation (EU) 2016/918 of 19 May 2016

**9th ATP** - Regulation (EU) 2016/1179 of 19 July 2016

**10th ATP** - Regulation (EU) 2017/776 of 4 May 2017

**HP14 amendment** - Regulation (EU) 2017/997 of 8 June 2017

**13th ATP** - Regulation (EU) 2018/1480 of 4 October 2018

**14th ATP** - Regulation (EU) 2020/217 of 4 October 2019

**15th ATP** - Regulation (EU) 2020/1182 of 19 May 2020

**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)**

**Regulations 2020** - UK: 2020 No. 1567 of 16th December 2020

**The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020** - UK:

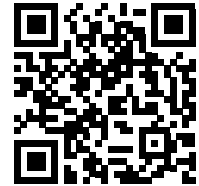
2020 No. 1540 of 16th December 2020

**GB MCL List** - version 1.1 of 09 June 2021

# Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



ASY7W-YA1XD-A7U7M

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

## Job name

22-83965\_HWOL\_Results

## Description/Comments

i2 Lab Reports 22-82372, 22-82408, 22-82414, 22-82420, 22-83964, 22-83965, 22-83966 & 22-85537

## Project

19114

## Site

Begbroke

## Classified by

Name: **Nathan Thompson**  
 Date: **26 Oct 2022 19:06 GMT**  
 Telephone: **07557 345 513**

Company: **Hydrock Consultants Ltd**  
**Hawthorn Park**  
**Holdenby Road, Spratton**  
**Northampton**  
**NN6 8LD**

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

## HazWasteOnline™ Certification:

**CERTIFIED**

## Course

Hazardous Waste Classification

## Date

22 Apr 2021

Next 3 year Refresher due by Apr 2024

## Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	WS225--31082022-0.60		Non Hazardous		2
2	WS225--31082022-0.20		Non Hazardous		4
3	WS221--31082022-0.20		Non Hazardous		6
4	WS247--31082022-0.20		Non Hazardous		8
5	WS236--05092022-0.20		Hazardous	HP 3(i), HP 7, HP 11	10
6	WS228--05092022-0.20		Non Hazardous		16
7	WS235--05092022-0.20		Non Hazardous		18
8	WS242--05092022-0.20		Non Hazardous		20
9	TP206--08092022-0.20		Non Hazardous		23
10	TP217--08092022-0.40		Non Hazardous		25
11	TP218--08092022-0.15		Non Hazardous		27
12	TP219--08092022-0.25		Non Hazardous		29
13	TP214--08092022-0.50		Non Hazardous		31
14	TP223--08092022-0.15		Non Hazardous		33

## Related documents

#	Name	Description
1	22-83965_HWOL_Results.hwol	i2 Analytical .hwol file used to populate the Job
2	Hydrock Standard plus Cresol (ammended Lead)	waste stream template used to create this Job

## Report

Created by: Nathan Thompson

Created date: 26 Oct 2022 19:06 GMT

## Appendices

Appendix	Page
Appendix A: Classifier defined and non GB MCL determinands	35
Appendix B: Rationale for selection of metal species	39
Appendix C: Version	39

Classification of sample: WS225--31082022-0.60

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS225--31082022-0.60</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>3.7%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties




















None identified

Determinands

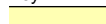





Moisture content: 3.7% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	51 mg/kg	1.32	64.845 mg/kg	0.00648 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5 mg/kg	2.775	4.009 mg/kg	0.000401 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.8 mg/kg	13.43	23.28 mg/kg	0.00233 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	52 mg/kg	1.462	76.001 mg/kg	0.0076 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	19 mg/kg	1.126	20.6 mg/kg	0.00206 %	✓	



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	33 mg/kg		31.779 mg/kg	0.00318 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				37 mg/kg	1.579	56.279 mg/kg	0.00563 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.8 pH		7.8 pH	7.8 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				100 mg/kg	1.245	119.866 mg/kg	0.012 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				94 mg/kg	1.785	161.599 mg/kg	0.0162 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0567 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS225--31082022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>WS225--31082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>4.9%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)




















**Hazard properties**

None identified

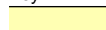





**Determinands**

Moisture content: 4.9% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	27 mg/kg	1.32	33.902 mg/kg	0.00339 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.89 mg/kg	2.775	2.349 mg/kg	0.000235 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1.1 mg/kg	13.43	14.049 mg/kg	0.0014 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	31 mg/kg	1.462	45.308 mg/kg	0.00453 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	13 mg/kg	1.126	13.919 mg/kg	0.00139 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	94 mg/kg		89.394 mg/kg	0.00894 %	✓	
	082-001-00-6									
23	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel { nickel dihydroxide }				24 mg/kg	1.579	36.05 mg/kg	0.00361 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				8 pH		8 pH	8pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc { zinc oxide }				67 mg/kg	1.245	79.309 mg/kg	0.00793 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				63 mg/kg	1.785	106.956 mg/kg	0.0107 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.043 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS221--31082022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS221--31082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>4.3%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
























Hazard properties

None identified

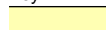





Determinands

Moisture content: 4.3% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	31	mg/kg	1.32	39.17	mg/kg	0.00392 %	✔	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2	mg/kg	2.775	3.187	mg/kg	0.000319 %	✔	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	2.4	mg/kg	13.43	30.846	mg/kg	0.00308 %	✔	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	41	mg/kg	1.462	59.924	mg/kg	0.00599 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	14	mg/kg	1.126	15.085	mg/kg	0.00151 %	✔	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	21 mg/kg		20.097 mg/kg	0.00201 %	✓	
	082-001-00-6									
23	 mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel {  nickel dihydroxide }				24 mg/kg	1.579	36.278 mg/kg	0.00363 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc {  zinc oxide }				75 mg/kg	1.245	89.339 mg/kg	0.00893 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				69 mg/kg	1.785	117.881 mg/kg	0.0118 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0421 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS247--31082022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS247--31082022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>9.2%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties








None identified

Determinands

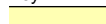





Moisture content: 9.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	30	mg/kg	1.32	35.966	mg/kg	0.0036 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2	mg/kg	2.775	3.024	mg/kg	0.000302 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.8	mg/kg	13.43	9.756	mg/kg	0.000976 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	44	mg/kg	1.462	64.308	mg/kg	0.00643 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	9.5	mg/kg	1.126	9.712	mg/kg	0.000971 %	✓	



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	22 mg/kg		19.976 mg/kg	0.002 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				24 mg/kg	1.579	34.42 mg/kg	0.00344 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.7 pH		7.7 pH	7.7 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				77 mg/kg	1.245	87.025 mg/kg	0.0087 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				74 mg/kg	1.785	119.95 mg/kg	0.012 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0393 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS236--05092022-0.20

**Hazardous Waste**  
 Classified as **17 05 03 \***  
 in the List of Waste

Sample details

Sample name: <b>WS236--05092022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>2%</b> (wet weight correction)	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because No free product identified. Unlikely to be hazardous

Hazard Statements hit:

**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.216%)

**HP 7: Carcinogenic** "waste which induces cancer or increases its incidence"

Hazard Statements hit:

**Carc. 1B; H350** "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.216%)

**HP 11: Mutagenic** "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

**Muta. 1B; H340** "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.216%)

Determinands

Moisture content: 2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	25 mg/kg	1.32	32.348 mg/kg	0.00323 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
6	benzo[a]anthracene 601-033-00-9 200-280-6 56-55-3				0.24 mg/kg		0.235 mg/kg	0.0000235 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 200-028-5 50-32-8				0.41 mg/kg		0.402 mg/kg	0.0000402 %	✓	
8	benzo[b]fluoranthene 601-034-00-4 205-911-9 205-99-2				0.52 mg/kg		0.51 mg/kg	0.000051 %	✓	
9	benzo[ghi]perylene 205-883-8 191-24-2				0.49 mg/kg		0.48 mg/kg	0.000048 %	✓	
10	benzo[k]fluoranthene 601-036-00-5 205-916-6 207-08-9				0.21 mg/kg		0.206 mg/kg	0.0000206 %	✓	
11	beryllium { beryllium oxide } 004-003-00-8 215-133-1 1304-56-9				0.47 mg/kg	2.775	1.278 mg/kg	0.000128 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) } 10294-33-4, 10294-34-5, 7637-07-2				0.3 mg/kg	13.43	3.948 mg/kg	0.000395 %	✓	
13	cadmium { cadmium sulfide } 048-010-00-4 215-147-8 1306-23-6			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 1308-38-9				18 mg/kg	1.462	26.308 mg/kg	0.00263 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 215-607-8 1333-82-0				<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
16	chrysene 601-048-00-0 205-923-4 218-01-9				0.42 mg/kg		0.412 mg/kg	0.0000412 %	✓	
17	copper { dicopper oxide; copper (I) oxide } 029-002-00-X 215-270-7 1317-39-1				29 mg/kg	1.126	31.998 mg/kg	0.0032 %	✓	
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
19	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	ethylbenzene 601-023-00-4 202-849-4 100-41-4				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
21	fluoranthene 205-912-4 206-44-0				0.34 mg/kg		0.333 mg/kg	0.0000333 %	✓	
22	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	indeno[123-cd]pyrene 205-893-2 193-39-5				0.32 mg/kg		0.314 mg/kg	0.0000314 %	✓	
24	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	13 mg/kg		12.74 mg/kg	0.00127 %	✓	
25	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
26	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.0001 mg/kg		<0.0001 mg/kg	<0.00000001 %		<LOD
27	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				14 mg/kg	1.579	21.671 mg/kg	0.00217 %	✓	
28	pH PH				8.1 pH		8.1 pH	8.1 pH		
29	phenanthrene 201-581-5 85-01-8				0.22 mg/kg		0.216 mg/kg	0.0000216 %	✓	
30	phenol 604-001-00-2 203-632-7 108-95-2				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
31	pyrene	204-927-3	129-00-0		0.39 mg/kg		0.382 mg/kg	0.0000382 %	✓	
32	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8			<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
33	tetrachloroethylene	602-028-00-4	204-825-9	127-18-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
34	carbon tetrachloride; tetrachloromethane	602-008-00-5	200-262-8	56-23-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
35	toluene	601-021-00-3	203-625-9	108-88-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
36	TPH (C6 to C40) petroleum group		TPH		2200 mg/kg		2156 mg/kg	0.216 %	✓	
37	trichloroethylene; trichloroethene	602-027-00-9	201-167-4	79-01-6	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
38	vinyl chloride; chloroethylene	602-023-00-7	200-831-0	75-01-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
39	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]	<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
40	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2	67 mg/kg	1.245	81.728 mg/kg	0.00817 %	✓	
41	hexachlorobenzene	602-065-00-6	204-273-9	118-74-1	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
42	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]	604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
43	1,2-dichloroethane; ethylene dichloride	602-012-00-7	203-458-1	107-06-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
44	monohydric phenols		P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
45	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	59 mg/kg	1.785	103.219 mg/kg	0.0103 %	✓	
46	aniline	612-008-00-7	200-539-3	62-53-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
47	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
48	bis(2-chloroethyl) ether	603-029-00-2	203-870-1	111-44-4	<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
49	hexachloroethane		200-666-4	67-72-1	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
50	nitrobenzene	609-003-00-7	202-716-0	98-95-3	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
51	3,5,5-trimethylcyclohex-2-enone; isophorone	606-012-00-8	201-126-0	78-59-1	<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
52	2-nitrophenol		201-857-5	88-75-5	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
53	3,4-xylene; [1] 2,5-xylene; [2] 2,4-xylene; [3] 2,3-xylene; [4] 2,6-xylene; [5] xylene; [6] 2,4(or 2,5)-xylene [7]	604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5]	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
		209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	1300-71-6 [6] 71975-58-1 [7]							
54	•	bis(2-chloroethoxy)methane 203-920-2	111-91-1		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
55		2,4-dichlorophenol 604-011-00-7	204-429-6 120-83-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
56		4-chloroaniline 612-137-00-9	203-401-0 106-47-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
57		chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol 604-014-00-3	200-431-6 59-50-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
58		2,4,6-trichlorophenol 604-018-00-5	201-795-9 88-06-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
59		2,4,5-trichlorophenol 604-017-00-X	202-467-8 95-95-4		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
60	•	2-methyl naphthalene 202-078-3	91-57-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
61	•	2-chloronaphthalene 202-079-9	91-58-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
62	•	dimethyl phthalate 205-011-6	131-11-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
63		2,6-dinitrotoluene 609-049-00-8	210-106-0 606-20-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
64		2,4-dinitrotoluene; [1] dinitrotoluene [2] 609-007-00-9	204-450-0 [1] 246-836-1 [2] 121-14-2 [1] 25321-14-6 [2]		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
65	•	dibenzofuran 205-071-3	132-64-9		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
66	•	4-chlorophenylphenylether 230-281-7	7005-72-3		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
67	•	diethyl phthalate 201-550-6	84-66-2		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
68		o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3] 612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3] 88-74-4 [1] 99-09-2 [2] 100-01-6 [3]		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
69		azobenzene 611-001-00-6	203-102-5 103-33-3		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
70	•	4-bromophenylphenylether 202-952-4	101-55-3		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
71	•	carbazole 201-696-0	86-74-8		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
72		dibutyl phthalate; DBP 607-318-00-4	201-557-4 84-74-2		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
73		anthraquinone 606-151-00-4	201-549-0 84-65-1		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
74		BBP; benzyl butyl phthalate 607-430-00-3	201-622-7 85-68-7		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
75		1,1,1-trichloroethane; methyl chloroform 602-013-00-2	200-756-3 71-55-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
76		1,1,2,2-tetrachloroethane 602-015-00-3	201-197-8 79-34-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
77		1,1,2-trichloroethane 602-014-00-8	201-166-9 79-00-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
78		1,1-dichloroethylene; vinylidene chloride 602-025-00-8	200-864-0 75-35-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
79		1,1-dichloroethane 602-011-00-1	200-863-5 75-34-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
80		1,1-dichloropropene 602-031-00-0	209-253-3 563-58-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
81	1,2,3-trichlorobenzene	201-757-1	87-61-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
82	1,2,4-trimethylbenzene	601-043-00-3	202-436-9	95-63-6	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
83	1,2-dibromoethane	602-010-00-6	203-444-5	106-93-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
84	1,2-dichlorobenzene; o-dichlorobenzene	602-034-00-7	202-425-9	95-50-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
85	1,2-dichloropropane; propylene dichloride	602-020-00-0	201-152-2	78-87-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
86	1,3-dichlorobenzene	602-067-00-7	208-792-1	541-73-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
87	1,3-dichloropropane		205-531-3	142-28-9	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
88	1,4-dichlorobenzene; p-dichlorobenzene	602-035-00-2	203-400-5	106-46-7	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
89	2,2-dichloropropane		209-832-0	594-20-7	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
90	bromodichloromethane		200-856-7	75-27-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
91	bromomethane; methylbromide	602-002-00-2	200-813-2	74-83-9	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
92	bromobenzene	602-060-00-9	203-623-8	108-86-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
93	n-butylbenzene		203-209-7	104-51-8	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
94	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]	602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
95	chlorobenzene	602-033-00-1	203-628-5	108-90-7	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
96	chloroethane	602-009-00-0	200-830-5	75-00-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
97	chloroform; trichloromethane	602-006-00-4	200-663-8	67-66-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
98	chloromethane; methyl chloride	602-001-00-7	200-817-4	74-87-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
99	dibromochloromethane		204-704-0	124-48-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
100	1,2-dibromo-3-chloropropane	602-021-00-6	202-479-3	96-12-8	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
101	dibromomethane	602-003-00-8	200-824-2	74-95-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
102	hexachlorobutadiene		201-765-5	87-68-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
103	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
104	4-isopropyltoluene		202-796-7	99-87-6	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
105	sec-butylbenzene		205-227-0	135-98-8	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
106	styrene	601-026-00-0	202-851-5	100-42-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
107	trans-1,3-dichloropropene		431-460-4	10061-02-6	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
108	tert-butylbenzene		202-632-4	98-06-6	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
109	bromoform; tribromomethane	602-007-00-X	200-854-6	75-25-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used						
	EU CLP index number	EC Number	CAS Number													
110	1,2,4-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD						
	602-087-00-6	204-428-0	120-82-1													
111	1,1,1,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD						
		211-135-1	630-20-6													
112	trichlorofluoromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD						
		200-892-3	75-69-4													
113	mesitylene; 1,3,5-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD						
	601-025-00-5	203-604-4	108-67-8													
114	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD						
	602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]													
115	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]										<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]													
116	cumene; [1] propylbenzene [2]															
	601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]													
Total:								0.249 %								

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Hazardous result
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS228--05092022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS228--05092022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>5.1%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
























Hazard properties

None identified

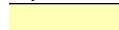





Determinands

Moisture content: 5.1% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	48	mg/kg	1.32	60.143	mg/kg	0.00601 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.3	mg/kg	2.775	3.424	mg/kg	0.000342 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	0.4	mg/kg	13.43	5.098	mg/kg	0.00051 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	49	mg/kg	1.462	71.616	mg/kg	0.00716 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	18	mg/kg	1.126	19.232	mg/kg	0.00192 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	 cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	 dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	 fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	 fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	 indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	20 mg/kg		18.98 mg/kg	0.0019 %	✓	
	082-001-00-6									
23	 mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	 naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	 nickel {  nickel dihydroxide }				35 mg/kg	1.579	52.463 mg/kg	0.00525 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	 pH				7.5 pH		7.5 pH	7.5 pH		
			PH							
27	 phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	 pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	 selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	 zinc {  zinc oxide }				77 mg/kg	1.245	90.955 mg/kg	0.0091 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	 monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	 vanadium {  divanadium pentaoxide; vanadium pentoxide }				91 mg/kg	1.785	154.167 mg/kg	0.0154 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0485 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS235--05092022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name: <b>WS235--05092022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>5.7%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)








Hazard properties

None identified







Determinands

Moisture content: 5.7% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	45	mg/kg	1.32	56.028	mg/kg	0.0056 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2	mg/kg	2.775	3.141	mg/kg	0.000314 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	1	mg/kg	13.43	12.664	mg/kg	0.00127 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	45	mg/kg	1.462	65.77	mg/kg	0.00658 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	14	mg/kg	1.126	14.864	mg/kg	0.00149 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
18	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
19	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
20	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
21	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
22	lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	18 mg/kg		16.974 mg/kg	0.0017 %	✓	
	082-001-00-6									
23	mercury {  mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
24	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
25	nickel {  nickel dihydroxide }				28 mg/kg	1.579	41.705 mg/kg	0.00417 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
26	pH				7.8 pH		7.8 pH	7.8 pH		
			PH							
27	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
28	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
29	selenium {  selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
30	zinc {  zinc oxide }				96 mg/kg	1.245	112.681 mg/kg	0.0113 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
31	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
32	vanadium {  divanadium pentaoxide; vanadium pentoxide }				80 mg/kg	1.785	134.674 mg/kg	0.0135 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0468 %		

Key

-  User supplied data
-  Determinand values ignored for classification, see column 'Conc. Not Used' for reason
-  Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS242--05092022-0.20

**Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS242--05092022-0.20</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>8.2%</b> (wet weight correction)	

**Hazard properties**

None identified

**Determinands**

Moisture content: 8.2% Wet Weight Moisture Correction applied (MC)

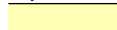





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	24 mg/kg	1.32	29.089 mg/kg	0.00291 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1 mg/kg	2.775	2.803 mg/kg	0.00028 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.6 mg/kg	13.43	7.397 mg/kg	0.00074 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		34 mg/kg	1.462	49.693 mg/kg	0.00497 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide }				18 mg/kg	1.126	18.604 mg/kg	0.00186 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
19	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
20	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
21	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	26 mg/kg		23.868 mg/kg	0.00239 %	✓	
	082-001-00-6									
25	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
26	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
27	nickel { nickel dihydroxide }				34 mg/kg	1.579	49.299 mg/kg	0.00493 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
28	pH				7.7 pH		7.7 pH	7.7 pH		
			PH							
29	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
30	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
32	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
34	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
35	zinc { zinc oxide }				89 mg/kg	1.245	101.696 mg/kg	0.0102 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
36	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				56 mg/kg	1.785	91.773 mg/kg	0.00918 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.0393 %		

Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP206--08092022-0.20

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP206--08092022-0.20</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>7.1%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 7.1% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	59 mg/kg	1.32	72.368 mg/kg	0.00724 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5 mg/kg	2.775	3.867 mg/kg	0.000387 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.4 mg/kg	13.43	4.991 mg/kg	0.000499 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	55 mg/kg	1.462	80.386 mg/kg	0.00804 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	18 mg/kg	1.126	18.827 mg/kg	0.00188 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	26 mg/kg		24.154 mg/kg	0.00242 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				34 mg/kg	1.579	49.89 mg/kg	0.00499 %	✓		
26	pH PH				7.8 pH		7.8 pH	7.8 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				99 mg/kg	1.245	114.478 mg/kg	0.0114 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				100 mg/kg	1.785	165.844 mg/kg	0.0166 %	✓		
Total:									0.0544 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP217--08092022-0.40

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP217--08092022-0.40</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>2.5%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 2.5% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	78 mg/kg	1.32	100.411 mg/kg	0.01 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5 mg/kg	2.775	4.059 mg/kg	0.000406 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.2 mg/kg	13.43	2.619 mg/kg	0.000262 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	55 mg/kg	1.462	80.386 mg/kg	0.00804 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	12 mg/kg	1.126	13.173 mg/kg	0.00132 %	✓	


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	15 mg/kg		14.625 mg/kg	0.00146 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				30 mg/kg	1.579	46.2 mg/kg	0.00462 %	✓		
26	pH PH				8.3 pH		8.3 pH	8.3 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				80 mg/kg	1.245	97.088 mg/kg	0.00971 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				110 mg/kg	1.785	191.461 mg/kg	0.0191 %	✓		
Total:									0.0559 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: TP218--08092022-0.15

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP218--08092022-0.15</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>6.6%</b> (wet weight correction)		

**Hazard properties**

None identified




**Determinands**

Moisture content: 6.6% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	41 mg/kg	1.32	50.561 mg/kg	0.00506 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1 mg/kg	2.775	2.851 mg/kg	0.000285 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.5 mg/kg	13.43	6.272 mg/kg	0.000627 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	38 mg/kg	1.462	55.539 mg/kg	0.00555 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	20 mg/kg	1.126	21.032 mg/kg	0.0021 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	27 mg/kg		25.218 mg/kg	0.00252 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				25 mg/kg	1.579	36.881 mg/kg	0.00369 %	✓		
26	pH PH				7 pH		7 pH	7pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				83 mg/kg	1.245	96.493 mg/kg	0.00965 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				68 mg/kg	1.785	113.381 mg/kg	0.0113 %	✓		
Total:									0.0417 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
-  Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
-  Newer version of determinand available
-  This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP219--08092022-0.25

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP219--08092022-0.25</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>5.3%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 5.3% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	51 mg/kg	1.32	63.768 mg/kg	0.00638 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.4 mg/kg	2.775	3.68 mg/kg	0.000368 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.4 mg/kg	13.43	5.087 mg/kg	0.000509 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	50 mg/kg	1.462	73.078 mg/kg	0.00731 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	20 mg/kg	1.126	21.324 mg/kg	0.00213 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	27 mg/kg		25.569 mg/kg	0.00256 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				34 mg/kg	1.579	50.857 mg/kg	0.00509 %	✓		
26	pH PH				7.7 pH		7.7 pH	7.7 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				110 mg/kg	1.245	129.662 mg/kg	0.013 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				97 mg/kg	1.785	163.985 mg/kg	0.0164 %	✓		
Total:									0.0546 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- ⚗ Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- 📄 Newer version of determinand available
- 🇪🇺 This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP214--08092022-0.50

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP214--08092022-0.50</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>6.8%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 6.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	64 mg/kg	1.32	78.755 mg/kg	0.00788 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.7 mg/kg	2.775	4.397 mg/kg	0.00044 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.3 mg/kg	13.43	3.755 mg/kg	0.000376 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	64 mg/kg	1.462	93.54 mg/kg	0.00935 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	21 mg/kg	1.126	22.036 mg/kg	0.0022 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	17 mg/kg		15.844 mg/kg	0.00158 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				41 mg/kg	1.579	60.356 mg/kg	0.00604 %	✓		
26	pH PH				7.9 pH		7.9 pH	7.9 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				94 mg/kg	1.245	109.047 mg/kg	0.0109 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				120 mg/kg	1.785	199.655 mg/kg	0.02 %	✓		
Total:									0.0597 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: TP223--08092022-0.15

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP223--08092022-0.15</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>5.8%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 5.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	18 mg/kg	1.32	22.387 mg/kg	0.00224 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.79 mg/kg	2.775	2.065 mg/kg	0.000207 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.6 mg/kg	13.43	7.591 mg/kg	0.000759 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	28 mg/kg	1.462	40.924 mg/kg	0.00409 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	16 mg/kg	1.126	16.969 mg/kg	0.0017 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	25 mg/kg		23.55 mg/kg	0.00236 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				18 mg/kg	1.579	26.782 mg/kg	0.00268 %	✓		
26	pH PH				7.7 pH		7.7 pH	7.7 pH			
27	phenanthrene 201-581-5 85-01-8				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				56 mg/kg	1.245	65.661 mg/kg	0.00657 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				45 mg/kg	1.785	75.674 mg/kg	0.00757 %	✓		
Total:									0.0291 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

## Appendix A: Classifier defined and non GB MCL determinands

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 23 Jul 2015

Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **boron tribromide/trichloride/trifluoride (combined)** (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride

Data source: N/A

Data source date: 06 Aug 2015

Hazard Statements: EUH014 , Acute Tox. 2; H330 , Acute Tox. 2; H300 , Skin Corr. 1A; H314 , Skin Corr. 1B; H314

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database

Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H332 , Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Resp. Sens. 1; H334 , Skin Sens. 1; H317 , Repr. 1B; H360FD , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

GB MCL index number: 006-007-00-5

Description/Comments: Conversion factor based on a worst case compound: sodium cyanide

Additional Hazard Statement(s): EUH032 >= 0.2 %

Reason for additional Hazards Statement(s):

20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Carc. 2; H351

• **lead compounds with the exception of those specified elsewhere in this Annex**

GB MCL index number: 082-001-00-6

Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium  
www.reach-lead.eu/substanceinformation.html. Review date 29/09/2015

• **pH (CAS Number: PH)**

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

• **phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)**

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Carc. 2; H351, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Skin Irrit. 2; H315

• **pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)**

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

• **monohydric phenols (CAS Number: P1186)**

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)

Data source: CLP combined data

Data source date: 26 Mar 2019

Hazard Statements: Muta. 2; H341, Acute Tox. 3; H331, Acute Tox. 3; H311, Acute Tox. 3; H301, STOT RE 2; H373, Skin Corr. 1B; H314, Skin Corr. 1B; H314 >= 3 %, Skin Irrit. 2; H315 1 £ conc. < 3 %, Eye Irrit. 2; H319 1 £ conc. < 3 %, Aquatic Chronic 2; H411

**divanadium pentaoxide; vanadium pentoxide (EC Number: 215-239-8, CAS Number: 1314-62-1)**

EU CLP index number: 023-001-00-8

Description/Comments:

Additional Hazard Statement(s): None.

• **ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)**

GB MCL index number: 601-023-00-4

Description/Comments:

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

• **TPH (C6 to C40) petroleum group (CAS Number: TPH)**

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: Flam. Liq. 3; H226, Asp. Tox. 1; H304, STOT RE 2; H373, Muta. 1B; H340, Carc. 1B; H350, Repr. 2; H361d, Aquatic Chronic 2; H411

• **hexachloroethane (EC Number: 200-666-4, CAS Number: 67-72-1)**

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335, Carc. 2; H351, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, STOT RE 2; H373

• **2-nitrophenol (EC Number: 201-857-5, CAS Number: 88-75-5)**

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302, Acute Tox. 4; H312, Skin Irrit. 2; H315, Eye Irrit. 2; H319, Acute Tox. 4; H332, STOT SE 3; H335, STOT RE 2; H373, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

• **bis(2-chloroethoxy)methane** (EC Number: 203-920-2, CAS Number: 111-91-1)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 3; H301 , Acute Tox. 4; H312 , Acute Tox. 1; H330 , Acute Tox. 2; H330 , STOT SE 1; H370 , STOT RE 2; H373

• **2-methyl naphthalene** (EC Number: 202-078-3, CAS Number: 91-57-6)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , STOT SE 3; H336 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **2-chloronaphthalene** (EC Number: 202-079-9, CAS Number: 91-58-7)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

• **dimethyl phthalate** (EC Number: 205-011-6, CAS Number: 131-11-3)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , STOT SE 3; H335 , STOT SE 3; H336 , Repr. 2; H361 , Aquatic Chronic 3; H412

• **dibenzofuran** (EC Number: 205-071-3, CAS Number: 132-64-9)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Acute Tox. 4; H332 , Aquatic Chronic 2; H411

• **4-chlorophenylphenylether** (EC Number: 230-281-7, CAS Number: 7005-72-3)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **diethyl phthalate** (EC Number: 201-550-6, CAS Number: 84-66-2)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Skin Irrit. 2; H315 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , STOT SE 3; H335 , STOT RE 2; H373 , Repr. 2; H361 , Acute Tox. 4; H302 , STOT SE 3; H336 , Skin Sens. 1; H317 , Aquatic Chronic 1; H410

• **4-bromophenylphenylether** (EC Number: 202-952-4, CAS Number: 101-55-3)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **carbazole** (EC Number: 201-696-0, CAS Number: 86-74-8)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Muta. 2; H341 , Carc. 2; H351 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , Acute Tox. 3; H301

• **1,2,3-trichlorobenzene** (EC Number: 201-757-1, CAS Number: 87-61-6)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , STOT SE 3; H336 , Aquatic Acute 1; H400 , Aquatic Chronic 3; H410

• **1,3-dichloropropane** (EC Number: 205-531-3, CAS Number: 142-28-9)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H332 , Flam. Liq. 2; H225 , Flam. Liq. 3; H226 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335

• **2,2-dichloropropane** (EC Number: 209-832-0, CAS Number: 594-20-7)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H332 , Flam. Liq. 2; H225 , Acute Tox. 4; H302 , Acute Tox. 4; H312 , Eye Irrit. 2; H319

• **bromodichloromethane** (EC Number: 200-856-7, CAS Number: 75-27-4)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 1A; H360

• **n-butylbenzene** (EC Number: 203-209-7, CAS Number: 104-51-8)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **dibromochloromethane** (EC Number: 204-704-0, CAS Number: 124-48-1)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 4; H332 , STOT SE 3; H335 , STOT SE 3; H336 , Muta. 2; H341 , Aquatic Chronic 2; H411

• **hexachlorobutadiene** (EC Number: 201-765-5, CAS Number: 87-68-3)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 3; H301 , Acute Tox. 2; H310 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Irrit. 2; H319 , Acute Tox. 2; H330 , Carc. 2; H351 , Repr. 2; H361 , STOT SE 2; H371 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **4-isopropyltoluene** (EC Number: 202-796-7, CAS Number: 99-87-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Chronic 2; H411

• **sec-butylbenzene** (EC Number: 205-227-0, CAS Number: 135-98-8)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Aquatic Chronic 2; H411

• **trans-1,3-dichloropropene** (EC Number: 431-460-4, CAS Number: 10061-02-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Acute Tox. 3; H301 , Asp. Tox. 1; H304 , Acute Tox. 3; H311 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Irrit. 2; H319 , Acute Tox. 4; H332 , STOT SE 3; H335 , Aquatic Chronic 1; H410

• **tert-butylbenzene** (EC Number: 202-632-4, CAS Number: 98-06-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , Acute Tox. 4; H332 , STOT SE 3; H335 , Asp. Tox. 1; H304 , Aquatic Chronic 2; H411



• **1,1,1,2-tetrachloroethane** (EC Number: 211-135-1, CAS Number: 630-20-6)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , Eye Dam. 1; H318 , Acute Tox. 4; H332 , Carc. 2; H351 , Acute Tox. 4; H312 , Aquatic Chronic 3; H412 , Skin Irrit. 2; H315

• **trichlorofluoromethane** (EC Number: 200-892-3, CAS Number: 75-69-4)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H312 , Ozone 1; H420

## Appendix B: Rationale for selection of metal species

### arsenic {arsenic trioxide}

Worst case species based on hazard statements

### beryllium {beryllium oxide}

Worst case species based on hazard statements

### boron {boron tribromide/trichloride/trifluoride (combined)}

Worst case species based on hazard statements

### cadmium {cadmium sulfide}

Worst case species based on hazard statements

### chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Worst case species based on hazard statements

### chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case species based on hazard statements

### copper {dicopper oxide; copper (I) oxide}

Most likely common species

### cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

### lead {lead compounds with the exception of those specified elsewhere in this Annex}

Worst case species based on hazard statements

### mercury {mercury dichloride}

Worst case species based on hazard statements

### nickel {nickel dihydroxide}

Worst case species based on hazard statements

### selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on hazard statements

### zinc {zinc oxide}

Worst case species based on hazard statements

### vanadium {divanadium pentaoxide; vanadium pentoxide}

Worst case species based on hazard statements.

## Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition v1.2.GB - Oct 2021**

HazWasteOnline Classification Engine Version: 2022.263.5340.9974 (20 Sep 2022)

HazWasteOnline Database: 2022.273.5362.10003 (03 Oct 2022)

This classification utilises the following guidance and legislation:

**WM3 v1.2.GB - Waste Classification** - 1st Edition v1.2.GB - Oct 2021

**CLP Regulation** - Regulation 1272/2008/EC of 16 December 2008

**1st ATP** - Regulation 790/2009/EC of 10 August 2009

**2nd ATP** - Regulation 286/2011/EC of 10 March 2011

**3rd ATP** - Regulation 618/2012/EU of 10 July 2012

**4th ATP** - Regulation 487/2013/EU of 8 May 2013

**Correction to 1st ATP** - Regulation 758/2013/EU of 7 August 2013

**5th ATP** - Regulation 944/2013/EU of 2 October 2013

**6th ATP** - Regulation 605/2014/EU of 5 June 2014

**WFD Annex III replacement** - Regulation 1357/2014/EU of 18 December 2014

**Revised List of Waste 2014** - Decision 2014/955/EU of 18 December 2014

**7th ATP** - Regulation 2015/1221/EU of 24 July 2015

**8th ATP** - Regulation (EU) 2016/918 of 19 May 2016

**9th ATP** - Regulation (EU) 2016/1179 of 19 July 2016

**10th ATP** - Regulation (EU) 2017/776 of 4 May 2017

**HP14 amendment** - Regulation (EU) 2017/997 of 8 June 2017

**13th ATP** - Regulation (EU) 2018/1480 of 4 October 2018

**14th ATP** - Regulation (EU) 2020/217 of 4 October 2019

**15th ATP** - Regulation (EU) 2020/1182 of 19 May 2020

**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)**

**Regulations 2020** - UK: 2020 No. 1567 of 16th December 2020

**The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020** - UK:

2020 No. 1540 of 16th December 2020

**GB MCL List** - version 1.1 of 09 June 2021

# Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



138U3-ANZXL-VPEJM

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

## Job name

22-83966\_HWOL\_Results

## Description/Comments

i2 Lab Reports 22-82372, 22-82408, 22-82414, 22-82420, 22-83964, 22-83965, 22-83966 & 22-85537

## Project

191114

## Site

Begbroke

## Classified by

Name: **Nathan Thompson**  
 Date: **26 Oct 2022 19:07 GMT**  
 Telephone: **07557 345 513**

Company: **Hydrock Consultants Ltd**  
**Hawthorn Park**  
**Holdenby Road, Spratton**  
**Northampton**  
**NN6 8LD**

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

## HazWasteOnline™ Certification:

**CERTIFIED**

## Course

Hazardous Waste Classification

## Date

22 Apr 2021

Next 3 year Refresher due by Apr 2024

## Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	WS224--08092022-0.10		Non Hazardous		2
2	WS234--08092022-0.10		Non Hazardous		5
3	WS233--08092022-0.50		Non Hazardous		7
4	TP226--06092022-0.20		Non Hazardous		9
5	TP213--06092022-0.20		Non Hazardous		11
6	TP204--06092022-0.20		Non Hazardous		13

## Related documents

#	Name	Description
1	22-83966_HWOL_Results.hwol	i2 Analytical .hwol file used to populate the Job

## Report

Created by: Nathan Thompson

Created date: 26 Oct 2022 19:07 GMT

## Appendices

Appendix	Page
Appendix A: Classifier defined and non GB MCL determinands	15
Appendix B: Rationale for selection of metal species	16
Appendix C: Version	17

Classification of sample: WS224--08092022-0.10

**Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS224--08092022-0.10</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
<b>7.8%</b> (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

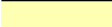





Moisture content: 7.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	25 mg/kg	1.32	30.434 mg/kg	0.00304 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.88 mg/kg	2.775	2.252 mg/kg	0.000225 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.6 mg/kg	13.43	7.429 mg/kg	0.000743 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		32 mg/kg	1.462	46.77 mg/kg	0.00468 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide }				15 mg/kg	1.126	15.571 mg/kg	0.00156 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
19	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
20	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
21	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	23 mg/kg		21.206 mg/kg	0.00212 %	✓	
	082-001-00-6									
25	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
26	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
27	nickel { nickel dihydroxide }				20 mg/kg	1.579	29.126 mg/kg	0.00291 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
28	pH				8.6 pH		8.6 pH	8.6 pH		
			PH							
29	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
30	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
32	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
34	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
35	zinc { zinc oxide }				64 mg/kg	1.245	73.448 mg/kg	0.00734 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
36	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				52 mg/kg	1.785	85.589 mg/kg	0.00856 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
Total:								0.0331 %		


Key

---

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification



Classification of sample: WS234--08092022-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>WS234--08092022-0.10</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>12%</b> (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 12% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	16 mg/kg	1.32	18.59 mg/kg	0.00186 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.99 mg/kg	2.775	2.418 mg/kg	0.000242 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		1.9 mg/kg	13.43	22.455 mg/kg	0.00225 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	37 mg/kg	1.462	54.078 mg/kg	0.00541 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	16 mg/kg	1.126	15.853 mg/kg	0.00159 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				0.21 mg/kg		0.185 mg/kg	0.0000185 %	✓		
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	22 mg/kg		19.36 mg/kg	0.00194 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				23 mg/kg	1.579	31.969 mg/kg	0.0032 %	✓		
26	pH PH				8.3 pH		8.3 pH	8.3 pH			
27	phenanthrene 201-581-5 85-01-8				0.36 mg/kg		0.317 mg/kg	0.0000317 %	✓		
28	pyrene 204-927-3 129-00-0				0.27 mg/kg		0.238 mg/kg	0.0000238 %	✓		
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				72 mg/kg	1.245	78.865 mg/kg	0.00789 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				51 mg/kg	1.785	80.119 mg/kg	0.00801 %	✓		
Total:									0.0333 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS233--08092022-0.50

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>WS233--08092022-0.50</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>8.1%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 8.1% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	24 mg/kg	1.32	29.121 mg/kg	0.00291 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.93 mg/kg	2.775	2.372 mg/kg	0.000237 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<0.2 mg/kg	13.43	<2.686 mg/kg	<0.000269 %		<LOD
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	38 mg/kg	1.462	55.539 mg/kg	0.00555 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	9.1 mg/kg	1.126	9.416 mg/kg	0.000942 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				0.27 mg/kg		0.248 mg/kg	0.0000248 %	✓		
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	10 mg/kg		9.19 mg/kg	0.000919 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				23 mg/kg	1.579	33.386 mg/kg	0.00334 %	✓		
26	pH PH				7.9 pH		7.9 pH	7.9 pH			
27	phenanthrene 201-581-5 85-01-8				0.49 mg/kg		0.45 mg/kg	0.000045 %	✓		
28	pyrene 204-927-3 129-00-0				0.32 mg/kg		0.294 mg/kg	0.0000294 %	✓		
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				48 mg/kg	1.245	54.907 mg/kg	0.00549 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				61 mg/kg	1.785	100.076 mg/kg	0.01 %	✓		
Total:									0.0307 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP226--06092022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name: <b>TP226--06092022-0.20</b>	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: <b>6%</b> (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 6% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	39 mg/kg	1.32	48.403 mg/kg	0.00484 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2 mg/kg	2.775	3.131 mg/kg	0.000313 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		1 mg/kg	13.43	12.624 mg/kg	0.00126 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		43 mg/kg	1.462	62.847 mg/kg	0.00628 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	21 mg/kg	1.126	22.225 mg/kg	0.00222 %	✓	


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				0.23 mg/kg		0.216 mg/kg	0.0000216 %	✓		
20	fluorene 201-695-5 86-73-7				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	30 mg/kg		28.2 mg/kg	0.00282 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				31 mg/kg	1.579	46.027 mg/kg	0.0046 %	✓		
26	pH PH				8 pH		8 pH	8pH			
27	phenanthrene 201-581-5 85-01-8				0.41 mg/kg		0.385 mg/kg	0.0000385 %	✓		
28	pyrene 204-927-3 129-00-0				0.3 mg/kg		0.282 mg/kg	0.0000282 %	✓		
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				110 mg/kg	1.245	128.703 mg/kg	0.0129 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				78 mg/kg	1.785	130.89 mg/kg	0.0131 %	✓		
Total:									0.0493 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification



Classification of sample: TP213--06092022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP213--06092022-0.20</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>4.3%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 4.3% Wet Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		0.32 mg/kg		0.306 mg/kg	0.0000306 %	✓	
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	31 mg/kg	1.32	39.17 mg/kg	0.00392 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.94 mg/kg	2.775	2.497 mg/kg	0.00025 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.3 mg/kg	13.43	3.856 mg/kg	0.000386 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	37 mg/kg	1.462	54.078 mg/kg	0.00541 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	18 mg/kg	1.126	19.395 mg/kg	0.00194 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD	
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
19	fluoranthene 205-912-4 206-44-0				0.44 mg/kg		0.421 mg/kg	0.0000421 %	✓		
20	fluorene 201-695-5 86-73-7				0.2 mg/kg		0.191 mg/kg	0.0000191 %	✓		
21	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	28 mg/kg		26.796 mg/kg	0.00268 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD	
24	naphthalene 601-052-00-2 202-049-5 91-20-3				0.81 mg/kg		0.775 mg/kg	0.0000775 %	✓		
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				23 mg/kg	1.579	34.766 mg/kg	0.00348 %	✓		
26	pH PH				7.9 pH		7.9 pH	7.9 pH			
27	phenanthrene 201-581-5 85-01-8				0.87 mg/kg		0.833 mg/kg	0.0000833 %	✓		
28	pyrene 204-927-3 129-00-0				0.46 mg/kg		0.44 mg/kg	0.000044 %	✓		
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD	
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				70 mg/kg	1.245	83.383 mg/kg	0.00834 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD	
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				62 mg/kg	1.785	105.922 mg/kg	0.0106 %	✓		
Total:									0.0382 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD** Below limit of detection
- ND** Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP204--06092022-0.20

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>TP204--06092022-0.20</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>5.4%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 5.4% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		0.66 mg/kg		0.624 mg/kg	0.0000624 %	✓	
2	acenaphthylene	205-917-1	208-96-8		2.5 mg/kg		2.365 mg/kg	0.000237 %	✓	
3	anthracene	204-371-1	120-12-7		1.7 mg/kg		1.608 mg/kg	0.000161 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	71 mg/kg	1.32	88.681 mg/kg	0.00887 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	1.8 mg/kg		1.703 mg/kg	0.00017 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.98 mg/kg		0.927 mg/kg	0.0000927 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	1.1 mg/kg		1.041 mg/kg	0.000104 %	✓	
8	benzo[ghi]perylene		205-883-8	191-24-2	0.82 mg/kg		0.776 mg/kg	0.0000776 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.75 mg/kg		0.709 mg/kg	0.0000709 %	✓	
10	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5 mg/kg	2.775	3.938 mg/kg	0.000394 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		0.7 mg/kg	13.43	8.893 mg/kg	0.000889 %	✓	
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
13	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	69 mg/kg	1.462	100.847 mg/kg	0.0101 %		
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
15	chrysene	601-048-00-0	205-923-4	218-01-9	1.3 mg/kg		1.23 mg/kg	0.000123 %	✓	
16	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	24 mg/kg	1.126	25.562 mg/kg	0.00256 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
18	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	fluoranthene 205-912-4 206-44-0				4.8 mg/kg		4.541 mg/kg	0.000454 %	✓		
20	fluorene 201-695-5 86-73-7				2 mg/kg		1.892 mg/kg	0.000189 %	✓		
21	indeno[123-cd]pyrene 205-893-2 193-39-5				0.51 mg/kg		0.482 mg/kg	0.0000482 %	✓		
22	lead { lead compounds with the exception of those specified elsewhere in this Annex } 082-001-00-6			1	46 mg/kg		43.516 mg/kg	0.00435 %	✓		
23	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
24	naphthalene 601-052-00-2 202-049-5 91-20-3				1.6 mg/kg		1.514 mg/kg	0.000151 %	✓		
25	nickel { nickel dihydroxide } 028-008-00-X 235-008-5 [1] 12054-48-7 [1] 234-348-1 [2] 11113-74-9 [2]				44 mg/kg	1.579	65.745 mg/kg	0.00657 %	✓		
26	pH PH				8 pH		8 pH	8pH			
27	phenanthrene 201-581-5 85-01-8				7.4 mg/kg		7 mg/kg	0.0007 %	✓		
28	pyrene 204-927-3 129-00-0				4.5 mg/kg		4.257 mg/kg	0.000426 %	✓		
29	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
30	zinc { zinc oxide } 030-013-00-7 215-222-5 1314-13-2				110 mg/kg	1.245	129.525 mg/kg	0.013 %	✓		
31	monohydric phenols P1186				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
32	vanadium { divanadium pentaoxide; vanadium pentoxide } 023-001-00-8 215-239-8 1314-62-1				100 mg/kg	1.785	168.878 mg/kg	0.0169 %	✓		
Total:									0.0675 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- Newer version of determinand available
- This determinand is defined in the EU CLP Table 3
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

## Appendix A: Classifier defined and non GB MCL determinands

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Aquatic Chronic 2; H411

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H302, Acute Tox. 1; H330, Acute Tox. 1; H310, Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 23 Jul 2015

Hazard Statements: Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **boron tribromide/trichloride/trifluoride (combined)** (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride

Data source: N/A

Data source date: 06 Aug 2015

Hazard Statements: EUH014, Acute Tox. 2; H330, Acute Tox. 2; H300, Skin Corr. 1A; H314, Skin Corr. 1B; H314

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database

Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H332, Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Resp. Sens. 1; H334, Skin Sens. 1; H317, Repr. 1B; H360FD, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

GB MCL index number: 006-007-00-5

Description/Comments: Conversion factor based on a worst case compound: sodium cyanide

Additional Hazard Statement(s): EUH032 >= 0.2 %

Reason for additional Hazards Statement(s):

20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4

Description/Comments:

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Acute Tox. 4; H302, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Aquatic Acute 1; H400, Aquatic Chronic 1; H410

▪ **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Carc. 2; H351

▪ **lead compounds with the exception of those specified elsewhere in this Annex**

GB MCL index number: 082-001-00-6  
Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2  
Additional Hazard Statement(s): Carc. 2; H351  
Reason for additional Hazards Statement(s):  
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium [www.reach-lead.eu/substanceinformation.html](http://www.reach-lead.eu/substanceinformation.html). Review date 29/09/2015

▪ **pH** (CAS Number: PH)

Description/Comments: Appendix C4  
Data source: WM3 1st Edition 2015  
Data source date: 25 May 2015  
Hazard Statements: None.

▪ **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

▪ **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 21 Aug 2015  
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

▪ **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013  
Data source: WM3 1st Edition 2015  
Data source date: 25 May 2015  
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

▪ **monohydric phenols** (CAS Number: P1186)

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)  
Data source: CLP combined data  
Data source date: 26 Mar 2019  
Hazard Statements: Muta. 2; H341 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , Acute Tox. 3; H301 , STOT RE 2; H373 , Skin Corr. 1B; H314 , Skin Corr. 1B; H314 >= 3 % , Skin Irrit. 2; H315 1 £ conc. < 3 % , Eye Irrit. 2; H319 1 £ conc. < 3 % , Aquatic Chronic 2; H411

**divanadium pentaoxide; vanadium pentoxide** (EC Number: 215-239-8, CAS Number: 1314-62-1)

EU CLP index number: 023-001-00-8  
Description/Comments:  
Additional Hazard Statement(s): None.

**Appendix B: Rationale for selection of metal species**

**arsenic {arsenic trioxide}**

Worst case species based on hazard statements

**beryllium {beryllium oxide}**

Worst case species based on hazard statements

**boron {boron tribromide/trichloride/trifluoride (combined)}**

Worst case species based on hazard statements

**cadmium {cadmium sulfide}**

Worst case species based on hazard statements



**chromium in chromium(III) compounds {chromium(III) oxide (worst case)}**

Worst case species based on hazard statements

**chromium in chromium(VI) compounds {chromium(VI) oxide}**

Worst case species based on hazard statements

**copper {dicopper oxide; copper (I) oxide}**

Most likely common species

**cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}**

Worst case species

**lead {lead compounds with the exception of those specified elsewhere in this Annex}**

Worst case species based on hazard statements

**mercury {mercury dichloride}**

Worst case species based on hazard statements

**nickel {nickel dihydroxide}**

Worst case species based on hazard statements

**selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}**

Worst case species based on hazard statements

**zinc {zinc oxide}**

Worst case species based on hazard statements

**vanadium {divanadium pentaoxide; vanadium pentoxide}**

Worst case species based on hazard statements.

**Appendix C: Version**

HazWasteOnline Classification Engine: **WM3 1st Edition v1.2.GB - Oct 2021**  
 HazWasteOnline Classification Engine Version: 2022.263.5340.9974 (20 Sep 2022)  
 HazWasteOnline Database: 2022.273.5362.10003 (03 Oct 2022)

This classification utilises the following guidance and legislation:

**WM3 v1.2.GB - Waste Classification** - 1st Edition v1.2.GB - Oct 2021

**CLP Regulation** - Regulation 1272/2008/EC of 16 December 2008

**1st ATP** - Regulation 790/2009/EC of 10 August 2009

**2nd ATP** - Regulation 286/2011/EC of 10 March 2011

**3rd ATP** - Regulation 618/2012/EU of 10 July 2012

**4th ATP** - Regulation 487/2013/EU of 8 May 2013

**Correction to 1st ATP** - Regulation 758/2013/EU of 7 August 2013

**5th ATP** - Regulation 944/2013/EU of 2 October 2013

**6th ATP** - Regulation 605/2014/EU of 5 June 2014

**WFD Annex III replacement** - Regulation 1357/2014/EU of 18 December 2014

**Revised List of Waste 2014** - Decision 2014/955/EU of 18 December 2014

**7th ATP** - Regulation 2015/1221/EU of 24 July 2015

**8th ATP** - Regulation (EU) 2016/918 of 19 May 2016

**9th ATP** - Regulation (EU) 2016/1179 of 19 July 2016

**10th ATP** - Regulation (EU) 2017/776 of 4 May 2017

**HP14 amendment** - Regulation (EU) 2017/997 of 8 June 2017

**13th ATP** - Regulation (EU) 2018/1480 of 4 October 2018

**14th ATP** - Regulation (EU) 2020/217 of 4 October 2019

**15th ATP** - Regulation (EU) 2020/1182 of 19 May 2020

**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)**

**Regulations 2020** - UK: 2020 No. 1567 of 16th December 2020

**The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020** - UK:

2020 No. 1540 of 16th December 2020

**GB MCL List** - version 1.1 of 09 June 2021

# Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



VJI3I-4K476-2EQU4

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

## Job name

22-85537\_HWOL\_Results

## Description/Comments

i2 Lab Reports 22-82372, 22-82408, 22-82414, 22-82420, 22-83964, 22-83965, 22-83966 & 22-85537

## Project

19114

## Site

Begbroke

## Classified by

Name: **Nathan Thompson**  
 Date: **26 Oct 2022 19:10 GMT**  
 Telephone: **07557 345 513**

Company: **Hydrock Consultants Ltd**  
**Hawthorn Park**  
**Holdenby Road, Spratton**  
**Northampton**  
**NN6 8LD**

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

**HazWasteOnline™ Certification:**

**CERTIFIED**

**Course**  
 Hazardous Waste Classification

**Date**  
 22 Apr 2021

Next 3 year Refresher due by Apr 2024

## Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	HP201--14092022-0.10		Non Hazardous		2
2	HP202--14092022-0.10		Non Hazardous		5
3	HP203--14092022-0.10		Non Hazardous		11
4	HP204--14092022-0.10		Non Hazardous		14
5	HP205--14092022-0.10		Non Hazardous		17
6	HP206--14092022-0.10		Non Hazardous		23

## Related documents

#	Name	Description
1	22-85537_HWOL_Results.hwol	i2 Analytical .hwol file used to populate the Job
2	Hydrock Standard plus Cresol (ammended Lead)	waste stream template used to create this Job

## Report


Created by: Nathan Thompson

Created date: 26 Oct 2022 19:10 GMT

## Appendices

Appendix	Page
Appendix A: Classifier defined and non GB MCL determinands	26
Appendix B: Rationale for selection of metal species	30
Appendix C: Version	30

Classification of sample: HP201--14092022-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

Sample details

Sample name:	LoW Code:
<b>HP201--14092022-0.10</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>13%</b> (wet weight correction)	

Hazard properties

None identified

Determinands

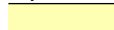





Moisture content: 13% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		0.2 mg/kg		0.174 mg/kg	0.0000174 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	25 mg/kg	1.32	28.717 mg/kg	0.00287 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.56 mg/kg		0.487 mg/kg	0.0000487 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.51 mg/kg		0.444 mg/kg	0.0000444 %	✓	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.67 mg/kg		0.583 mg/kg	0.0000583 %	✓	
9	benzo[ghi]perylene	205-883-8	191-24-2		0.51 mg/kg		0.444 mg/kg	0.0000444 %	✓	
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.27 mg/kg		0.235 mg/kg	0.0000235 %	✓	
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1 mg/kg	2.775	2.656 mg/kg	0.000266 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		2 mg/kg	13.43	23.368 mg/kg	0.00234 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		30 mg/kg	1.462	43.847 mg/kg	0.00438 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	2 mg/kg	1.923	3.846 mg/kg	0.000385 %		
16	chrysene	601-048-00-0	205-923-4	218-01-9	0.53 mg/kg		0.461 mg/kg	0.0000461 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide }				21 mg/kg	1.126	20.57 mg/kg	0.00206 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
19	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
20	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
21	fluoranthene				0.79 mg/kg		0.687 mg/kg	0.0000687 %	✓	
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				0.33 mg/kg		0.287 mg/kg	0.0000287 %	✓	
		205-893-2	193-39-5							
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	38 mg/kg		33.06 mg/kg	0.00331 %	✓	
	082-001-00-6									
25	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
26	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
27	nickel { nickel dihydroxide }				25 mg/kg	1.579	34.354 mg/kg	0.00344 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
28	pH				7.8 pH		7.8 pH	7.8 pH		
			PH							
29	phenanthrene				0.59 mg/kg		0.513 mg/kg	0.0000513 %	✓	
		201-581-5	85-01-8							
30	pyrene				0.68 mg/kg		0.592 mg/kg	0.0000592 %	✓	
		204-927-3	129-00-0							
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
32	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
34	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
35	zinc { zinc oxide }				130 mg/kg	1.245	140.777 mg/kg	0.0141 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
36	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
37	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
38	vanadium { divanadium pentaoxide; vanadium pentoxide }				51 mg/kg	1.785	79.209 mg/kg	0.00792 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.043 %		

Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

---

### Supplementary Hazardous Property Information

**HP 2: Oxidizing** "waste which may, generally by providing oxygen, cause or contribute to the combustion of other materials"

Force this Hazardous property to non hazardous because Not enough metal to create oxidising conditions.

Hazard Statements hit:

---

**Ox. Sol. 1; H271** "May cause fire or explosion; strong oxidiser."

Because of determinand:

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chromium(VI) oxide: (compound conc.: 0.00038%)

Classification of sample: HP202--14092022-0.10

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>HP202--14092022-0.10</b>	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
<b>11%</b> (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

**Hazard properties**

None identified

**Determinands**

Moisture content: 11% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		0.81 mg/kg		0.721 mg/kg	0.0000721 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	30 mg/kg	1.32	35.253 mg/kg	0.00353 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	2.3 mg/kg		2.047 mg/kg	0.000205 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	1.8 mg/kg		1.602 mg/kg	0.00016 %	✓	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	2 mg/kg		1.78 mg/kg	0.000178 %	✓	
9	benzo[ghi]perylene		205-883-8	191-24-2	1.6 mg/kg		1.424 mg/kg	0.000142 %	✓	
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	1.5 mg/kg		1.335 mg/kg	0.000133 %	✓	
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2 mg/kg	2.775	2.964 mg/kg	0.000296 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		3.9 mg/kg	13.43	46.616 mg/kg	0.00466 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		39 mg/kg	1.462	57.001 mg/kg	0.0057 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	1.7 mg/kg		1.513 mg/kg	0.000151 %	✓	



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide }				30 mg/kg	1.126	30.061 mg/kg	0.00301 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
19	dibenz[a,h]anthracene				0.38 mg/kg		0.338 mg/kg	0.0000338 %	✓	
	601-041-00-2	200-181-8	53-70-3							
20	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
21	fluoranthene				3.2 mg/kg		2.848 mg/kg	0.000285 %	✓	
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				1.2 mg/kg		1.068 mg/kg	0.000107 %	✓	
		205-893-2	193-39-5							
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	50 mg/kg		44.5 mg/kg	0.00445 %	✓	
	082-001-00-6									
25	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
26	naphthalene				<0.0001 mg/kg		<0.0001 mg/kg	<0.00000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
27	nickel { nickel dihydroxide }				27 mg/kg	1.579	37.955 mg/kg	0.0038 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
28	pH				7.1 pH		7.1 pH	7.1 pH		
			PH							
29	phenanthrene				2.6 mg/kg		2.314 mg/kg	0.000231 %	✓	
		201-581-5	85-01-8							
30	phenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
31	pyrene				3.1 mg/kg		2.759 mg/kg	0.000276 %	✓	
		204-927-3	129-00-0							
32	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
33	tetrachloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-028-00-4	204-825-9	127-18-4							
34	carbon tetrachloride; tetrachloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-008-00-5	200-262-8	56-23-5							
35	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
36	TPH (C6 to C40) petroleum group				63 mg/kg		56.07 mg/kg	0.00561 %	✓	
			TPH							
37	trichloroethylene; trichloroethene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-027-00-9	201-167-4	79-01-6							
38	vinyl chloride; chloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-023-00-7	200-831-0	75-01-4							
39	xylene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
40	zinc { zinc oxide }				260 mg/kg	1.245	288.027 mg/kg	0.0288 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
41	hexachlorobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	602-065-00-6	204-273-9	118-74-1							

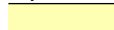





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
42	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]							
43	1,2-dichloroethane; ethylene dichloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-012-00-7	203-458-1	107-06-2							
44	monohydric phenols				1.3 mg/kg		1.3 mg/kg	0.00013 %		
			P1186							
45	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
46	vanadium { divanadium pentaoxide; vanadium pentoxide }				55 mg/kg	1.785	87.385 mg/kg	0.00874 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
47	1,1,1-trichloroethane; methyl chloroform				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-013-00-2	200-756-3	71-55-6							
48	1,1,1,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5							
49	1,1,2-trichloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-014-00-8	201-166-9	79-00-5							
50	1,1-dichloroethylene; vinylidene chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-025-00-8	200-864-0	75-35-4							
51	1,1-dichloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-011-00-1	200-863-5	75-34-3							
52	1,1-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-031-00-0	209-253-3	563-58-6							
53	1,2,3-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		201-757-1	87-61-6							
54	1,2,4-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-043-00-3	202-436-9	95-63-6							
55	1,2-dibromoethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-010-00-6	203-444-5	106-93-4							
56	1,2-dichlorobenzene; o-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-034-00-7	202-425-9	95-50-1							
57	1,2-dichloropropane; propylene dichloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-020-00-0	201-152-2	78-87-5							
58	1,3-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-067-00-7	208-792-1	541-73-1							
59	1,3-dichloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		205-531-3	142-28-9							
60	1,4-dichlorobenzene; p-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-035-00-2	203-400-5	106-46-7							
61	2,2-dichloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		209-832-0	594-20-7							
62	bromodichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		200-856-7	75-27-4							
63	bromomethane; methylbromide				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-002-00-2	200-813-2	74-83-9							
64	bromobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-060-00-9	203-623-8	108-86-1							
65	n-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		203-209-7	104-51-8							
66	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]							
67	chlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-033-00-1	203-628-5	108-90-7							
68	chloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-009-00-0	200-830-5	75-00-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
69	chloroform; trichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-006-00-4	200-663-8	67-66-3							
70	chloromethane; methyl chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-001-00-7	200-817-4	74-87-3							
71	dibromochloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		204-704-0	124-48-1							
72	1,2-dibromo-3-chloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-021-00-6	202-479-3	96-12-8							
73	dibromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-003-00-8	200-824-2	74-95-3							
74	hexachlorobutadiene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		201-765-5	87-68-3							
75	4-isopropyltoluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		202-796-7	99-87-6							
76	sec-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		205-227-0	135-98-8							
77	styrene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-026-00-0	202-851-5	100-42-5							
78	trans-1,3-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		431-460-4	10061-02-6							
79	tert-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		202-632-4	98-06-6							
80	bromoform; tribromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-007-00-X	200-854-6	75-25-2							
81	1,2,4-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-087-00-6	204-428-0	120-82-1							
82	1,1,1,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		211-135-1	630-20-6							
83	trichlorofluoromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		200-892-3	75-69-4							
84	mesitylene; 1,3,5-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-025-00-5	203-604-4	108-67-8							
85	aniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-008-00-7	200-539-3	62-53-3							
86	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]							
87	bis(2-chloroethyl) ether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	603-029-00-2	203-870-1	111-44-4							
88	hexachloroethane				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		200-666-4	67-72-1							
89	nitrobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	609-003-00-7	202-716-0	98-95-3							
90	3,5,5-trimethylcyclohex-2-enone; isophorone				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	606-012-00-8	201-126-0	78-59-1							
91	2-nitrophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-857-5	88-75-5							
92	3,4-xylenol; [1] 2,5-xylenol; [2] 2,4-xylenol; [3] 2,3-xylenol; [4] 2,6-xylenol; [5] xylenol; [6] 2,4(or 2,5)-xylenol [7]				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]							
93	bis(2-chloroethoxy)methane				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		203-920-2	111-91-1							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
94	2,4-dichlorophenol 604-011-00-7	204-429-6	120-83-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
95	4-chloroaniline 612-137-00-9	203-401-0	106-47-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
96	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol 604-014-00-3	200-431-6	59-50-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
97	2,4,6-trichlorophenol 604-018-00-5	201-795-9	88-06-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
98	2,4,5-trichlorophenol 604-017-00-X	202-467-8	95-95-4		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
99	2-methyl naphthalene 202-078-3	91-57-6			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
100	2-chloronaphthalene 202-079-9	91-58-7			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
101	dimethyl phthalate 205-011-6	131-11-3			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
102	2,6-dinitrotoluene 609-049-00-8	210-106-0	606-20-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
103	2,4-dinitrotoluene; [1] dinitrotoluene [2] 609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
104	dibenzofuran 205-071-3	132-64-9			<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
105	4-chlorophenylphenylether 230-281-7	7005-72-3			<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
106	diethyl phthalate 201-550-6	84-66-2			<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
107	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3] 612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
108	azobenzene 611-001-00-6	203-102-5	103-33-3		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
109	4-bromophenylphenylether 202-952-4	101-55-3			<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
110	carbazole 201-696-0	86-74-8			<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
111	dibutyl phthalate; DBP 607-318-00-4	201-557-4	84-74-2		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
112	anthraquinone 606-151-00-4	201-549-0	84-65-1		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
113	BBP; benzyl butyl phthalate 607-430-00-3	201-622-7	85-68-7		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
114	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4] 602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
115	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3] 602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
116	cumene; [1] propylbenzene [2] 601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
Total:								0.0721 %		

Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

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### Supplementary Hazardous Property Information

**HP 3(i): Flammable** "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because **No Free Product Identified, unlikely to be hazardous.**

Hazard Statements hit:

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**Flam. Liq. 3; H226** "Flammable liquid and vapour."

Because of determinand:

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TPH (C6 to C40) petroleum group: (conc.: 0.00561%)

Classification of sample: HP203--14092022-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>HP203--14092022-0.10</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>13%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 13% Wet Weight Moisture Correction applied (MC)







#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	215-481-4	1327-53-3		23 mg/kg	1.32	26.42 mg/kg	0.00264 %	✓	
5	benzene	200-753-7	71-43-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	200-280-6	56-55-3		0.18 mg/kg		0.157 mg/kg	0.0000157 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	200-028-5	50-32-8		0.24 mg/kg		0.209 mg/kg	0.0000209 %	✓	
8	benzo[b]fluoranthene	205-911-9	205-99-2		0.27 mg/kg		0.235 mg/kg	0.0000235 %	✓	
9	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	205-916-6	207-08-9		0.14 mg/kg		0.122 mg/kg	0.0000122 %	✓	
11	beryllium { beryllium oxide }	215-133-1	1304-56-9		1.1 mg/kg	2.775	2.656 mg/kg	0.000266 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		1.4 mg/kg	13.43	16.358 mg/kg	0.00164 %	✓	
13	cadmium { cadmium sulfide }	215-147-8	1306-23-6	1	1.2 mg/kg	1.285	1.342 mg/kg	0.000104 %	✓	
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		36 mg/kg	1.462	52.616 mg/kg	0.00526 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
16	chrysene	205-923-4	218-01-9		0.23 mg/kg		0.2 mg/kg	0.00002 %	✓	



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide }				23 mg/kg	1.126	22.529 mg/kg	0.00225 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
19	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
20	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
21	fluoranthene				0.27 mg/kg		0.235 mg/kg	0.0000235 %	✓	
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	44 mg/kg		38.28 mg/kg	0.00383 %	✓	
	082-001-00-6									
25	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
26	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
27	nickel { nickel dihydroxide }				27 mg/kg	1.579	37.102 mg/kg	0.00371 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
28	pH				7.7 pH		7.7 pH	7.7 pH		
			PH							
29	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
30	pyrene				0.25 mg/kg		0.218 mg/kg	0.0000218 %	✓	
		204-927-3	129-00-0							
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
32	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
34	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
35	zinc { zinc oxide }				130 mg/kg	1.245	140.777 mg/kg	0.0141 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
36	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
37	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
38	vanadium { divanadium pentaoxide; vanadium pentoxide }				54 mg/kg	1.785	83.868 mg/kg	0.00839 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0442 %		

Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: HP204--14092022-0.10

**Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:
<b>HP204--14092022-0.10</b>	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>8.9%</b> (wet weight correction)	

**Hazard properties**

None identified

**Determinands**







Moisture content: 8.9% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	acenaphthene	201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	18	mg/kg	1.32	21.651	mg/kg	0.00217 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.25	mg/kg		0.228	mg/kg	0.0000228 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene		205-883-8	191-24-2	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.98	mg/kg	2.775	2.478	mg/kg	0.000248 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }			10294-33-4, 10294-34-5, 7637-07-2	2.3	mg/kg	13.43	28.14	mg/kg	0.00281 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9	30	mg/kg	1.462	43.847	mg/kg	0.00438 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	0.25	mg/kg		0.228	mg/kg	0.0000228 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide }				21 mg/kg	1.126	21.539 mg/kg	0.00215 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
19	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
20	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
21	fluoranthene				0.28 mg/kg		0.255 mg/kg	0.0000255 %	✓	
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	30 mg/kg		27.33 mg/kg	0.00273 %	✓	
	082-001-00-6									
25	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
26	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
27	nickel { nickel dihydroxide }				26 mg/kg	1.579	37.412 mg/kg	0.00374 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
28	pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
29	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
30	pyrene				0.25 mg/kg		0.228 mg/kg	0.0000228 %	✓	
		204-927-3	129-00-0							
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
32	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
34	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
35	zinc { zinc oxide }				110 mg/kg	1.245	124.733 mg/kg	0.0125 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
36	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
37	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
38	vanadium { divanadium pentaoxide; vanadium pentoxide }				44 mg/kg	1.785	71.557 mg/kg	0.00716 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0399 %		

Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: HP205--14092022-0.10

✔ **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>HP205--14092022-0.10</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>13%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 13% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	21 mg/kg	1.32	24.122 mg/kg	0.00241 %	✔	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.85 mg/kg	2.775	2.052 mg/kg	0.000205 %	✔	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		3.9 mg/kg	13.43	45.568 mg/kg	0.00456 %	✔	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		26 mg/kg	1.462	38 mg/kg	0.0038 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide }				22 mg/kg	1.126	21.55 mg/kg	0.00215 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
19	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
20	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
21	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	47 mg/kg		40.89 mg/kg	0.00409 %	✓	
	082-001-00-6									
25	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
26	naphthalene				<0.0001 mg/kg		<0.0001 mg/kg	<0.00000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
27	nickel { nickel dihydroxide }				23 mg/kg	1.579	31.606 mg/kg	0.00316 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
28	pH				7.5 pH		7.5 pH	7.5 pH		
			PH							
29	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
30	phenol				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
31	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
32	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
33	tetrachloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-028-00-4	204-825-9	127-18-4							
34	carbon tetrachloride; tetrachloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-008-00-5	200-262-8	56-23-5							
35	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
36	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
37	trichloroethylene; trichloroethene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-027-00-9	201-167-4	79-01-6							
38	vinyl chloride; chloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-023-00-7	200-831-0	75-01-4							
39	xylene				<0.004 mg/kg		<0.004 mg/kg	<0.0000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
40	zinc { zinc oxide }				150 mg/kg	1.245	162.435 mg/kg	0.0162 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
41	hexachlorobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	602-065-00-6	204-273-9	118-74-1							

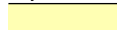





#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
42	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	604-004-00-9	203-577-9 [1]	108-39-4 [1]							
		202-423-8 [2]	95-48-7 [2]							
		203-398-6 [3]	106-44-5 [3]							
		215-293-2 [4]								
43	1,2-dichloroethane; ethylene dichloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-012-00-7	203-458-1	107-06-2							
44	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
45	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
46	vanadium { divanadium pentaoxide; vanadium pentoxide }				42 mg/kg	1.785	65.231 mg/kg	0.00652 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
47	1,1,1-trichloroethane; methyl chloroform				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-013-00-2	200-756-3	71-55-6							
48	1,1,1,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5							
49	1,1,2-trichloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-014-00-8	201-166-9	79-00-5							
50	1,1-dichloroethylene; vinylidene chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-025-00-8	200-864-0	75-35-4							
51	1,1-dichloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-011-00-1	200-863-5	75-34-3							
52	1,1-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-031-00-0	209-253-3	563-58-6							
53	1,2,3-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		201-757-1	87-61-6							
54	1,2,4-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-043-00-3	202-436-9	95-63-6							
55	1,2-dibromoethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-010-00-6	203-444-5	106-93-4							
56	1,2-dichlorobenzene; o-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-034-00-7	202-425-9	95-50-1							
57	1,2-dichloropropane; propylene dichloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-020-00-0	201-152-2	78-87-5							
58	1,3-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-067-00-7	208-792-1	541-73-1							
59	1,3-dichloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		205-531-3	142-28-9							
60	1,4-dichlorobenzene; p-dichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-035-00-2	203-400-5	106-46-7							
61	2,2-dichloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		209-832-0	594-20-7							
62	bromodichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		200-856-7	75-27-4							
63	bromomethane; methylbromide				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-002-00-2	200-813-2	74-83-9							
64	bromobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-060-00-9	203-623-8	108-86-1							
65	n-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		203-209-7	104-51-8							
66	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-030-00-5	208-826-5 [1]	542-75-6 [1]							
		233-195-8 [2]								
67	chlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-033-00-1	203-628-5	108-90-7							
68	chloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-009-00-0	200-830-5	75-00-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
69	chloroform; trichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-006-00-4	200-663-8	67-66-3							
70	chloromethane; methyl chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-001-00-7	200-817-4	74-87-3							
71	dibromochloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		204-704-0	124-48-1							
72	1,2-dibromo-3-chloropropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-021-00-6	202-479-3	96-12-8							
73	dibromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-003-00-8	200-824-2	74-95-3							
74	hexachlorobutadiene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		201-765-5	87-68-3							
75	4-isopropyltoluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		202-796-7	99-87-6							
76	sec-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		205-227-0	135-98-8							
77	styrene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-026-00-0	202-851-5	100-42-5							
78	trans-1,3-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		431-460-4	10061-02-6							
79	tert-butylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		202-632-4	98-06-6							
80	bromoform; tribromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-007-00-X	200-854-6	75-25-2							
81	1,2,4-trichlorobenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	602-087-00-6	204-428-0	120-82-1							
82	1,1,1,2-tetrachloroethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		211-135-1	630-20-6							
83	trichlorofluoromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
		200-892-3	75-69-4							
84	mesitylene; 1,3,5-trimethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-025-00-5	203-604-4	108-67-8							
85	aniline				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	612-008-00-7	200-539-3	62-53-3							
86	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]							
87	bis(2-chloroethyl) ether				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	603-029-00-2	203-870-1	111-44-4							
88	hexachloroethane				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		200-666-4	67-72-1							
89	nitrobenzene				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	609-003-00-7	202-716-0	98-95-3							
90	3,5,5-trimethylcyclohex-2-enone; isophorone				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
	606-012-00-8	201-126-0	78-59-1							
91	2-nitrophenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		201-857-5	88-75-5							
92	3,4-xylenol; [1] 2,5-xylenol; [2] 2,4-xylenol; [3] 2,3-xylenol; [4] 2,6-xylenol; [5] xylenol; [6] 2,4(or 2,5)-xylenol [7]				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]							
93	bis(2-chloroethoxy)methane				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		203-920-2	111-91-1							


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
94	2,4-dichlorophenol 604-011-00-7	204-429-6	120-83-2		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
95	4-chloroaniline 612-137-00-9	203-401-0	106-47-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
96	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol 604-014-00-3	200-431-6	59-50-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
97	2,4,6-trichlorophenol 604-018-00-5	201-795-9	88-06-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
98	2,4,5-trichlorophenol 604-017-00-X	202-467-8	95-95-4		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
99	2-methyl naphthalene 202-078-3	91-57-6			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
100	2-chloronaphthalene 202-079-9	91-58-7			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
101	dimethyl phthalate 205-011-6	131-11-3			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
102	2,6-dinitrotoluene 609-049-00-8	210-106-0	606-20-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
103	2,4-dinitrotoluene; [1] dinitrotoluene [2] 609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
104	dibenzofuran 205-071-3	132-64-9			<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
105	4-chlorophenylphenylether 230-281-7	7005-72-3			<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
106	diethyl phthalate 201-550-6	84-66-2			<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
107	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3] 612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
108	azobenzene 611-001-00-6	203-102-5	103-33-3		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
109	4-bromophenylphenylether 202-952-4	101-55-3			<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
110	carbazole 201-696-0	86-74-8			<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
111	dibutyl phthalate; DBP 607-318-00-4	201-557-4	84-74-2		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
112	anthraquinone 606-151-00-4	201-549-0	84-65-1		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
113	BBP; benzyl butyl phthalate 607-430-00-3	201-622-7	85-68-7		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
114	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4] 602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
115	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3] 602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
116	cumene; [1] propylbenzene [2] 601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
Total:								0.0457 %		

Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: HP206--14092022-0.10

 **Non Hazardous Waste**  
Classified as **17 05 04**  
in the List of Waste

**Sample details**

Sample name:	LoW Code:	
<b>HP206--14092022-0.10</b>	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
<b>11%</b> (wet weight correction)		

**Hazard properties**

None identified

**Determinands**

Moisture content: 11% Wet Weight Moisture Correction applied (MC)







#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	32 mg/kg	1.32	37.603 mg/kg	0.00376 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.38 mg/kg		0.338 mg/kg	0.0000338 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.37 mg/kg		0.329 mg/kg	0.0000329 %	✓	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.48 mg/kg		0.427 mg/kg	0.0000427 %	✓	
9	benzo[ghi]perylene		205-883-8	191-24-2	0.33 mg/kg		0.294 mg/kg	0.0000294 %	✓	
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.16 mg/kg		0.142 mg/kg	0.0000142 %	✓	
11	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.1 mg/kg	2.775	2.717 mg/kg	0.000272 %	✓	
12	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		2.4 mg/kg	13.43	28.686 mg/kg	0.00287 %	✓	
13	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
14	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		31 mg/kg	1.462	45.308 mg/kg	0.00453 %		
15	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	0.33 mg/kg		0.294 mg/kg	0.0000294 %	✓	



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
17	copper { dicopper oxide; copper (I) oxide }				25 mg/kg	1.126	25.051 mg/kg	0.00251 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
19	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
20	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
21	fluoranthene				0.51 mg/kg		0.454 mg/kg	0.0000454 %	✓	
		205-912-4	206-44-0							
22	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
23	indeno[123-cd]pyrene				0.23 mg/kg		0.205 mg/kg	0.0000205 %	✓	
		205-893-2	193-39-5							
24	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	44 mg/kg		39.16 mg/kg	0.00392 %	✓	
	082-001-00-6									
25	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
26	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
27	nickel { nickel dihydroxide }				27 mg/kg	1.579	37.955 mg/kg	0.0038 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
28	pH				7.5 pH		7.5 pH	7.5 pH		
			PH							
29	phenanthrene				0.28 mg/kg		0.249 mg/kg	0.0000249 %	✓	
		201-581-5	85-01-8							
30	pyrene				0.46 mg/kg		0.409 mg/kg	0.0000409 %	✓	
		204-927-3	129-00-0							
31	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
32	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
34	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
35	zinc { zinc oxide }				130 mg/kg	1.245	144.013 mg/kg	0.0144 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
36	monohydric phenols				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			P1186							
37	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
38	vanadium { divanadium pentaoxide; vanadium pentoxide }				51 mg/kg	1.785	81.03 mg/kg	0.0081 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
Total:								0.0463 %		

Key

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	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
	This determinand is defined in the EU CLP Table 3
<b>&lt;LOD</b>	Below limit of detection
<b>ND</b>	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

## Appendix A: Classifier defined and non GB MCL determinands

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 17 Jul 2015  
Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Aquatic Chronic 2; H411

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 17 Jul 2015  
Hazard Statements: Acute Tox. 4; H302, Acute Tox. 1; H330, Acute Tox. 1; H310, Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 17 Jul 2015  
Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 23 Jul 2015  
Hazard Statements: Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **boron tribromide/trichloride/trifluoride (combined)** (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride  
Data source: N/A  
Data source date: 06 Aug 2015  
Hazard Statements: EUH014, Acute Tox. 2; H330, Acute Tox. 2; H300, Skin Corr. 1A; H314, Skin Corr. 1B; H314

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>  
Data source date: 17 Jul 2015  
Hazard Statements: Acute Tox. 4; H332, Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Resp. Sens. 1; H334, Skin Sens. 1; H317, Repr. 1B; H360FD, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

GB MCL index number: 006-007-00-5  
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide  
Additional Hazard Statement(s): EUH032 >= 0.2 %  
Reason for additional Hazards Statement(s):  
20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4  
Description/Comments:  
Additional Hazard Statement(s): Carc. 2; H351  
Reason for additional Hazards Statement(s):  
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 21 Aug 2015  
Hazard Statements: Acute Tox. 4; H302, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Aquatic Acute 1; H400, Aquatic Chronic 1; H410

▪ **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Carc. 2; H351

▪ **lead compounds with the exception of those specified elsewhere in this Annex**

GB MCL index number: 082-001-00-6  
Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2  
Additional Hazard Statement(s): Carc. 2; H351  
Reason for additional Hazards Statement(s):  
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium [www.reach-lead.eu/substanceinformation.html](http://www.reach-lead.eu/substanceinformation.html). Review date 29/09/2015

▪ **pH** (CAS Number: PH)

Description/Comments: Appendix C4  
Data source: WM3 1st Edition 2015  
Data source date: 25 May 2015  
Hazard Statements: None.

▪ **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 06 Aug 2015  
Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

▪ **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014  
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 21 Aug 2015  
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

▪ **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013  
Data source: WM3 1st Edition 2015  
Data source date: 25 May 2015  
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

▪ **monohydric phenols** (CAS Number: P1186)

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)  
Data source: CLP combined data  
Data source date: 26 Mar 2019  
Hazard Statements: Muta. 2; H341 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , Acute Tox. 3; H301 , STOT RE 2; H373 , Skin Corr. 1B; H314 , Skin Corr. 1B; H314 >= 3 % , Skin Irrit. 2; H315 1 £ conc. < 3 % , Eye Irrit. 2; H319 1 £ conc. < 3 % , Aquatic Chronic 2; H411

▪ **divanadium pentaoxide; vanadium pentoxide** (EC Number: 215-239-8, CAS Number: 1314-62-1)

EU CLP index number: 023-001-00-8  
Description/Comments:  
Additional Hazard Statement(s): None.

▪ **1,2,3-trichlorobenzene** (EC Number: 201-757-1, CAS Number: 87-61-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , STOT SE 3; H336 , Aquatic Acute 1; H400 , Aquatic Chronic 3; H410

▪ **1,3-dichloropropane** (EC Number: 205-531-3, CAS Number: 142-28-9)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H332 , Flam. Liq. 2; H225 , Flam. Liq. 3; H226 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335

• **2,2-dichloropropane** (EC Number: 209-832-0, CAS Number: 594-20-7)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H332 , Flam. Liq. 2; H225 , Acute Tox. 4; H302 , Acute Tox. 4; H312 , Eye Irrit. 2; H319

• **bromodichloromethane** (EC Number: 200-856-7, CAS Number: 75-27-4)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 1A; H360

• **n-butylbenzene** (EC Number: 203-209-7, CAS Number: 104-51-8)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **dibromochloromethane** (EC Number: 204-704-0, CAS Number: 124-48-1)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 4; H332 , STOT SE 3; H335 , STOT SE 3; H336 , Muta. 2; H341 , Aquatic Chronic 2; H411

• **hexachlorobutadiene** (EC Number: 201-765-5, CAS Number: 87-68-3)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 3; H301 , Acute Tox. 2; H310 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Irrit. 2; H319 , Acute Tox. 2; H330 , Carc. 2; H351 , Repr. 2; H361 , STOT SE 2; H371 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **4-isopropyltoluene** (EC Number: 202-796-7, CAS Number: 99-87-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Chronic 2; H411

• **sec-butylbenzene** (EC Number: 205-227-0, CAS Number: 135-98-8)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Aquatic Chronic 2; H411

• **trans-1,3-dichloropropene** (EC Number: 431-460-4, CAS Number: 10061-02-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Acute Tox. 3; H301 , Asp. Tox. 1; H304 , Acute Tox. 3; H311 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Irrit. 2; H319 , Acute Tox. 4; H332 , STOT SE 3; H335 , Aquatic Chronic 1; H410

• **tert-butylbenzene** (EC Number: 202-632-4, CAS Number: 98-06-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Flam. Liq. 3; H226 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , Acute Tox. 4; H332 , STOT SE 3; H335 , Asp. Tox. 1; H304 , Aquatic Chronic 2; H411

• **1,1,1,2-tetrachloroethane** (EC Number: 211-135-1, CAS Number: 630-20-6)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , Eye Dam. 1; H318 , Acute Tox. 4; H332 , Carc. 2; H351 , Acute Tox. 4; H312 , Aquatic Chronic 3; H412 , Skin Irrit. 2; H315

• **trichlorofluoromethane** (EC Number: 200-892-3, CAS Number: 75-69-4)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H312 , Ozone 1; H420

• **hexachloroethane** (EC Number: 200-666-4, CAS Number: 67-72-1)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , STOT RE 2; H373

• **2-nitrophenol** (EC Number: 201-857-5, CAS Number: 88-75-5)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 4; H332 , STOT SE 3; H335 , STOT RE 2; H373 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **bis(2-chloroethoxy)methane** (EC Number: 203-920-2, CAS Number: 111-91-1)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 3; H301 , Acute Tox. 4; H312 , Acute Tox. 1; H330 , Acute Tox. 2; H330 , STOT SE 1; H370 , STOT RE 2; H373

• **2-methyl naphthalene** (EC Number: 202-078-3, CAS Number: 91-57-6)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , STOT SE 3; H336 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **2-chloronaphthalene** (EC Number: 202-079-9, CAS Number: 91-58-7)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

• **dimethyl phthalate** (EC Number: 205-011-6, CAS Number: 131-11-3)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , STOT SE 3; H335 , STOT SE 3; H336 , Repr. 2; H361 , Aquatic Chronic 3; H412

• **dibenzofuran** (EC Number: 205-071-3, CAS Number: 132-64-9)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Acute Tox. 4; H332 , Aquatic Chronic 2; H411

• **4-chlorophenylphenylether** (EC Number: 230-281-7, CAS Number: 7005-72-3)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **diethyl phthalate** (EC Number: 201-550-6, CAS Number: 84-66-2)

Description/Comments: VOC; Data from C&L Inventory Database  
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>  
Data source date: 02 Mar 2017  
Hazard Statements: Skin Irrit. 2; H315 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , STOT SE 3; H335 , STOT RE 2; H373 , Repr. 2; H361 , Acute Tox. 4; H302 , STOT SE 3; H336 , Skin Sens. 1; H317 , Aquatic Chronic 1; H410



• **4-bromophenylphenylether** (EC Number: 202-952-4, CAS Number: 101-55-3)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **carbazole** (EC Number: 201-696-0, CAS Number: 86-74-8)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Muta. 2; H341 , Carc. 2; H351 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , Acute Tox. 3; H301

## Appendix B: Rationale for selection of metal species

### arsenic {arsenic trioxide}

Worst case species based on hazard statements

### beryllium {beryllium oxide}

Worst case species based on hazard statements

### boron {boron tribromide/trichloride/trifluoride (combined)}

Worst case species based on hazard statements

### cadmium {cadmium sulfide}

Worst case species based on hazard statements

### chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Worst case species based on hazard statements

### chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case species based on hazard statements

### copper {dicopper oxide; copper (I) oxide}

Most likely common species

### cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

### lead {lead compounds with the exception of those specified elsewhere in this Annex}

Worst case species based on hazard statements

### mercury {mercury dichloride}

Worst case species based on hazard statements

### nickel {nickel dihydroxide}

Worst case species based on hazard statements

### selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on hazard statements

### zinc {zinc oxide}

Worst case species based on hazard statements

### vanadium {divanadium pentaoxide; vanadium pentoxide}

Worst case species based on hazard statements.

## Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021

HazWasteOnline Classification Engine Version: 2022.263.5340.9974 (20 Sep 2022)

HazWasteOnline Database: 2022.273.5362.10003 (03 Oct 2022)

This classification utilises the following guidance and legislation:

**WM3 v1.2.GB - Waste Classification** - 1st Edition v1.2.GB - Oct 2021

**CLP Regulation** - Regulation 1272/2008/EC of 16 December 2008

**1st ATP** - Regulation 790/2009/EC of 10 August 2009

**2nd ATP** - Regulation 286/2011/EC of 10 March 2011

**3rd ATP** - Regulation 618/2012/EU of 10 July 2012

**4th ATP** - Regulation 487/2013/EU of 8 May 2013

**Correction to 1st ATP** - Regulation 758/2013/EU of 7 August 2013

**5th ATP** - Regulation 944/2013/EU of 2 October 2013

**6th ATP** - Regulation 605/2014/EU of 5 June 2014

**WFD Annex III replacement** - Regulation 1357/2014/EU of 18 December 2014

**Revised List of Waste 2014** - Decision 2014/955/EU of 18 December 2014

**7th ATP** - Regulation 2015/1221/EU of 24 July 2015

**8th ATP** - Regulation (EU) 2016/918 of 19 May 2016

**9th ATP** - Regulation (EU) 2016/1179 of 19 July 2016

**10th ATP** - Regulation (EU) 2017/776 of 4 May 2017

**HP14 amendment** - Regulation (EU) 2017/997 of 8 June 2017

**13th ATP** - Regulation (EU) 2018/1480 of 4 October 2018

**14th ATP** - Regulation (EU) 2020/217 of 4 October 2019

**15th ATP** - Regulation (EU) 2020/1182 of 19 May 2020

**The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)**

**Regulations 2020** - UK: 2020 No. 1567 of 16th December 2020

**The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020** - UK:

2020 No. 1540 of 16th December 2020

**GB MCL List** - version 1.1 of 09 June 2021

*WAC Data*



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## **Analytical Report Number : 22-85543**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	21/09/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	21/09/2022
<b>Your order number:</b>	PO19941	<b>Analysis completed by:</b>	28/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	28/09/2022
<b>Samples Analysed:</b>	10:1 WAC sample		

**Signed:**

*Izabela Wójcik*

Izabela Wójcik  
Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.



4041



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email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results							
Report No:	22-85543						
				Client: <b>HYDROCK</b>			
Location		Begbroke					
Lab Reference (Sample Number)		2432733 / 2432734			Landfill Waste Acceptance Criteria		
Sampling Date		19/09/2022			Limits		
Sample ID		HP201			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)		0.10					
<b>Solid Waste Analysis</b>							
TOC (%)**	3.5				3%	5%	6%
Loss on Ignition (%) **	8.1				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg) <small>EH, ID, CU, AL</small>	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	5.22				100	--	--
pH (units)**	8.0				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	1.7				--	To be evaluated	To be evaluated
<b>Eluate Analysis</b>							
	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0114			0.0979	0.5	2	25
Barium *	0.0131			0.112	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0023			0.019	0.5	10	70
Copper *	0.0054			0.046	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0034			0.0297	0.5	10	30
Nickel *	0.0082			0.071	0.4	10	40
Lead *	0.0042			0.036	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.015			0.13	4	50	200
Chloride *	0.73			6.3	800	15000	25000
Fluoride	0.13			1.2	10	150	500
Sulphate *	3.7			32	1000	20000	50000
TDS*	110			980	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	21.0			180	500	800	1000
<b>Leach Test Information</b>							
Stone Content (%)	< 0.1						
Sample Mass (kg)	0.80						
Dry Matter (%)	87						
Moisture (%)	13						
Results are expressed on a dry weight basis, after correction for moisture content where applicable. * = UKAS accredited (liquid eluate analysis only)							
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation. ** = MCERTS accredited							
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3. This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.							



4041



**Analytical Report Number : 22-85543**

**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2432733	HP201	None Supplied	0.1	Brown loam and sand with gravel and vegetation.





4041



Environmental Science

Analytical Report Number : 22-85543

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance on Sampling and Testing of Wastes to Meet Landfill Waste Acceptance <sup>™</sup>	L046-PL	W
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270. MCERTS accredited except Coronene.	L064-PL	D
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D
pH at 20oC in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W
Total BTEX in soil (Poland)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073-PL	W
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil <sup>™</sup>	L039-PL	W
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination <sup>†</sup>	L033B-PL	W
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil <sup>™</sup>	L039-PL	W

Analytical Report Number : 22-85543  
Project / Site name: Begbroke

**Water matrix abbreviations:**

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L031	W
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided to the client. The instructed on date indicates the date on which this information was provided to the laboratory.

### Information in Support of Analytical Results

#### List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total



Accreditation Status
NONE
NONE
MCERTS
NONE
NONE
MCERTS
MCERTS
MCERTS
MCERTS
NONE
MCERTS
MCERTS
MCERTS
ISO 17025
ISO 17025
ISO 17025
ISO 17025



Accreditation Status
ISO 17025
ISO 17025
NONE

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## **Analytical Report Number : 22-82374**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	06/09/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	06/09/2022
<b>Your order number:</b>	PO19941	<b>Analysis completed by:</b>	13/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	13/09/2022
<b>Samples Analysed:</b>	10:1 WAC sample		

**Signed:** \_\_\_\_\_

Anna Goc  
Junior Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.







**Analytical Report Number : 22-82374**

**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2414915	HP208	None Supplied	0.8	Brown loam and clay with gravel and vegetation.

**Analytical Report Number : 22-82374**

**Project / Site name: Begbroke**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance on Sampling and Testing of Wastes to Meet Landfill Waste Acceptance"	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270. MCERTS accredited except Coronene.	L064-PL	D	MCERTS
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	MCERTS
pH at 20oC in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Total BTEX in soil (Poland)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073-PL	W	MCERTS
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L031	W	ISO 17025

**Analytical Report Number : 22-82374**

**Project / Site name: Begbroke**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**

## Information in Support of Analytical Results

### List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total



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## **Analytical Report Number : 22-82425**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	06/09/2022
<b>Your job number:</b>	19144	<b>Samples instructed on/ Analysis started on:</b>	06/09/2022
<b>Your order number:</b>	PO19941	<b>Analysis completed by:</b>	13/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	13/09/2022
<b>Samples Analysed:</b>	2 10:1 WAC samples		

**Signed:** \_\_\_\_\_

Anna Goc  
Junior Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

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email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results							
Report No:	22-82425						
	Client: HYDROCK						
Location	Begbroke						
Lab Reference (Sample Number)	2415250 / 2415251						
Sampling Date	01/09/2022						
Sample ID	WS250						
Depth (m)	0.20						
				Limits			
				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
<b>Solid Waste Analysis</b>							
TOC (%)**	1.9				3%	5%	6%
Loss on Ignition (%) **	4.6				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg) <small>EH_ID_CU_AL</small>	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	7.6				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	1.6				--	To be evaluated	To be evaluated
<b>Eluate Analysis</b>	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.0010			< 0.0100	0.5	2	25
Barium *	0.0069			0.0633	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0016			0.014	0.5	10	70
Copper *	0.018			0.16	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0013			0.0120	0.5	10	30
Nickel *	0.0052			0.048	0.4	10	40
Lead *	0.0052			0.048	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0066			0.060	4	50	200
Chloride *	1.3			12	800	15000	25000
Fluoride	0.66			6.0	10	150	500
Sulphate *	2.7			25	1000	20000	50000
TDS*	61			560	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	10.9			99.4	500	800	1000
<b>Leach Test Information</b>							
Stone Content (%)	< 0.1						
Sample Mass (kg)	0.80						
Dry Matter (%)	94						
Moisture (%)	6.2						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.				* = UKAS accredited (liquid eluate analysis only)			
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation				** = MCERTS accredited			

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3. This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.







**Analytical Report Number : 22-82425**

**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2415250	WS250	None Supplied	0.2	Brown sand with fibrous material and gravel
2415252	WS245	None Supplied	0.5	Brown clay and loam with gravel.

**Analytical Report Number : 22-82425**

**Project / Site name: Begbroke**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as received, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance""	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270. MCERTS accredited except Coronene.	L064-PL	D	MCERTS
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	MCERTS
pH at 20oC in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Total BTEX in soil (Poland)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073-PL	W	MCERTS
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L031	W	ISO 17025

**Analytical Report Number : 22-82425**

**Project / Site name: Begbroke**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)**

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

**For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.**

**For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.**

**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.**

**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**

## Information in Support of Analytical Results

### List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total



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## **Analytical Report Number : 22-83971**

<b>Project / Site name:</b>	Begbroke	<b>Samples received on:</b>	13/09/2022
<b>Your job number:</b>	19114	<b>Samples instructed on/ Analysis started on:</b>	13/09/2022
<b>Your order number:</b>	PO19941	<b>Analysis completed by:</b>	22/09/2022
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	22/09/2022
<b>Samples Analysed:</b>	1 10:1 WAC Sample		

**Signed:** \_\_\_\_\_

Dominika Warjan  
Junior Reporting Specialist  
**For & on behalf of i2 Analytical Ltd.**

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.



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Waste Acceptance Criteria Analytical Results							
Report No:	22-83971						
				Client: <b>HYDROCK</b>			
Location		Begbroke					
Lab Reference (Sample Number)		2423919 / 2423920		Landfill Waste Acceptance Criteria			
Sampling Date		05/09/2022		Limits			
Sample ID		WS236		Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Depth (m)		0.20					
<b>Solid Waste Analysis</b>							
TOC (%)**	4.1			3%	5%	6%	
Loss on Ignition (%) **	6.6			--	--	10%	
BTEX (µg/kg) **	< 10			6000	--	--	
Sum of PCBs (mg/kg) **	< 0.007			1	--	--	
Mineral Oil (mg/kg) <small>EH, ID, CU, AL</small>	510			500	--	--	
Total PAH (WAC-17) (mg/kg)	3.40			100	--	--	
pH (units)**	8.1			--	>6	--	
Acid Neutralisation Capacity (mmol / kg)	4.5			--	To be evaluated	To be evaluated	
<b>Eluate Analysis</b>							
	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0037			0.0357	0.5	2	25
Barium *	0.0099			0.0946	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0006			0.0058	0.5	10	70
Copper *	0.021			0.20	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0022			0.0214	0.5	10	30
Nickel *	0.0042			0.040	0.4	10	40
Lead *	0.0066			0.063	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0065			0.062	4	50	200
Chloride *	1.1			10	800	15000	25000
Fluoride	0.37			3.5	10	150	500
Sulphate *	1.8			17	1000	20000	50000
TDS*	66			630	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	19.3			184	500	800	1000
<b>Leach Test Information</b>							
Stone Content (%)	< 0.1						
Sample Mass (kg)	0.80						
Dry Matter (%)	98						
Moisture (%)	2.0						
Results are expressed on a dry weight basis, after correction for moisture content where applicable. * = UKAS accredited (liquid eluate analysis only)							
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation. ** = MCERTS accredited							
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.							
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.							



**Analytical Report Number : 22-83971**  
**Project / Site name: Begbroke**

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2423919	WS236	None Supplied	0.2	Brown loam and sand with vegetation and clinker



Analytical Report Number : 22-83971

Project / Site name: Begbroke

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance"	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270. MCERTS accredited except Coronene.	L064-PL	D	MCERTS
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	MCERTS
pH at 20oC in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Total BTEX in soil (Poland)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073-PL	W	MCERTS
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033B-PL	W	ISO 17025
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L031	W	ISO 17025

Analytical Report Number : 22-83971

Project / Site name: Begbroke

Water matrix abbreviations:

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Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

## Information in Support of Analytical Results

### List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

# Appendix H Preliminary Geotechnical Risk Register

## Geotechnical Hazard Identification – Desk Study Stage

Potential geotechnical hazards have been assessed in accordance with the general requirements of ICE/DETR Document ‘Managing Geotechnical Risk’ and the HE documents CS 641 and CD 622. The following pages set out the identified geotechnical risks and hazards which are associated with the proposed development and establish the approach which is to be taken to manage the risks including the geotechnical input and analysis.

Table H.1 is a preliminary assessment of possible geotechnical hazards at the site at Desk Study stage. This information is used to assist with ground investigation design.

Table H.1: Possible geotechnical hazards

Hazard	Comment	Hazard status based on desk study	
		Could be present and / or affect site (i.e. Plausible)	Unlikely to be present and/or affect site
Uncontrolled Made Ground (variable strength and compressibility).	Associated with former landfill (off-site) and around localised buildings.	✓	-
Soft / loose compressible ground (low strength and high settlement potential).	Alluvium present around streams and in the east of the site.	✓	-
Shrink swell of the clay fraction of soils under the influence of vegetation.	Cohesive deposits present on site. Moderate to high potential for swell in these areas.	✓	-
Variable lateral and vertical changes in ground conditions.	Various geologies across site.	✓	-
High sulphates present in the soils.	Oxford Clay Formation is known to have high sulphate content.	✓	-
Adverse chemical ground conditions, (e.g. expansive slag).	Unlikely to affect the site.	-	✓
Obstructions.	Sewer mains present crossing the site along with overhead power line pylon/pole foundation bases and farm building foundations.	✓	-
Existing below ground structures to remain (i.e. sewer main).		✓	-
Shallow groundwater.	Potential for shallow groundwater levels in vicinity of the streams and within the Alluvium and River Terrace Deposits.	✓	-
Changing groundwater conditions.		✓	-

Hazard	Comment	Hazard status based on desk study	
		Could be present and / or affect site (i.e. Plausible)	Unlikely to be present and/or affect site
Risk from erosion.	Site is partially within Flooding Zone 2 and 3.	✓	-
Risk from flooding.		✓	-
Running sands and / or loose Made Ground, leading to difficulty with excavation and collapse of side walls.	Localised to River Terrace Deposits, Made Ground and Alluvium.	✓	-
Slope stability issues – general slopes.	Site slopes from the topographic high in the west towards the north, east and south. Level changes may be required on slopes.	✓	-
Slope stability issues – retaining walls.		✓	-
Earthworks – settlement (due to placement of fill on soft / loose ground).	Site levels may need to be altered to create development plateaus.	✓	-
Earthworks – poor bearing capacity of new fill.		✓	-
Earthworks – unsuitability of site won material to be reused as fill.		✓	-
Solution features in Chalk.	Unlikely to be present on site.	-	✓
Cavities in the Superficial Deposits due to solution features.		-	✓
Dissolution (associated with “wet rock head”).		-	✓
Brine extraction.		-	✓
Mining / quarrying / mineral extraction (including sand and gravel workings).	Unlikely to be present on site, however, shown in the surrounding areas and within the Sand Lane pits.	✓	-
Cambered ground with gulls possibly present.	Unlikely to be present on site.	-	✓
Relict Slip Surfaces.	Unlikely to affect the site.	-	✓
Solifluction.	Site slopes away from the topographic high in the west of the site towards the north, east and south.	✓	-
Problematic soils (silts and rewetting etc.).	Alluvium present on site.	✓	-

## Geotechnical Hazard Identification – Following Ground Investigation

The preliminary Geotechnical Risk Register following Ground Investigation is set out in Table H.3 and assumes that no works are proposed in the Landfill area.

The probability and impact of a hazard have been judged on a qualitative scale as set out in Table H.2. The degree of risk (R) is determined by combining an assessment of the probability (P) of the hazard occurring with an assessment of the impact (I) of the hazard and associated mitigation it will require if it occurs ( $R = P \times I$ ).

Table H.2: Qualitative assessment of hazards and risks

P = Probability		I = Impact		R = Risk Rating (P x I)	
1	Very unlikely (VU)	1	Very Low	1 – 4	None / negligible
2	Unlikely (U)	2	Low	5 – 9	Minor
3	Plausible(P)	3	Medium	10 – 14	Moderate
4	Likely (Lk)	4	High	15 – 19	Substantial
5	Very Likely (VLk)	5	Very High	20 - 25	Severe



Hazard	Comments	Who is at Risk	Consequence	Risk Before Mitigation			Actions Required
				P	I	R	
Uncontrolled Made Ground (variable strength and compressibility).	There are small areas of Made Ground around site associated with farm buildings and trackways.	New Structures	Bearing capacity failure, settlement (total and differential).	1	4	4	Design foundations to found below Made Ground or on Made Ground which has been improved.
			Floor slab failure.	1	4	4	Design floor slabs as suspended.
		Roads and Pavements.	Settlement (total and differential) of roads and pavements.	1	2	2	Design roads and pavements using suitable geotechnical parameters and increase the sub-base and use geo-grids as appropriate.
		Services.	Settlement (differential), causing damage to services.	1	2	2	Anticipated settlements are not anticipated to be significant with regard to services. It is also advisable to steepen falls in drainage to prevent back fall and use rocker boxes and flexible couplings.
		Gardens / POS areas	Settlement (differential), in gardens.	1	2	2	It is unlikely that settlements will be significant with regard to gardens / POS areas.
		Construction staff, vehicles and plant operators.	Trafficking of the site in temporary conditions. Overturning of plant during construction.	1	3	3	Where soft spots encountered, over-excavation and replacement with suitable fill. Outline design of working platform to include geo-grid. Site inspection and watching brief by Contractor to review working platform frequently and regularly.

Cont.....

Hazard	Comments	Who is at Risk	Consequence	Risk Before Mitigation			Actions Required
				P	I	R	
Soft / loose ground (low strength and high settlement potential).	The shallow natural soils comprise River Terrace Deposits, Head Deposits, Alluvium, and the Solid Geology of the Oxford Clay Formation, Kellaways Sand Member, Kellaways Clay Member and the Cornbrash Limestone Formation.	New Structures	Foundation bearing capacity failure, settlement (total and differential).	4	4	16	Design foundations to found below any loose sand and gravel or soft clay, or improve the underlying geology is required.
			Floor slab failure.	4	4	16	Design floor slab as suspended.
		Roads and Pavements.	Settlement (total and differential), of roads and pavements.	4	3	12	Design roads and pavements using suitable geotechnical parameters and increase the sub-base and use geo-grids as appropriate. If anticipated settlements are significant, and cannot be mitigated by design, over-excavate and replace soft soils.
		Services.	Settlement (differential), causing damage to services.	3	3	9	Settlements are not anticipated to be significant. No additional design requirements envisaged.
		Gardens / POS areas	Settlement (differential), in gardens.	3	3	9	
		Construction staff, vehicles and plant operators.	Trafficking of the site in temporary conditions. Overturning of plant during construction.	4	3	12	Where soft spots encountered, over-excavate and replace with suitable fill. Design working platform to suit the ground conditions. Outline design of working platform to include geo-grid if necessary. Site inspection and watching brief by Contractor to review working platform frequently and regularly.
Shrinkage / swelling of the clay fraction of soils under the influence of vegetation.	The clays of the Oxford Clay Formation, Alluvium and Kellaways Clay are medium to high heave potential. Cohesive lenses within superficial deposits.	Foundations.	Shrinkage or heave of soils and associated damage to foundations.	4	3	12	Design foundations in accordance with relevant standards. Deepen foundations due to trees as appropriate.
		Floor slabs.	Floor slab failure.	4	4	16	Design floor slabs in accordance with relevant standards. Design floor slab as suspended with a void, unless the warranty provider is satisfied the soil is not desiccated, or slabs are constructed when soils are not seasonally desiccated (i.e. during winter and spring).

Hazard	Comments	Who is at Risk	Consequence	Risk Before Mitigation			Actions Required
				P	I	R	
Variable lateral and vertical changes in ground conditions.	The Shallow soils vary laterally and vertically across the site and comprise River Terrace Deposits, Head Deposits, Alluvium, and the Solid Geology of the Oxford Clay Formation, Kellaways Sand Member, Kellaways Clay Member and the Cornbrash Limestone Formation.  Structures may be founded in materials with different geotechnical parameters.	New Structures	Foundation bearing capacity failure, settlement (total and differential).	4	4	16	Design foundations to found below Made Ground or on Made Ground which has been improved. Design foundations to found below any loose relative density sand and gravel or soft clay, or improvement prior to founding.
			Floor slab failure.	4	4	16	Design floor slabs in accordance with relevant standards.
		Roads and Pavements.	Settlement (total and differential), of roads and pavements.	4	3	12	Design roads and pavements using suitable geotechnical parameters and increase the sub-base and use geo-grids as appropriate. If anticipated settlements are significant, and cannot be mitigated by design, over-excavate and replace unsuitable soils.
		Services.	Settlement (differential), causing damage to services.	3	3	9	Settlements are not anticipated to be significant with regard to services. No additional design requirements envisaged.
		Gardens / POS Areas	Settlement (differential), in gardens.	3	3	9	It is unlikely that settlements will be significant with respect to gardens/POS.
		Construction staff, vehicles and plant operators.	Trafficking of the site in temporary conditions. Overturning of plant during construction.	4	3	12	Where soft spots encountered, over-excavate and replace with suitable fill. Design working platform to suit the ground conditions. Outline design of working platform to include geo-grid if necessary. Site inspection and watching brief by Contractor to review working platform frequently and regularly.

Hazard	Comments	Who is at Risk	Consequence	Risk Before Mitigation			Actions Required
				P	I	R	
Cont...							
Sulphates present in the soils.	The ground investigation has proven that there is the potential for expansive sulphate bearing soils to be present (DS-4) within the Oxford Clay	Attack of buried concrete.	Damage to concrete and reduction in strength.	3	4	12	Classify concrete in accordance with BRE SD1 and design concrete accordingly.
		Earthworks.	Sulphate heave following the use of hydraulic binders.	3	4	12	Supplementary sulphate testing in accordance with BRE guidelines to be undertaken as part of detailing investigation works. Before the use of hydraulic binders is approved, comprehensive testing and design will need to be completed by a Specialist Contractor to satisfy both themselves and the Engineer of the suitability of the soils for treatment, and confirm that the requisite end-performance of the material is achievable. The use of modification / stabilisation to be restricted to suitable materials following laboratory trials. In all instances where improvement by the inclusion of binders is considered, a mix design is required and as part of this design, samples should be checked for swelling, even where very low sulphate values are recorded.
Obstructions.	Obstructions were not noted during the investigation, however a number of services	Construction staff, vehicles and plant operators.	Risk of collapse of excavation as obstructions are pulled out.	3	3	9	Undertake Enablement Works and remove all obstructions. Allow for a breaker to be present during construction and remove obstructions where encountered during construction.

Hazard	Comments	Who is at Risk	Consequence	Risk Before Mitigation			Actions Required
				P	I	R	
	are present beneath the site..	Roads and Pavements.	Hard spots in externals and roads / pavements.	3	2	6	
		Structures	Impact on foundations resulting in re-design	3	3	9	
Cont...							
Shallow groundwater.	Monitoring during the ground investigations has proven a shallow groundwater table in the north, east and south of the site (at a minimum of <1.0m bgl), with relatively fast inflows of water seen during the ground investigation.	Construction staff, vehicles and plant operators.	Difficulty with excavation.	4	2	8	Contractor to appoint competent Temporary Works Designer to design temporary works, in accordance with BS 5975:2008+A1:2011. Temporary Works Designer to consider in their analysis the impact of, and requirements for, de-watering of excavations. Any water that collects at the base of excavations to be removed as soon as practicable.
			Limit state failure, excessive deformation, trafficking of site plant, inability to place and compact fill.				
		Slopes and Retaining.	Serviceability issues.	5	2	10	Contractor to appoint competent Temporary Works Designer to design temporary works, as required in accordance with BS 5975:2008+A1:2011. The shallow groundwater is to be taken into account during geotechnical design of the permanent works.
Changing groundwater conditions.	Monitoring during the ground investigation is ongoing. Groundwater levels likely to be seasonally variable.	Construction staff, vehicles and plant operators.	Difficulty with excavation. Limit state failure, excessive deformation, trafficking of site plant, inability to place and compact fill.	4	2	8	Contractor to appoint competent Temporary Works Designer to design temporary works as required, in accordance with BS 5975:2008+A1:2011. Temporary Works Designer to consider in their analysis the impact of a variable water table.

Hazard	Comments	Who is at Risk	Consequence	Risk Before Mitigation			Actions Required
				P	I	R	
		Slopes and Retaining.	Serviceability issues.	5	2	10	Contractor to appoint competent Temporary Works Designer to design temporary works, as required in accordance with BS 5975:2008+A1:2011. Design drainage for retaining walls to account for fluctuating groundwater levels. The shallow groundwater is to be taken into account during geotechnical design of the permanent works.
Subject to risk from erosion.	A stream is present in the north and along the south of the site.	The entire development.	Damage to structures, gardens/POS roads and services.	4	4	16	Slopes to be designed at stable angle. Slopes to be designed with erosion matting to prevent scouring.
Cont...							
Subject to risk from flooding.	The site is within an area of flood risk near the stream in the north and in the east of the site	The entire development.	Damage to structures gardens/POS roads and services.	4	4	16	The site is partially located within a Flood Zone 2/3, and as such is at risk of flooding. The planning of the site needs to take into account the risk of flooding.
Running sands and / or loose granular soils, leading to difficulty with excavation and collapse of side walls.	The ground investigation has indicated that there is a potential for loose soils and Shallow Groundwater to be present at the site with collapse noted in trial pits.	Construction staff, vehicles and plant operators.	Ground failure, instability of plant and machinery.	5	4	20	As instability has been noted in all pits during excavation and exacerbated by groundwater ingress, foundation options should be reviewed to ensure minimal excavation (e.g. piles) where instability is noted at shallow depths.
			Risk of collapse of excavation.	5	3	13	Contractor to appoint competent Temporary Works Designer to design temporary works, in accordance with BS 5975:2008+A1:2011. Temporary Works Design to include recommendations for inspection of excavations. No person entry to unsupported excavations.
	The site is on sloping ground and the	New Structures	Serviceability issues.	4	4	16	Safe slope angles to be assessed during design.



Hazard	Comments	Who is at Risk	Consequence	Risk Before Mitigation			Actions Required
				P	I	R	
Slope stability issues – General Slopes.	proposed development is likely to require slopes to be formed as part of the cut to fill.	Roads and Pavements.	Serviceability issues.	4	3	12	Engineered fill requirements to be defined at outline design stage. Drainage requirements to be assessed during design. Slopes to be constructed at a safe angle.
		Gardens/POS	Serviceability issues.	3	2	6	
Cont...							
Slope stability issues – retaining walls.	The site is on sloping ground and the proposed development may require retaining walls to be constructed.	New structures.	Serviceability issues.	4	4	16	Design of the retaining to be undertaken in accordance with EC7. Adequate drainage to be designed behind the structure, or for water seepage through the face of the wall. Lateral earth pressure parameters to be characterised during investigation and design. Engineered fill requirements to be defined at outline design stage.
		Pavement construction and long-term durability highways and external areas.	Serviceability issues.	3	3	9	
		Gardens / POS	Serviceability issues.	3	2	6	

Hazard	Comments	Who is at Risk	Consequence	Risk Before Mitigation			Actions Required
				P	I	R	
		Construction staff, vehicles and plant operators.	Potential for future movements / collapse.	3	4	12	
Cont...							
Earthworks – Settlement (due to placement of fill on soft / loose ground	The ground conditions at the site include variable cohesive and granular deposits and locally recorded up to 4.0m as soft/loose.	New Structures	Foundation bearing capacity failure, settlement (total and differential).	4	4	16	Soft to loose ground, within structurally placed fill or improve ground using VSC
			Floor slab failure.	4	4	16	Design floor slabs in accordance with relevant standards.
		Roads and Pavements.	Settlement (total and differential), of roads and pavements.	3	3	9	Undertake ground improvement (pre-load and surcharge / rolling dynamic compaction / dynamic compaction / over-excavation and replacement) to reduce settlements.

Hazard	Comments	Who is at Risk	Consequence	Risk Before Mitigation			Actions Required
				P	I	R	
							Design roads and pavements using suitable geotechnical parameters and increase the sub-base and use geo-grids as appropriate.
		Services.	Settlement (differential), causing damage to services.	2	3	6	Settlements are not anticipated to be significant with regard to services.
		Gardens / POS	Settlement (differential), in gardens.	3	3	9	Assess the use of geogrids as part of the design process. Undertake ground improvement (pre-load and surcharge / rolling dynamic compaction / dynamic compaction / over-excavation and replacement) to reduce settlements.
		Construction staff, vehicles and plant operators.	Trafficking of the site in temporary conditions. Overturning of plant during construction.	3	3	9	Where soft spots encountered, over-excavate and replace with suitable fill. Design working platform to suit the ground conditions. Outline design of working platform to include geo-grid if necessary. Site inspection and watching brief by Contractor to review working platform frequently and regularly.
Cont...							
Earthworks – poor bearing capacity and / or settlement of new fill.	There may be a requirement for cut to fill to create the development platform depending on final design	New structures	Foundation bearing capacity failure, settlement (total and differential).	4	4	16	Design foundations to found below soft to loose ground or within new engineered fill.
			Floor slab failure.	4	4	16	Design floor slabs in accordance with relevant standards.
		Roads and Pavements.	Settlement (total and differential).	3	3	9	Minimum engineering performance to be defined in an Earthworks Specification.

Hazard	Comments	Who is at Risk	Consequence	Risk Before Mitigation			Actions Required
				P	I	R	
	This will require reuse of soils excavated from the site.	Services.	Settlement (differential), causing damage to services.	3	3	9	Earthworks to be designed in accordance with 1) Manual of Contract Documents for Highway Works (MCHW), Volume 1; 2) Specification for Highway Works (SHW) Series 600; 3) 6031:2009, Code of practice for earthworks; and 4) BS 8000-1, workmanship on building sites. Site testing to be undertaken to confirm the works are in accordance with the design. A suitable watching brief and independent verification.
		Gardens/POS	Settlement (differential), in gardens/POS	2	3	6	
		Construction staff, vehicles and plant operators.	Trafficking of the site in temporary conditions. Overturning of plant during construction.	3	3	9	
Earthworks – Unsuitability of site won material to be reused as fill.	There may be a requirement for cut to fill to create the development platform depending on final design This will require reuse of soils excavated from the site.	Earthworks control, inability to place and compact fill.	Service limit state failure, excessive and intolerable total and differential settlement.	4	3	12	The design is to describe the processes required to produce suitable fill for reuse. Contractor to design site control measures, plant, equipment and arrangement to comply with processing requirements. Site testing to be undertaken to confirm the works are in accordance with the design. A suitable watching brief and independent verification. Adequate investigation required of soil types and characterisation of the soils to be undertaken during investigation. Some fill may be unsuitable for use.
		Project Budgets - Insufficient fill to complete earthworks.	Additional Costs, due to importation of fill or having to modify designs.	3	2	6	
Cont...							
Problematic soils (silts and rewetting etc.).	Silts recorded in a number of locations	New Structures	Foundation bearing capacity failure, settlement (total and differential).	4	4	16	Design foundations to found below any problematic soils.
			Floor slab failure.	4	4	16	Design floor slabs in accordance with relevant standards.

Hazard	Comments	Who is at Risk	Consequence	Risk Before Mitigation			Actions Required
				P	I	R	
		Roads and Pavements.	Settlement (total and differential), of roads and pavements.	4	3	12	Design roads and pavements using suitable geotechnical parameters and increase the sub-base and use geo-grids as appropriate. If anticipated settlements are significant, and cannot be mitigated by design, over-excavate and replace soft soils or undertake ground improvement.
		Services.	Settlement (differential), causing damage to services.	3	3	9	Ground levels are likely remaining at approximately current levels. Settlements are not anticipated to be significant. No additional design requirements envisaged.
		Gardens/POS	Settlement (differential), in gardens / POS	2	3	6	
		Construction staff, vehicles and plant operators.	Trafficking of the site in temporary conditions. Overturning of plant during construction.	3	3	9	Where soft spots encountered, over-excavate and replace with suitable fill. Design working platform to suit the ground conditions. Outline design of working platform to include geo-grid if necessary. Site inspection and watching brief by Contractor to review working platform frequently and regularly.
Cont....							
Unforeseen ground conditions - risk associated with limited data.	Ground investigation has been undertaken. However, additional information will be	All aspects of the development		3	4	12	Designers to be contacted if conditions encountered are different to those identified during investigation. Regular inspections of excavations and earthworks for evidence of stability.

Hazard	Comments	Who is at Risk	Consequence	Risk Before Mitigation			Actions Required
				P	I	R	
	obtained during construction. Ground conditions are only defined at exploratory hole locations.						Adequate investigation required to characterise the site and understand the potential risks.

Whilst the probability and impact of the hazard occurring can be reduced to a minimum by geotechnical design, the impact cannot be reduced below very low. The risk register will need to be up-dated, as necessary, to reflect design, additional information, data and experience as it is gained through the construction process.

Impacts of the design with regard to health and Safety considerations will need to be included by the designer at design stage.



# Appendix I Plausible Source-Pathway-Receptor Contaminant Linkages

### Summary of Potential Contaminant Linkages

Table I.2 lists the plausible contaminant linkages which have been identified. These are considered as potentially unacceptable risks in line with guidelines published in LCRM (2022) and additional risk assessment is required.

Source – Pathway – Receptor Linkages have been assessed in general accordance with guidance in CIRIA Report C552 (Rudland *et al* 2001) but modified to add a ‘no linkage’ category and to remove low/moderate risk (See Table I.1).

It should be noted that whilst the risk assessment process undertaken in this report may identify potential risks to site demolition and redevelopment workers, consideration of occupational health and safety issues is beyond the scope of this report and need to be considered separately in the Construction Phase Health and Safety Plan.

Table I.1: Consequence versus probability assessment.

		Consequence			
		Severe	Medium	Mild	Minor
Probability	High Likelihood	Very high risk	High risk	Moderate risk	Low risk
	Likely	High risk	Moderate risk	Low risk	Very low risk
	Low Likelihood	Moderate risk	Low risk	Low risk	Very low risk
	Unlikely	Low risk	Very low risk	Very low risk	Very low risk
	No Linkage	No risk			

Table 1.2: Exposure model – final source-pathway-receptor contaminant linkages

Sources	Possible Pathways	Receptors	Probability	Consequence	Risk Level	Comments	
<b>Wider Site</b>							
Asbestos fibres from insulation or asbestos-containing materials in the buildings.	Fugitive dust.	On Site	Likely	Severe	High	Asbestos may be present in existing farm buildings and sporadically on surface. Careful removal will be required from buildings during demolition. However, removal under controlled conditions should limit release of fibres to the air and the ground.	
		Neighbours.	Unlikely	Severe	Low		
Asbestos fibres within soils around Parkers Farm	Fugitive dust.	On Site	Low likelihood	Severe	Moderate		
<b>Landfill Area</b>							
Landfill Made Ground (metals, metalloids, and PAH).	Ingestion, inhalation or direct contact.	Site users.	Likely	Medium	Moderate	There is Landfill Made Ground below the entire site, and there are metals, metalloids, PAH at levels in excess of the GAC. No capping layer is currently present.	Contact with these materials is likely in gardens and areas of POS. Mitigation measures will be required to break the SPR linkage.
	Leaching through unsaturated zone.	Surface Waters	Low likelihood	Medium	Low		No significantly elevated concentrations of metals, metalloids and PAH in groundwater samples, when compared to the WQT.
	Root uptake	Landscape planting	Likely	Medium	Moderate	Direct contact with buried water supply pipes is therefore likely	Mitigation measures will be required to break the SPR linkage.
	Direct contact	Water supply pipes	Likely	Medium	Moderate		

Sources	Possible Pathways	Receptors	Probability	Consequence	Risk Level	Comments
Landfill Made Ground below the site (Ammoniacal Nitrogen).	Leaching through unsaturated zone.	Surface Waters	Low likelihood	Medium	Low	<p>The concentrations that have been observed in the landfill soils are, in Hydrock's experience' towards the lower end of typical concentrations in historical landfills.</p> <p>The closest surface receptor to the site appears to be an unnamed brook some 230m to the south. Given the distance from the site and shallow unconsolidated nature of the superficial aquifers (River Terrace Gravels / Alluvium), any ammoniacal nitrogen from the landfill is expected to attenuate (via dispersion, dilution and degradation) before the surface water receptor is reached. Additional sampling shows decreased ammoniacal nitrogen outside of the landfill and indicates a low risk to controlled water.</p> <p>If necessary, a Detailed Quantitative Risk Assessment (DQRA) required.</p>
Asbestos free fibres within the Landfill Made Ground	Inhalation of fugitive dust.	Site users.	Likely	Severe	Very High	<p>There is Landfill Made Ground below the entire site, and ACM and asbestos fibres have been proven to be present in the soil.</p> <p>Contact with these materials is likely in gardens and areas of POS.</p> <p>Mitigation measures will be required to break the SPR linkage</p>
		Neighbours.	Unlikely	Severe	Low	
Metals, metalloids and PAH within the Topsoil Made Ground	Ingestion, inhalation or direct contact.	Site users.	Likely to High likelihood	Medium	Moderate to High	<p>Contact with these materials is possible/likely in gardens and areas of POS.</p> <p>GAC are exceeded by a significant amount.</p> <p>Mitigation will be required.</p>
	Direct contact	Water supply pipes.	Likely	Medium	Moderate	<p>Direct contact with buried water supply pipes is likely and mitigation will be required.</p>

Sources	Possible Pathways	Receptors	Probability	Consequence	Risk Level	Comments
Ground gases (carbon dioxide) from organic materials in the Landfill Made Ground.	Migration, build up and explosion.	Site users.	Likely	Medium to Severe	Moderate to High	Ground gas monitoring has indicated concentrations of carbon dioxide above the detection limits of the analytical apparatus. Mitigation measures are required for carbon dioxide in accordance with CS2 conditions. Further monitoring required to assess risks on the wider site.
		Neighbours.				
		Buildings on site.				
		Buildings on adjacent sites.				
Radon	Migration	Site users.	Likely	Medium to Severe	Moderate to High	Mitigation measures required north of Rowel Brook if construction undertaken in this area.