



**Intelligent  
Ground  
Solutions**



## **Geo-Environmental Assessment**

Markfield  
LE67 9QB

**For Burrows Graham**

30 October 2025  
Report ref. 25/4467B.2

**Report ref. 25/4467B.2****Revision log**

| Issue No. | Date              | Description                                               |
|-----------|-------------------|-----------------------------------------------------------|
| 1         | 17 September 2025 | Issue of report to Client                                 |
| 2         | 30 October 2025   | Re-issue of report to Client with updated site masterplan |

| Report Prepared By                                                     | Signature                                                                                                                                                               | Date            |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
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## Executive Summary

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| <b>Site Brief</b>              | <p>Markfield, LE67 9QB. Grid reference 483190, 153180.</p> <p>The study was undertaken prior to the proposed redevelopment of the site for an industrial/commercial end use, comprising several units with associated hardstanding and soft landscaping features, to identify the potential for land contamination issues and provide preliminary geotechnical data.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Site Setting</b>            | <p>The site comprises a series of agricultural fields with some agricultural and residential properties along the southwestern perimeter known as Cliff Hill Farm. The site is likely underlain by a sequence of Topsoil and / or Made Ground underlain by superficial deposits of the Oadby Member (diamicton) with areas of Head deposits (clay, silt, sand and gravel) as well as areas with no superficial deposits (in the centre of the site). Bedrock underlying the superficial soils is anticipated to be Gunthorpe Member (Mudstone) with inclusions of Beacon Hill and Bradgate Formations Volcaniclastic Siltstones.</p> <p>The bedrock is classified as a Secondary B Aquifer and the superficial deposits are classed as a Secondary Undifferentiated Aquifer.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Ground Conditions</b>       | <p>The current ground investigation recorded a variable thickness of topsoil, which is in turn underlain by the Oadby Member and Head Deposits, which are underlain by the Gunthorpe Member. Beacon Hill and Bradgate Formation material was recovered in one location.</p> <p>Monitoring of standpipes has identified a shallow groundwater table within the Oadby Member (1.36 – 3.63m bgl) and a deeper groundwater table anticipated to be within the Gunthorpe Member (7.27 – 8.65m bgl).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Geotechnical Assessment</b> | <p>Based on the ground conditions encountered the firm cohesive material of the Oadby Member is considered suitable as a bearing stratum in its present form, with foundation placed at a minimum of 2.0m bgl, an allowable bearing capacity of 100kn/m<sup>2</sup> is considered achievable.</p> <p>Ground bearing floor slabs up to 20kPa are considered suitable at the site. All unsuitable materials (Made Ground, Topsoil and soft zones) should be removed and replaced with engineered granular fill as required. Should a higher bearing capacity be required then ground improvement could be undertaken to enable the adoption of ground bearing floor slabs.</p> <p>Where cut and fill earthworks are to be undertaken below ground bearing floor slabs, fill material should be placed and compacted in accordance with an agreed earthworks specification to match the long geotechnical properties of the ground in areas of cut to minimise the risk of differential settlement. This should account for any settlement of the fill material and the underlying soils.</p> <p>Buried obstructions in the form of boulders/bedrock were encountered in several locations during the ground investigation. Buried concrete may be encountered within the area of the developed farm area on the south of the site. These may need breaking out during the enabling works.</p> <p>Groundwater seepages were noted within two trial pits during the ground investigation, and a shallow and deeper groundwater table were identified during the monitoring period, as such, shallow excavations may not be stable and will require to be supported.</p> |

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                     | <p>A conservative design CBR of 3% is recommended on the near surface natural material for preliminary design purposes. It would be prudent to undertake further testing ahead of construction to assure the design process.</p> <p>A design sulphate classification of DS1 would be required for buried concrete within the Oadby Member.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Contaminated Land Assessment</b> | <p>During the site investigation, no visual evidence of contamination was identified on site.</p> <p>The site has a very limited development history, largely used for agricultural purposes, as such the ground investigation recorded topsoil over natural superficial deposits, overlying bedrock. Soil chemical results recorded asbestos fibres within near surface materials in TP116 at a concentration of 0.009%, however, given the low concentration identified and commercial end use of the development, plus questionable source of the asbestos, no further assessment or mitigation is considered necessary. The risk to human health from contamination at the site is considered to be Low.</p> <p>As no gross contamination has been identified during the investigation and superficial deposits predominantly comprise cohesive deposits, limiting vertical migration, Geo<sup>2</sup> considers the risk to controlled waters to be Low.</p> <p>The investigation recorded topsoil over natural deposits and Total Organic Matter testing of deeper natural materials recorded a maximum 0.2%. Geo<sup>2</sup> considers the risk from hazardous ground gas to future site users to be Low. As per RB17, the site is considered to be a Characteristic Situation 1 (CS1) where no ground gas protection measures are required.</p> <p>Volcaniclastic deposits have been identified on-site in the southern site area, as such, basic Radon protection measures will be required within proposed units 3 and 4 coinciding with the mapped volcaniclastic deposits and radon mapping.</p>                                 |
| <b>Recommendations</b>              | <ul style="list-style-type: none"> <li>• Eurocode 7 guidance notes that for large area structures, investigation points should be spaced in a grid pattern at points no more than 60m distance. Therefore, the geotechnical ground investigation completed to date and geotechnical recommendations contained herein are preliminary and not Eurocode 7 compliant. Further geotechnical ground investigation is recommended should a Eurocode 7 compliant investigation be required on this project.</li> <li>• Basic radon protection measures will be required within proposed units 3 and 4 coinciding with the mapped volcaniclastic deposits and radon mapping</li> <li>• Production of a Remediation Strategy to include, but not limited to, a hotspot protocol in the event of unidentified localised areas of contamination being encountered.</li> <li>• Site users during the redevelopment of the site should be advised during toolbox talks of the possibility of encountering contaminated soils. Given that asbestos is known to be present within soils on-site, workers should be informed of the appropriate protocols to minimise risk of exposure to themselves and others. Appropriate levels of Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE) should be implemented as and when needed. The Contractor, who should be appropriately qualified and experienced, shall prepare a Construction Environmental Management Plan (CEMP). The CEMP shall include a detailed Asbestos Management Plan (AMP) and full details of the measures to be taken during the redevelopment,</li> </ul> |

|                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                               | <p>including control measures such as dampening down dry soils and wheel wash/road sweeper facilities.</p> <ul style="list-style-type: none"><li>• Consideration to the production of a Materials Management Plan (MMP) to facilitate sustainable materials re-use.</li><li>• Although considered unlikely, the Local Water Authority should be contacted to advise whether they will require the installation of upgraded pipework for new services at the site.</li><li>• When areas of soils to be removed from site are identified, e.g. service trenches, surface water attenuation, additional sampling, analysis and assessment should be undertaken to inform off-site management routes. Waste classification was not undertaken as part of the scope of works.</li></ul> |
| This table is a summary only, full details and limitations of the assessment are provided within the main body of the report. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

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## 1.0 Introduction

Geo<sup>2</sup> Limited were commissioned by Burrows Graham to conduct a Geo-Environmental Assessment of a site located adjacent to the M1, Junction 22, Markfield, LE67 9QB.

The site is approximately 29.78 hectares in area and located at grid reference 448194, 311444.

The study was undertaken prior to the proposed redevelopment of the site for an industrial/commercial end use with several units with associated hardstanding and soft landscaping features, to identify the potential for land contamination issues and provide geotechnical data.

A proposed development plan for the site can be referred to within Appendix A.

### 1.1 Scope of Works

The scope of the investigation has been designed with consideration of guidance on Planning Practice Guidance (Land Affected by Contamination), Land Contamination: Risk Management pages of the GOV.UK web pages and the relevant requirements of the National Planning Policy Framework (NPPF) (as amended, 2024) (paragraphs 187 & 196-197). The geotechnical scope of investigation was designed in consideration with BS EN 1997-1:2004 Eurocode 7: Geotechnical Design – Part 1 General Rules and BS EN 1997-2:2007 Eurocode 7: Ground Investigation and Testing. Unless specifically stated, this report does not constitute a Geotech Design Report (GDR) under Eurocode 7 guidance.

The intrusive investigation was conducted between 21<sup>st</sup> and 25<sup>th</sup> July 2025. The investigation was undertaken in accordance with Geo<sup>2</sup>'s Method Statement SMS SI 1503 and agreed proposal dated 03<sup>rd</sup> June 2025. The findings of the investigation are presented herein.

### 1.2 Previous Reports

The Client has provided the following report in relation to the site:

- BWB Consulting Ltd 'Phase 2 Geo-Environmental Assessment' Markfield, J22, M1, Leicestershire. Ref MAR-BWB-EGT-XX-RP-G-0001\_Ph2. Dated April 2024.

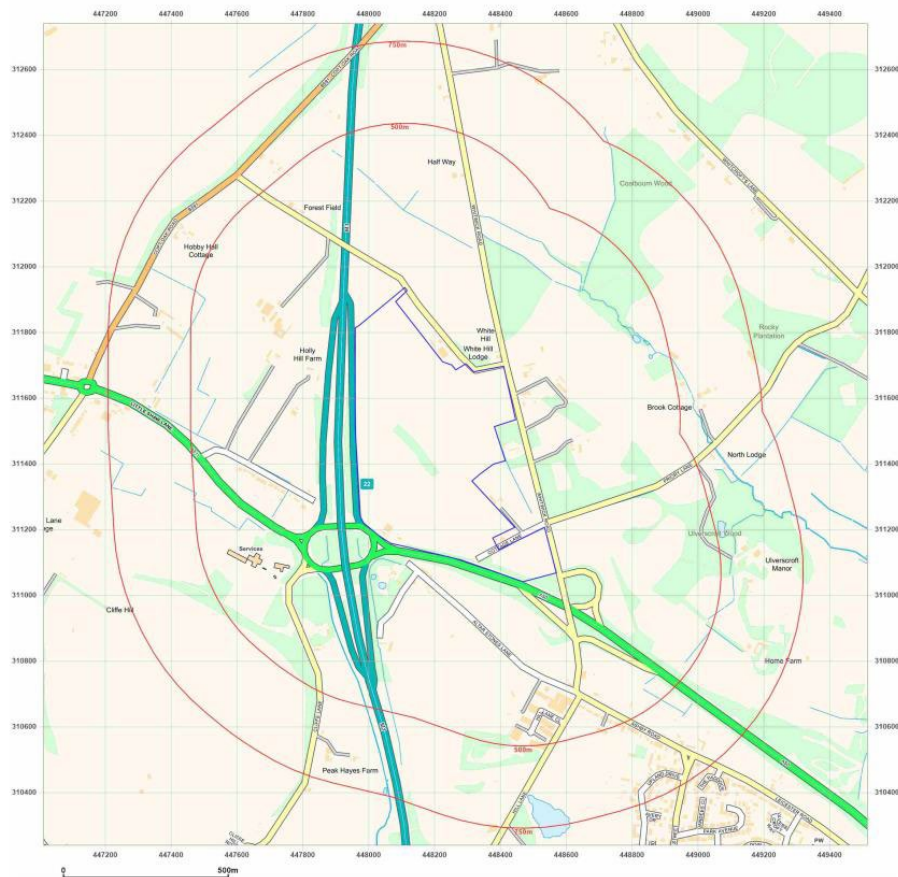
The previous report undertaken by Geo<sup>2</sup> should be read in conjunction with this Assessment:

- 'Preliminary Risk Assessment' Markfield, LE67 9QB. Ref 25/4467A.2 . Dated August 2025.

## 2.0 Description of the Site and Surroundings

### 2.1 Site Description

The site is located approximately 12.5km northwest of Leicester City centre, immediately north-east of Junction 22 of the M1. Figure A below shows the location of the site. The area shown within the blue site boundary, will be referred to throughout this document as ‘the site’.



**Figure A:** Site Location Plan. Blue line is approximate site boundary, and red lines are 500 m and 750 m buffers.

The site comprises a series of agricultural fields with some agricultural and residential properties along the southwestern perimeter known as Cliff Hill Farm.

### 2.2 Site Surroundings

The site is located immediately northeast of Junction 22 of the M1. The nearest residential properties are situated along the northern, eastern and southern boundaries of the site. The surrounding land uses of the site are summarised in Table 1 on the following page.

| Direction | Land Use                                                                                                 |
|-----------|----------------------------------------------------------------------------------------------------------|
| North     | Agricultural land, residential properties and White Hill Farm                                            |
| East      | Agricultural land and residential properties                                                             |
| South     | A50, residential and commercial properties, Old Cliffe Hill Quarry 500m southwest and agricultural land. |
| West      | M1 motorway with residential properties and agricultural land beyond                                     |

**Table 1.** Land Uses in the Surrounding Area.

### 2.2.1 Site Walkover

In addition to the site walkover notes included within the previous Geo<sup>2</sup> 'Preliminary Risk Assessment', during a site walkover prior to undertaking the ground investigation, an area of assumed waste material storage was noted to the rear of the farm buildings on the southern portion of the site, including fencing, tyres and plastics.

### 3.0 Desk Study

#### 3.1 Desk Study Data

A *Preliminary Geo-Environmental Risk Assessment* was undertaken by Geo2 (ref:25/4467A.2) dated August 2025. Pertinent information obtained from the report is summarised below:

|                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Site Geology, Hydrogeology and Hydrology</b></p> | <p>British Geological Survey (BGS) data indicates bedrock consists of mostly Gunthorpe Member Mudstone with inclusions of Beacon Hill and Bradgate Formations Volcaniclastic Siltstones.</p> <p>Superficial deposits are indicated to predominantly comprise Oadby Member (diamicton) with areas of Head deposits (clay, silt, sand and gravel) as well as areas with no superficial deposits (in the centre of the site).</p> <p>The BWB report noted a rock outcrop present in the southwestern part of the site. The outcrop was reportedly approximately 6m wide by 10m long, and 2 to 3m high, consisting of brown volcaniclastic siltstone, possibly metamorphosed, with medium to widely spaced discontinuities.</p> <p>There are no BGS boreholes located on-site.</p> <p>The site has negligible to low hazard regarding the potential for ground stability hazards including collapsible ground, ground dissolution, compressible ground, and shrinking and swelling clays.</p> <p>The bedrock is classified as a Secondary B aquifer and the superficial deposits are classed as a Secondary Undifferentiated Aquifer.</p> <p>The site is not located in a Source Protection Zone (SPZ).</p> <p>A historical potable groundwater abstraction point is located approximately 320m northeast, operated by the Trustees for Shuttlewood Clarke Foundation.</p> <p>The groundwater beneath the site in the combined productive bedrock and productive superficial aquifers has been classed as low vulnerability.</p> <p>During the BWB ground investigation groundwater was recorded between 1.2 m and 3.8 m bgl during drilling and between 0.31 m and 1.39 m bgl during subsequent monitoring.</p> <p>The nearest surface water feature is an unnamed stream located immediately adjacent to the east of the site. Surface water drainage ditches are present across the site along field boundaries.</p> <p>There have been no pollution incidents to water recorded within 500 m of the site since 2006.</p> |
| <p><b>Mining</b></p>                                   | <p>The BGS maps an Igneous Rock Quarry approximately 500m to the southwest of the site at Cliffe Hill Quarry. There are also three other igneous rock quarries 1.1-2.7km east of the site.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <p><b>Radon</b></p>                                    | <p>The site is predominantly in a low probability radon area (less than 1% of homes are estimated to be at or above the Action Level). As such, no radon protective measures are necessary in the construction of new buildings where they lay wholly within these areas. The site contains areas where 3-5% of properties will be affected by radon, this coincides with the Volcanoclastic deposits. Units 3 and 4 appear to lie within this area, hence, will likely require basic Radon protection measures to be incorporated.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Waste and Infilled Land</b>       | <p>There is a licensed waste transfer station located approximately 380 m south.</p> <p>There are two historical landfills approximately 450 m southeast and 470 m south of the site.</p> <p>There is infilled land present to the west and south of the site associated with the constructions of the M1 and A50 embankments.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Unexploded Ordnance</b>           | <p>A review of Zetica online risk mapping for the area indicates the site is located in a Low-risk area with respect to unexploded ordnance.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Site History</b>                  | <p>The site use has remained consistent since 1883 where the mapping shows the agricultural fields with residential properties in the south-west later utilised as Markfield Kennels and more recently as Cliffe Hill Farm.</p> <p>Between 1960 and 1967 the M1 was constructed to the west. Between 1968 and 1972 the A50 underwent development raising it onto an embankment</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Summary of Third-Party Report</b> | <p>A summary of the recommendations within the Geo<sup>2</sup> desk study report (Ref. 25/4467A.2) is summarised below.</p> <p><b>Geo2 'Preliminary Risk Assessment' 2025</b></p> <ul style="list-style-type: none"> <li>• A ground investigation was recommended to collect environmental and geotechnical samples and testing to inform foundation design.</li> <li>• Groundwater monitoring wells should be installed and monitored to inform groundwater levels within the proposed earthworks areas.</li> <li>• Basic radon protection measures will be required in units which intersect with areas of higher radon potential. Based on the current master plan, Units 3 &amp; 4.</li> <li>• The preliminary risk assessment identified a predominantly low, locally a low/moderate risk of soil contamination, low risk of groundwater contamination, and a low risk of hazardous ground gas at the site.</li> </ul> |

## 4.0 Preliminary Risk Assessment

### 4.1 Source – Pathway – Receptor

UK legislation and guidance on assessing potentially contaminated land recommends the use of a risk assessment process based on a review of source/pathway/receptor relationships for various environmental media. The first stage of any risk assessment is to identify, using the desk study data and site information, the presence and extent of any hazard at the site, theoretical or demonstrable.

A key component of the overall risk assessment process is identification of “significant contaminant linkages” between contaminants and receptors. This can be accomplished through development of a site-specific conceptual model in which the potential contaminants, pathways and receptors identified on-site are described.

Each element can be defined as follows:

- **Contaminant source:** A substance either on or under the land and which has the potential to cause harm or pollution to human or environmental receptors.
- **Pathway:** A route or means by which a receptor can be exposed to or affected by a source.
- **Receptor:** A living organism or an ecological system, or controlled water, or property including buildings, crops and livestock.

The presence of all three of the above elements identifies a contamination linkage and a potentially unacceptable risk. To ensure that any risk present to, or, from the site can be appropriately managed each of these contamination linkages will be targeted by the investigation.

### 4.2 Hazard Identification

The previous Preliminary Risk Assessment identified the following potential risks at the site:

Potentially contaminative on-site activities relate to the historical and current agricultural use of the site.

Geo<sup>2</sup> are not aware of any known leaks / spills which have occurred on site at the time of writing this report.

No off-site sources of contamination have been identified within close proximity to the site. The historic landfills (closest c.450m southeast) are considered unlikely to adversely impact the site and not considered further.

No significant risk from potentially elevated ground gas was identified.

The site is partly located within an area where Radon protection measures are required in new buildings.

### 4.3 Initial Conceptual Site Model (CSM)

Contamination linkages arise as a result of the interconnection of the contaminant source, contamination pathways and potential receptors. These contamination linkages are used to design the site investigation (if required), guiding the type of investigation, location of exploratory boreholes and the required sample analysis.

| Source(s)                                                                                                                                                                                                                                                                                                       | Pathway(s)                                                                                    | Receptor(s)                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <p>Potential contamination associated with agricultural use and Made Ground in the developed areas of the farm</p> <p>Potential for ACMs in the southwestern part of the site occupied by farm buildings.</p> <p>Potential for properties to be affected by radon, associated with volcanoclastic deposits.</p> | Leaching to groundwater, lateral and vertical flow, followed by migration within the aquifer. | Unnamed stream located adjacent to the east and on-site field drains                      |
|                                                                                                                                                                                                                                                                                                                 |                                                                                               | Bedrock and Superficial deposits Secondary B and Undifferentiated Aquifers, respectively. |
|                                                                                                                                                                                                                                                                                                                 | Exposure to harmful vapours, hazardous ground gas and tainting of water supply.               | Proposed commercial site end users.                                                       |
|                                                                                                                                                                                                                                                                                                                 |                                                                                               | Neighbouring site users.                                                                  |
|                                                                                                                                                                                                                                                                                                                 | Direct contact, inhalation and ingestion.                                                     | Proposed commercial site end users.                                                       |
|                                                                                                                                                                                                                                                                                                                 |                                                                                               | Construction or Maintenance Workers.                                                      |

## 5.0 Site Investigation

An intrusive ground investigation was carried out from 21<sup>st</sup> to 25<sup>th</sup> July 2025 in order to provide an assessment of the ground conditions on site for the proposed development discussed in Section 1.0.

### 5.1 Intrusive Investigation Scope

The intrusive investigation comprised the following activities:

- Service avoidance and topographic survey undertaken in all intrusive locations by a specialist third party contractor to obtain x,y,z coordinates;
- All works logged in accordance BS5930:2015+A1:2020 Code of Practice for Ground Investigations;
- Drilling of ten Rotary boreholes up to a maximum depth of 10.0 m bgl with regular Standard Penetration Tests (SPTs); and
- Excavation of twenty-one trial pits up to a maximum depth of 3.5 m bgl.

Field analysis comprised the examination of each of the samples for visual and olfactory indications of contamination.

An Exploratory Hole Location Plan is appended in Appendix A as Figure 1.

### 5.1.1 Exploratory Hole Location Rationale

Intrusive positions were chosen strategically to target certain areas as shown in the table below.

| Proposed Development / Target Location                    | Exploratory Holes                                                                                                                                                                                   | Rational                                                                                                                                | Targeted Testing                                                                                                                                                                                                                                      |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General site coverage                                     | TP102, TP103, TP104, TP106, TP108, TP115, TP117, TP120 and TP121.                                                                                                                                   | To assess the general ground conditions across the site and obtain soil samples for chemical and geotechnical testing.                  | <p>Common contaminants of concern including metals, hydrocarbons, Polycyclic Aromatic Hydrocarbons (PAH), MTBE, BTEX and asbestos.</p> <p>Geotechnical testing to inform preliminary foundation design and provide preliminary geotechnical data.</p> |
| Target existing farm buildings and storage area for waste | TP119                                                                                                                                                                                               | Obtain soil samples for chemical testing                                                                                                |                                                                                                                                                                                                                                                       |
| To target the proposed buildings                          | Unit 1 - TP101, TP105, RH101 and RH102.<br>Unit 2 - TP109, TP110, RH103 and RH104.<br>Unit 3 - TP107 and RH105.<br>Unit 4 - RH106 and RH107.<br>Unit 5 - TP116, RH108 and RH109.<br>Unit 6 - RH110. | To assess the ground conditions below the proposed buildings and obtain soil samples for chemical and geotechnical testing.             |                                                                                                                                                                                                                                                       |
| To target areas of deeper cut and fill operation          | TP112, TP113, TP111, TP118 and TP122.                                                                                                                                                               | To assess the ground conditions where significant earthworks are planned and obtain soil samples for chemical and geotechnical testing. |                                                                                                                                                                                                                                                       |

### 5.1.2 Limitations

The following limitations were noted during the works:

- Boulder/bedrock obstructions in the natural ground prevented several locations from being advanced to completion depth.
- The investigation was designed alongside the proposed plans outlined by the client in “24473-UMC-ZZZZ-SI-DR-A-0114-P04-Masterplan”.
- The excavator could not access the south-eastern fields to undertake TP123 and TP124 due to access constraints and therefore the locations had to be cancelled.
- Due to a GPR anomaly during service avoidance scanning, TP114 had to be terminated prior to commencement.

### 5.2 Ground Conditions

A summary of the ground conditions encountered at the site are summarised in the table below. Field logs are presented in Appendix B.

| Exploratory Hole Locations |                                         |               |      |                                                                                                                                                                    |                                                                                        |
|----------------------------|-----------------------------------------|---------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Stratum                    | Depth Range<br>Top of Strata<br>(m bgl) | Thickness (m) |      | Description                                                                                                                                                        | Comments                                                                               |
|                            |                                         | Min           | Max  |                                                                                                                                                                    |                                                                                        |
| Topsoil                    | 0.00                                    | 0.10          | 0.40 | Greyish light brown slightly clayey slightly silty gravelly SAND with rootlets.<br>Gravel generally comprised sandstone, mudstone, granite and quartzite.          | Present all locations.                                                                 |
| Head Deposits              | 0.14 – 0.40                             | 0.10          | 1.6  | Yellowish brown gravelly clayey SAND.<br>or<br>Yellowish brown clayey sandy GRAVEL with rare roots.<br>Gravel generally comprised mudstone, sandstone and granite. | Present in locations RH101, RH103, RH106, TP101 – TP106, TP108 – TP113, TP115 - TP121. |

| Exploratory Hole Locations                              |                                         |               |      |                                                                                                                                                                                                                                                                              |                                                            |
|---------------------------------------------------------|-----------------------------------------|---------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Stratum                                                 | Depth Range<br>Top of Strata<br>(m bgl) | Thickness (m) |      | Description                                                                                                                                                                                                                                                                  | Comments                                                   |
|                                                         |                                         | Min           | Max  |                                                                                                                                                                                                                                                                              |                                                            |
| Oadby Member                                            | 0.20 – 1.70                             | 1.05          | 9.80 | Soft to stiff grey to reddish brown/brown sandy gravelly clay with occasional cobbles and black speckling with depth and occasional lithorelicts. Gravel generally comprised mudstone, granite, sandstone and coal.                                                          | -                                                          |
| Weathered Bedrock<br>(Gunthorpe Member)                 | 4.30 – 7.00                             | Not Proven    |      | Interbedded extremely weak reddish brown thinly laminated mudstone with frequent coal inclusions and smooth to rough planar fissures interbedded with extremely weak grey structureless sandstone with coal inclusions.<br><br>Extremely weak grey closely bedded sandstone. | Present in locations RH103, RH106, RH107, RH108 and RH109. |
| Weathered Bedrock<br>(Beacon Hill / Bradgate Formation) | 8.50                                    | Not Proven    |      | Recovered as a brownish grey slightly clayey, slightly sandy gravel of dark igneous rock.                                                                                                                                                                                    | Encountered in RH106                                       |

Natural underlying superficial deposits varied across the site as detailed above, but generally comprised topsoil over a yellowish brown clayey gravelly sand (Head Deposits) over a gravelly sandy clay (Oadby Member).

The bedrock, identified in five of the rotary boreholes, slightly varied across the site but generally comprised an interbedded extremely weak thinly laminated mudstone interbedded with an extremely weak grey structureless sandstone.

### 5.2.1 Groundwater Strikes

Groundwater seepages were observed in TP107 at 3.00m bgl and TP108 at 3.20m bgl during the ground investigation.

### 5.2.2 Obstructions

Suspected shallow bedrock was encountered at a depth of 0.40 m bgl in TP117 and 1.90 m bgl in TP118, which was noted across the base of the pit and resulted in the location being abandoned. TP120 was terminated at 1.0m bgl due to instability and collapse.

A boulder was encountered at a depth of 1.30 m bgl in TP122, across the base of the trial pit resulted in the location being abandoned.

### 5.2.3 Potential Observed Contamination

Visual or olfactory evidence of gross contamination was not noted on site.

## 5.3 Groundwater Monitoring

Monitoring wells were installed in all of the boreholes (RH101 to RH110). Wells were installed with 50mm HDPE plastic pipe. Wells were monitored over two visits (30<sup>th</sup> July and 7<sup>th</sup> August 2025) for groundwater depth following completion of the ground investigation.

The groundwater monitoring data is present in Appendix E and also summarised in the below table.

| Monitoring Well | Response Zone (m bgl) | Depth to Water (m bgl) | Depth to Water (m AOD) | LNAPL | Comments |
|-----------------|-----------------------|------------------------|------------------------|-------|----------|
| RH101           | 1.0 – 10.0            | 2.96 – 3.65            | 210.06 – 210.75        | N/A   | -        |
| RH102           | 1.0 – 5.0             | 2.06 – 2.30            | 207.67 – 207.91        |       |          |
| RH103           | 1.0 – 5.0             | 1.36 – 1.69            | 207.05 – 207.38        |       |          |
| RH104           | 1.0 – 5.0             | 1.60 – 1.63            | 203.05 – 203.08        |       |          |
| RH105           | 1.0 – 10.0            | 3.17 – 3.63            | 200.99 – 201.45        |       |          |
| RH106           | 5.0 – 9.0             | 8.63 – 8.65            | 190.12 – 190.14        |       |          |
| RH107           | 1.0 – 5.0             | Dry                    | Dry                    |       |          |
| RH108           | 1.0 – 4.0             | Dry                    | Dry                    |       |          |
| RH109           | 1.0 – 10.0            | 7.27 – 7.43            | 187.64 – 187.80        |       |          |
| RH110           | 1.0 – 10.0            | 2.97 – 3.58            | 192.53 – 193.14        |       |          |

## 6.0 Environmental Laboratory Analysis

### 6.1 Environmental Analysis Rationale

Soil samples were selected for laboratory analysis following field screening, via visual and olfactory methods.

Samples were analysed for contaminants associated with historical and current use of the site in line with guidance provided in CIRIA's Contaminated Land Risk Assessment: A Guide to Good Practice (CIRIA C552, 2001).

All samples were placed in laboratory provided containers and stored in cool boxes prior to being transported to the laboratory under the laboratory's chain of custody documentation. The laboratory used for the ground investigation on this occasion was I2, a UKAS and MCERTS accredited laboratory.

Soil samples were selected from a range of depths and strata and from across the site, to gain an understanding of site-wide ground conditions. The analysis scheduled for collected soil samples is shown below in the table below.

| Analysis                                                                                                               | Rational                                                                                                                | Number of Soil Samples Analysed |
|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Asbestos                                                                                                               | Common potential contaminant which is typically analysed in all samples of Made Ground and/or reworked soils.           | 24                              |
| Total Petroleum Hydrocarbon - Criteria Working Group Method (TPHCWG), Benzene, Toluene, Ethylbenzene and Xylene (BTEX) | Common potential contaminants of concern                                                                                | 13                              |
| Total Petroleum Hydrocarbon (EC10-EC40)                                                                                |                                                                                                                         | 11                              |
| Heavy metals, speciated Polycyclic Aromatic Hydrocarbons (PAH)                                                         |                                                                                                                         | 24                              |
| Total Organic Carbon (TOC)                                                                                             | To allow comparison of soil results against their relevant assessment criteria and inform assessment of ground gas risk | 2                               |

### 6.2 Soil Testing Results

The soil results have been assessed relating to potential risks to human health receptors. Due to the site's proposed redevelopment as industrial/commercial units, soil testing results have been

compared against 'Commercial' end use Generic Assessment Criteria (GACs) thresholds. GAC concentrations associated with a conservative 1% Soil Organic Matter (SOM) have been utilised.

Where results have recorded an exceedance of the relevant GAC, this is presented below. The detailed results of laboratory analyses undertaken on soil samples are presented in Appendix C.

| Contaminant | GAC (mg/kg) | Maximum Concentration (mg/kg) | Exceedance Location (Concentration (mg/kg) / depth (m bgl))                            |
|-------------|-------------|-------------------------------|----------------------------------------------------------------------------------------|
| Asbestos    | Detected    | 0.009%                        | TP116 [0.009% / 0.4m bgl] – Loose Fibrous Debris containing Chrysotile and Crocidolite |

One sample taken from near surface at 0.40m bgl tested positive for asbestos. Asbestos identification testing and quantification analysis was undertaken on this sample, which identified Chrysotile and Crocidolite within loose fibrous Debris (0.009% w/w). During the site investigation there was no visible identification of Asbestos Containing Material (ACM) and the sample was obtained from natural ground (superficial soils) underlying a topsoil layer. It is possible that the identified asbestos is reflective of localised historically reworked ground (for example, it could have entered the soil during ploughing), or alternatively cross contamination of the sample has occurred, for example from the excavator used to undertake the trial pit, or from handling by the testing laboratory. Given the very low concentration identified, the absence of a significant potential source, and the low sensitivity of the proposed development (which will result in significant coverage of buildings and hardstanding) no further assessment or mitigation is considered necessary.

Additional sampling and analysis will be required once materials destined for off-site management are known. At present, the concentrations of asbestos detected would not themselves result in a hazardous waste classification (the threshold for this is >0.1% w/w).

## 7.0 Geotechnical Assessment

### 7.1 Geotechnical Analysis

#### 7.1.1 Geotechnical Analysis Rationale

Alongside the environmental intrusive investigation undertaken across the site on 21st to 25th July 2025 in line with anticipated contaminated land planning conditions, in-situ testing, soil sampling and geotechnical laboratory analysis was undertaken to inform preliminary foundation solutions, floor slabs, earthworks and other geotechnical considerations.

A summary of geotechnical testing is presented in the table below.

| Laboratory Test                                     | Rational                                                                                                                                              | Number of Samples |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Moisture Content                                    | For general classification, to assess plasticity and potential volume change of cohesive soils due to variations in moisture content.                 | 31                |
| Liquid and Plastic Limits (Atterberg Test)          |                                                                                                                                                       | 29                |
| Particle Size Distribution (PSD)                    | For general classification and to assess suitability of soils for re-use in earthworks in accordance with the Specification for Highways Works (SHW). | 16                |
| Shear box tests                                     | To inform the effective stress parameters ( $c'$ , $\phi'$ ) of cohesive or granular soils for use in geotechnical design.                            | 3                 |
| Unconfined Compressive Strength                     | Determine the unconfined compressive strength of a soil/rock for use in foundation design.                                                            | 9                 |
| Dry Density/Moisture content relationship           | To inform the maximum dry density and optimum moisture content relationship of a soil for use in earthworks design.                                   | 10                |
| California Bearing Ratio (CBR)                      | To inform the CBR value of a soil.                                                                                                                    | 3                 |
| Water Soluble Sulphate and pH                       | Inform concrete design with respect to aggressive ground conditions.                                                                                  | 34                |
| Total Sulphate as SO <sub>4</sub> and Total Sulphur |                                                                                                                                                       | 14                |

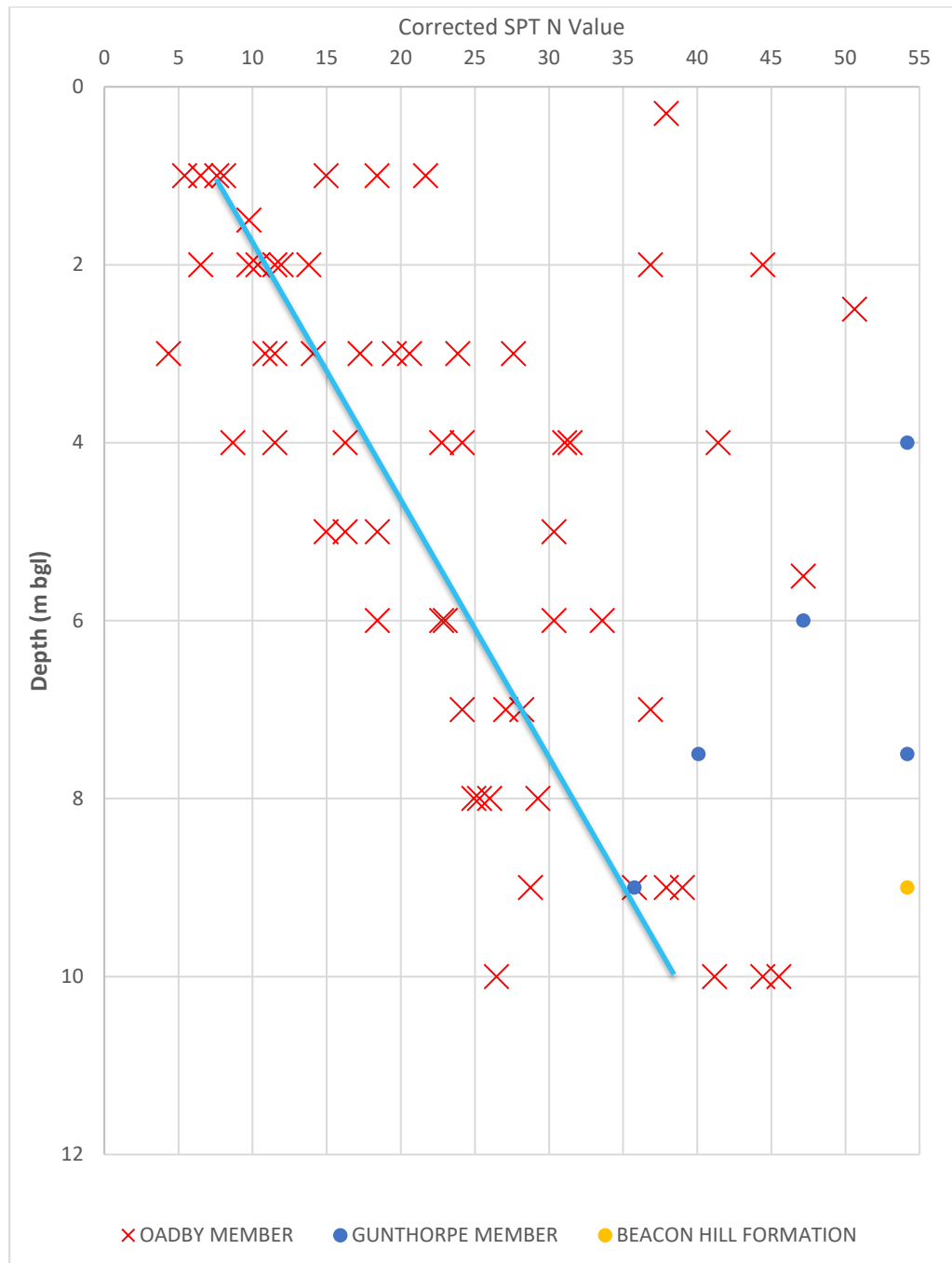
### 7.2 Geotechnical Testing

#### 7.2.1 In-Situ Tests

Standard Penetration Tests (SPTs) were generally undertaken every 1.0 m up to a maximum depth of 5.0 m bgl and then every 1.5 m thereafter in most borehole locations. In, some

locations SPT's were undertaken every metre to 10.0 m bgl. This was generally due to encountering suspected rockhead or potential obstructions.

SPT N60 values showed a general increase with depth in the Oadby Member, noted to generally be cohesive in nature, however it is noted to be variable.



Using the correlation by Stroud, whereby undrained shear strength  $C_u = f_1 \times N_{60}$ , an  $f_1 = 4.7$  is considered appropriate based on the Plasticity Index results. This corresponds

approximately to undrained shear strength values in the range of 18kN/m<sup>2</sup> to >200kN/m<sup>2</sup> for the Oadby Member, which is indicative of its variable composition (i.e varying gravel content).

## 7.2.2 Geotechnical Laboratory Results

A summary of the geotechnical test results is presented in the table below. Full details of the geotechnical results are presented in Appendix D.

| Parameter                                       |     | No of Tests | Minimum | Maximum | Average |
|-------------------------------------------------|-----|-------------|---------|---------|---------|
| Topsoil                                         |     |             |         |         |         |
| pH                                              |     | 11          | 6.5     | 8.2     | 7.15    |
| Water soluble sulphate (mg/l)                   |     | 11          | 7.41    | 38.5    | 17.37   |
| CBR (Average)                                   |     | 1           | 15      |         |         |
| Head Deposits                                   |     |             |         |         |         |
| pH                                              |     | 10          | 6.2     | 8.6     | 7.49    |
| Water soluble sulphate (mg/l)                   |     | 10          | 7.28    | 60.6    | 20.8    |
| Moisture Content (%)                            |     | 6           | 5.6     | 22.2    | 15.1    |
| Plasticity Index (%)                            |     | 5           | 15      | 31      | 24.7    |
| Modified Plasticity Index (%)                   |     | 5           | 8.6     | 27.3    | 20.5    |
| Shear Box (Shear Strength - kPa)                | C'  | 2           | 3.20    | 4.90    | 4.05    |
|                                                 | Ø'  |             | 16.5    | 44.5    | 30.5    |
| Maximum Dry Density vs Optimum Moisture Content | MDD | 2           | 1.73    | 1.84    | 1.785   |
|                                                 | OMC |             | 14      | 18      | 16      |
| Oadby Member                                    |     |             |         |         |         |
| pH                                              |     | 11          | 6.5     | 8.4     | 7.65    |

| Parameter                                       |     | No of Tests | Minimum | Maximum | Average |
|-------------------------------------------------|-----|-------------|---------|---------|---------|
| Water soluble sulphate (mg/l)                   |     | 11          | 4.24    | 164.0   | 27.74   |
| Moisture Content (%)                            |     | 22          | 11.3    | 36.9    | 18.6    |
| Plasticity Index (%)                            |     | 21          | 12      | 45      | 25.7    |
| Modified Plasticity Index (%)                   |     | 21          | 10.1    | 41.4    | 23.1    |
| SPT 'N <sub>60</sub> ' Value                    |     | 69          | 4       | 58      | 28      |
| Shear Box                                       | C'  | 1           | 12      |         |         |
|                                                 | ∅ ' |             | 22.5    |         |         |
| Maximum Dry Density vs Optimum Moisture Content |     | MDD         | 12      | 21      | 1.8     |
|                                                 |     | OMC         | 1.67    | 1.99    | 17.6    |
| CBR (Average)                                   |     | 1           | 4.6     |         |         |
| Gunthorpe Formation                             |     |             |         |         |         |
| pH                                              |     | 2           | 7.9     | 8.0     | 7.95    |
| Water soluble sulphate (mg/l)                   |     | 2           | 7.6     | 9.1     | 8.33    |
| Moisture Content (%)                            |     | 2           | 19.2    | 28.9    | 24.05   |
| Plasticity Index (%)                            |     | 2           | 25      | 29      | 27      |
| Modified Plasticity Index (%)                   |     | 2           | 24.8    | 27.3    | 26      |
| SPT 'N <sub>60</sub> ' Value                    |     | 18          | 36      | 65      | 55      |
| UCS Testing                                     |     | 9           | 103     | 684     | 265.8   |
| Beacon Hill/ Bradgate Formation                 |     |             |         |         |         |
| SPT 'N <sub>60</sub> ' Value                    |     | 1           | 65      |         |         |

Particle Size Distribution (PSD) testing using wet sieve techniques was carried out on twelve samples of the Oadby Member between 0.80-3.50m bgl, which recorded the following constituents:

- Cobbles: 0%;
- Gravel: 0% to 67%;
- Sand: 6% to 21%;
- Silt and Clay: 27% to 87%.

Particle Size Distribution (PSD) testing using wet sieve techniques was carried out on four samples of the Head Deposits between 0.40-1.30m bgl, which recorded the following constituents:

- Cobbles: 0%;
- Gravel: 10% to 47%;
- Sand: 12% to 36%;
- Silt and Clay: 32% to 71%.

The calculated modified plasticity index of 8 – 27% for the Head deposits and 10 – 41.4% for the Oadby Member indicates the material to be of low to medium and low to high volume change potential, respectively, in accordance with NHBC Standards, Chapter 4.2 'Building Near Trees'.

### 7.3 Assessment Introduction

It is understood the proposed redevelopment of the site comprises six new industrial/commercial units with associated infrastructure and a scheme of earthworks planned to facilitate this.

### 7.4 Preliminary Foundation Assessment Assumptions

The following foundation assessment is considered to be preliminary in nature given the following limitations:

- Eurocode 7 guidance notes that for large area structures, investigation points should be spaced in a grid pattern at points no more than 60m distance. Therefore, the geotechnical ground investigation completed to date and geotechnical recommendations contained herein are preliminary and not Eurocode 7 compliant. Further geotechnical ground investigation is recommended should a Eurocode 7 compliant investigation be required on this project.
- No detailed building dimensions, foundation or floor slab loads and earthworks plans have been provided to Geo<sup>2</sup> for review;
- It is assumed there are no significant basements, slopes or retaining features required as part of the proposed development.

Therefore, the preliminary recommendations below will need to be revisited if any of the above information becomes available or assumptions change.

## 7.5 Preliminary Geotechnical Risk Register

The table below is intended as a register of the potential geotechnical hazards associated with the development. It provides an assessment of whether the site is likely to be affected by the hazard, the possible consequences and engineering requirements.

| Hazard                                                                                       | Hazard Potential<br>(N/A / Low /<br>Medium / High) | Potential Engineering Consequences / Remarks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Variable ground conditions (lateral and vertical)                                            | Medium                                             | The ground conditions comprised topsoil and Head deposits over a variable thickness of Oadby Member (Diamicton) above the Gunthorpe Member.                                                                                                                                                                                                                                                                                                                                                                                              |
| Compressible ground / low bearing capacity soils (i.e., soft clays, peat, loose Made Ground) | Medium                                             | Shallow material of the Oadby Member is considered to be too soft to support shallow foundations. It is recommended to place Shallow foundations on the Oadby Member from 2.0m bgl, up to 100kN/m <sup>2</sup> should be feasible.                                                                                                                                                                                                                                                                                                       |
| Volume change potential (shrinking and swelling characteristics)                             | Medium                                             | The cohesive component of the Oadby Member classifies as low to high volume change potential. Heave protection measures may be required, and any tree planting should be undertaken with due consideration of the volume change potential of the soils.                                                                                                                                                                                                                                                                                  |
| Retaining wall / slope stability issues                                                      | Low                                                | Whilst no significant slopes are present on site, any temporary slopes created as part of the development should be subject to appropriate geotechnical design based on site-specific information.                                                                                                                                                                                                                                                                                                                                       |
| Infilled and Made Ground (including embankments)                                             | Low                                                | Limited thickness of Made Ground was encountered on-site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Groundwater                                                                                  | High                                               | Groundwater seepages were encountered at shallow depth in two trial pits in the Oadby Member and a resting water table was indicated by the post investigation monitoring within the Oadby Member (1.36 – 3.63m bgl) and a deeper groundwater table, anticipated to be within the Gunthorpe Member (7.27 – 8.65m bgl). Groundwater should be expected in shallow excavations and ground water exclusion/control methods will be required. Shallow foundations should be designed accordingly based on the ground water table identified. |
| Obstructions / buried structures (including foundations, basements, tunnels, and services)   | Medium to high                                     | The site has had a limited development history. However a number of large cobbles and boulders were encountered within the natural deposits and an outcrop of volcanoclastic siltstones is present on site.                                                                                                                                                                                                                                                                                                                              |
| Dissolution features                                                                         | NA                                                 | The ground conditions at the site are not consistent with this risk being present.                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Mining                                                                                       | NA                                                 | The site is not located within a coal mining reporting area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

|                                |     |                                                                                                                                |
|--------------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------|
| <b>Concrete Classification</b> | Low | Testing has indicated a Design Sulphate Class of DS-1 would be appropriate for all buried concrete structures across the site. |
| <b>Seismicity</b>              | Low | The PGA for a site under the 475 year return period is approximately 0.02g to 0.04g which is considered very low.              |

## 7.6 Foundation Assessment

In reference to Eurocode 7, this assessment has considered both the Ultimate Limit State (ULS) bearing capacity and Serviceable Limit State (SLS) for the preliminary and outline design of shallow foundations. As detailed structural loads are not available, Design Approach 1 (DA1) Combination 2 (A2 + M2) has been assumed with the associated partial factors applied to soil parameters only,

### 7.6.1 Spread Foundations

The Head Deposits are considered unsuitable as a founding stratum for shallow foundations without further re-engineering or ground improvement. Based upon the findings of the ground investigation, shallow pad foundations placed in firm clay of the Oadby Member at a minimum depth of 2.00m bgl are considered suitable. Assuming a minimum undrained shear strength of 45kPa, an SLS bearing capacity of 100kN/m<sup>2</sup> may be achieved (limited to less than 25mm of settlement) for pad sizes up to 2m x 2m.

At detailed design stage, consideration should be given to the variable and permanent actions on the foundation. Should the variable actions be greater than 50% of the overall load, a larger size foundation may be required to achieve the necessary bearing capacity.

Consideration should be given to ensure that foundations across the building footprint are cast in uniform strata in order limit the potential for differential settlement. All foundation excavations should be inspected by a suitably qualified engineer prior to casting to ensure the appropriate depth, founding medium and strength characteristics have been achieved.

### 7.6.2 Floor Slabs

Ground conditions largely comprise topsoil over natural superficial deposits, it is therefore considered that a ground bearing floor slab (up to 20kPa) would be suitable at the site. All unsuitable materials (Made Ground, Topsoil and soft zones) should be removed and replaced with engineered granular fill as required.

Where cut and fill earthworks are to be undertaken below ground bearing floor slabs, fill material should be placed and compacted in accordance with an agreed earthworks specification to match the long geotechnical properties of the ground in areas of cut to minimise the risk of differential settlement. This should account for any settlement of the fill material and the underlying soils.

Prior to the placement of any fill materials, the formation should be thoroughly proof rolled, with any soft zones removed and replaced with engineered granular fill.

## 7.7 Ground Improvement

Ground improvement could be feasible to densify shallow soils beneath any proposed structures in order to achieve suitable allowable bearing pressures and reduce the potential for differential settlement beneath traditional foundations and ground bearing floor slabs. This could be undertaken by Vibro replacement techniques such as Vibro Stone Columns (VSC), or Rigid Inclusions.

These techniques improve the near surface ground conditions by creating a column of unreinforced stone/concrete material to laterally displace or replace the near surface soils thereby stiffening the soil mass and reducing post construction settlements. These columns would be installed on a closely spaced grid, within and partially beyond the footprint of the proposed structures to be supported and extend down into the Oadby Member or deeper into the Gunthorpe Member. It is considered that ground improvement via this method in conjunction with a load transfer platform may be feasible to improve the strength characteristics of the loose / low strength shallow soils to allow the adoption of traditional foundations bearing within these strata for lightly loaded structures, should the anticipated loads exceed the SLS bearing capacity in Section 7.6.1. This would also reduce the potential for excessive total and/or differential settlement.

Due to variations in installation technique, it is recommended that a ground improvement contractor be consulted to determine suitability of the ground conditions, the most suitable technique, the likely improvement which may be achieved and costs for the differing techniques. Rigid inclusions/CMC's can be affected by buried obstructions and pre-drilled/probing may be required. These techniques rely on some inherent strength within the host soil to prevent the finished stone/concrete column from "barrelling" which may result in lower column performance and onerous long term settlements. Such issues would need to be discussed in advance of any detailed design work to ensure the proposed improvement technique is feasible.

If ground improvement via this technique is adopted then an appropriate working platform should be designed and constructed in accordance with BRE Digest 470 (Working Platforms for Tracked Plant) if such techniques are to be employed.

## 7.8 Volume Change Potential

The volume change potential should be considered in the design for foundation, floor slabs and services with respect to desiccation and tree planting.

The cohesive materials of the Oadby member have been identified as low to high volume change potential. A medium volume change should be adopted for design at this stage. Any proposed tree planting at the site should be undertaken in accordance with NHBC Part 4.2 - Building Near Trees to ensure minimum foundation depths are achieved.

Further assessment of cohesive soils is recommended when it is known whether it is proposed to remove trees, or introduce trees, to the proposed development.

## 7.9 Earthworks

### 7.9.1 Earthworks Material Classification

The table below summarises material grading results and the corresponding earthworks class, in accordance with the 'Specification for Highways Works, Series 600', Table 6/2.

| Exploratory Location | Depth (m bgl) | Strata       | Cobble Content (%) | Gravel Content (%) | Sand Content (%) | Fines <0.063 mm (%) | Series 600 Earthworks Class (Table 6/2) |
|----------------------|---------------|--------------|--------------------|--------------------|------------------|---------------------|-----------------------------------------|
| TP101                | 2.00-2.50     | Oadby Member | 0                  | 14                 | 10               | 76                  | 2B                                      |
| TP102                | 0.40-0.60     | Head         | 0                  | 15                 | 18               | 67                  | 2B                                      |
| TP103                | 0.40-0.50     | Head         | 0                  | 10                 | 19               | 71                  | 2B                                      |
| TP104                | 2.80-3.10     | Oadby Member | 0                  | 2                  | 11               | 87                  | 2B & 2D                                 |
| TP107                | 3.00-3.50     | Oadby Member | 0                  | 3                  | 21               | 76                  | 2B                                      |
| TP109                | 1.00-1.30     | Head         | 0                  | 47                 | 13               | 40                  | 2C                                      |
| TP109                | 2.00-2.20     | Oadby Member | 0                  | 9                  | 9                | 82                  | 2B & 2D                                 |
| TP111                | 2.50-3.00     | Oadby Member | 0                  | 10                 | 7                | 83                  | 2B & 2D                                 |
| TP112                | 2.30-2.60     | Oadby Member | 0                  | 13                 | 13               | 74                  | 2B                                      |
| TP113                | 2.20-2.60     | Oadby Member | 0                  | 3                  | 15               | 82                  | 2B & 2D                                 |
| TP115                | 2.50-3.00     | Oadby Member | 0                  | 68                 | 6                | 26                  | 2C                                      |
| TP116                | 2.00-2.50     | Oadby Member | 0                  | 2                  | 10               | 88                  | 2B & 2D                                 |
| TP118                | 0.50-1.00     | Oadby Member | 0                  | 14                 | 27               | 59                  | 2B                                      |
| TP120                | 0.80-1.00     | Head         | 0                  | 32                 | 36               | 32                  | 2C                                      |
| TP121                | 0.80-1.00     | Oadby Member | 0                  | 0                  | 11               | 89                  | 2B & 2D                                 |
| TP121                | 2.50-3.00     | Oadby Member | 0                  | 1                  | 7                | 92                  | 2B & 2D                                 |

Shallow earthworks on the Site will likely predominantly encounter Head deposits likely to fall into classes 2B and 2C, and Oadby member deposits likely to fall into classes 2B and 2D.

### 7.10 Compaction Results

The result of the compaction testing of the Head deposits indicates that the majority of samples comprises a natural moisture content dry of optimum. The result of the compaction testing of the Oadby Member indicates that the majority of samples comprises a natural moisture content close to or slightly wet of optimum.

Materials used as fill will need to be placed to a suitable engineering specification with the degree of compaction required will be dependent on end usage and serviceability criteria.

For example, a lesser degree of compaction may be suitable for paved areas than for building platforms supporting foundations and ground bearing slabs.

The suitability of earthworks materials has been assessed on the basis of the testing carried out as part of this investigation. The materials encountered on-Site may vary from those analysed; furthermore, inclement weather or winter working may result in materials being unsuitable for incorporation within the works without modification by lime, cement or other methods. In particular, cohesive soils are very susceptible to 'wet weathering working' and may require a reduction in moisture content via stabilisation techniques. These may include the use of lime and / or cement, however trials would first have to be undertaken to determine the suitability of potential techniques and acceptable mixes.

Unprotected stockpiled materials often deteriorate due to water infiltration and they may become unsuitable for incorporation in the works.

Further earthworks testing may be required prior to completion of a suitably detailed earthworks specification for the works.

### 7.10.1 Roads and Pavements

Laboratory California Bearing Ratio (CBR) testing was undertaken on three samples representative of near surface materials, with average CBR's ranging from 4.6-15.

The dataset is considered to be limited and not considered representative of the wider site, it is therefore recommended that a conservative CBR value of 3% should be adopted for shallow cohesive soils following proof rolling, for preliminary pavement design for external areas. It would be prudent to carry out plate CBR tests at formation level prior to finalising pavement design.

All materials within 450mm of final finished levels in roads or pavement should comprise non-frost-susceptible soils in accordance with BS 812-124.

### 7.11 Chemical Attack on Buried Concrete

The results for the Oadby member are listed below, noting an outlier in RH110 at 9m bgl, highlighted in yellow:

| Hole type        | TP    | RH   | RH   | RH   | RH   | RH   | RH   | RH   | RH   | RH   | RH   |
|------------------|-------|------|------|------|------|------|------|------|------|------|------|
| Hole number      | 107   | 101  | 102  | 103  | 104  | 105  | 106  | 108  | 109  | 110  | 110  |
| Sample depth (m) | 0.60  | 6.00 | 3.00 | 5.50 | 3.00 | 4.00 | 3.50 | 4.00 | 5.00 | 7.50 | 9.00 |
| Lithology        | Oadby |      |      |      |      |      |      |      |      |      |      |
| pH               | 7.9   | 8.2  | 7.8  | 8.4  | 7.7  | 7.2  | 7.4  | 6.5  | 7.0  | 7.9  | 8.1  |

| Hole type                                   | TP | RH   | RH   | RH   | RH   | RH   | RH   | RH   | RH   | RH   | RH   |
|---------------------------------------------|----|------|------|------|------|------|------|------|------|------|------|
| Total Sulphur (TS S)                        | -  | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.41 |
| Acid soluble sulphate (AS SO <sub>4</sub> ) | -  | 0.02 | 0.01 | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 | 0.01 | 0.05 | 0.21 |
| Water soluble sulphate (2:1)                | 48 | 4    | 6    | 8    | 22   | 20   | 21   | 10   | 9    | 12   | 164  |

As the Oadby Member is not listed as being a pyrite bearing strata within BRE SD1 (page 18 and page 23) and the results from this location being vastly different to other samples from the Oadby Member, the results from RH110 at 9.0m bgl are considered to be an outlier and have been omitted from this assessment.

In accordance with the recommendations of BRE Special Digest 1, 'Concrete in Aggressive Ground' 2005, the conditions of soils at the site are summarised in the below table:

| Strata                                                | DS Class | Groundwater (Mobile/Static) | Potentially Pyritic/non-pyritic |
|-------------------------------------------------------|----------|-----------------------------|---------------------------------|
| Topsoil                                               | DS-1     | -                           | Potentially Pyritic             |
| Head                                                  | DS-1     | Mobile                      | Potentially non-Pyritic         |
| Oadby                                                 | DS-1*    | Mobile                      | Potentially Pyritic             |
| Gunthorpe Member                                      | DS1      | Mobile                      | Potentially Pyritic             |
| *Reduced from DS-2 following removal of outlier data. |          |                             |                                 |

## 7.12 Excavation, Support and Earthworks

It should be assumed that shallow excavations on site are unstable and may need support in accordance with CIRIA 97 Trenching Practice. Side support for safety purposes should of course be provided to all excavations which appear unstable. In accordance with Health and Safety Regulations, a competent person who fully understands the dangers and necessary precautions should inspect an excavation of any depth at the start of each shift and after any event that may have affected the strength or stability of the excavation.

Excavation through layers of superficial deposits should be feasible using conventional site plant. However, underground obstructions may be present within the vicinity of the buildings present on the southern part of the site and within the natural material in the form of shallow bedrock or boulders.

Should any materials from site be intended to be reused in permanent earthworks, further sampling and testing should be undertaken to confirm its geotechnical and contaminative suitability. All earthworks materials should be tested, handled, classified, placed, compacted and verified in accordance with an appropriate earthworks specification. A Materials Management Plan should be prepared to assist in facilitating materials re-use.

### **7.13 Groundwater**

Groundwater seepages were noted within two trial pits during the ground investigation and during the monitoring period a shallow groundwater table was noted within the Oadby Member (1.36 – 3.63m bgl) and a deeper groundwater table, anticipated to be within the Gunthorpe Member (7.27 – 8.65m bgl). Excavations below the water table may become quickly inundated, as such local dewatering by local sump and pump may not be appropriate, and other groundwater control or exclusion measures will need to be considered. The effect of shallow groundwater within the Oadby Member should be carefully considered during the design of any earthworks required at the site and the protection of any cohesive formation layers.

## 8.0 Risk Estimation

### 8.1 Discussion of Investigation Findings

Encountered ground conditions across the site identified Topsoil in all instructive locations up to a maximum depth of 0.4 m bgl. Natural underlying superficial deposits varied across the site, generally comprising sandy gravelly clay and layers of sandy gravel and gravelly sand. The rotary boreholes terminated at a maximum depth of 10.0 m bgl in sandy gravelly clay/ extremely weak interbedded mudstone and sandstone, which is interpreted to be weathered bedrock.

Chemical analysis was undertaken on a selection of soil samples for a range of contaminants associated with the historical and current use of the site. One exceedance of the loose asbestos fibrous debris, Crocidolite and Chrysotile was identified in the subsoils at TP116 at a concentration of 0.009% w/w, which, as discussed previously, is not considered to represent a significant risk at the site, and not further assessment or mitigation is considered necessary to protect human health post-development. The remainder of the soil samples tested did not exceed their respective GAC.

Based on the data obtained during the site investigation, evidence of an off-site source impacting the site or off-site migration of contaminants was not identified.

Limitations are discussed in Section 5.1.2.

### 8.2 Qualitative Risk Assessment

Each of the identified potential contamination linkages in the preliminary conceptual site model is reviewed based upon the findings of the site investigation which allows a greater understanding of the ground conditions at the site, site observations, soil and groundwater quality and chemical analysis.

The qualitative risk assessment is undertaken, detailed in the table on the following page, in line with guidance provided in CIRIA's Contaminated Land Risk Assessment: a guide to good practice CIRIA C552, 2001. The purpose of this assessment is to determine the relative significance of the identified contamination linkages by assessing the probability of an impact occurring and by assessing the perceived severity of an impact to a receptor.

The perceived risk is based on a consideration of both the likelihood of an event (probability) occurring, and the severity of the potential consequence. Classification of these two factors is detailed in Appendix F.

Those linkages considered of low risk or less on the basis of the available site data will not be considered any further in this assessment. Linkages considered to be more significant are identified as presenting potentially unacceptable risk to the identified receptor. In these instances, further works may be considered necessary.

| Source(s)                                                                                    | Pathway(s)                                               | Receptor(s)                                                                                                                                                           | Risk | Comments/Mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------------------------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Asbestos fibres within near surface materials and determinands below their respective GAC's. | Direct contact, ingestion and/or inhalation of soil/dust | Proposed site end users (human health)                                                                                                                                | Low  | Asbestos (loose fibrous debris) was detected within one of the near surface samples tested from TP116 at a maximum concentration of 0.009%, however, this is not considered to represent a significant risk for reasons previously stated.<br><br>No visual evidence of ACMs was identified on-site during the investigation and given the proposed commercial use of the site, which will likely comprise predominantly hardstanding, the probability of risks to site end users being realised is considered Low. |
|                                                                                              |                                                          | Construction/maintenance workers (human health)                                                                                                                       | Low  | Short term risk to construction/maintenance workers would be mitigated by use of Personal Protection Equipment and provision of suitable welfare facilities.                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                              | Migration of contaminants into controlled waters         | Unnamed stream located adjacent to the east and on-site field drains (controlled waters)                                                                              | Low  | No significant contamination has been identified within the soils across the site, and therefore, there is considered to be a low risk to controlled waters from contamination at the site..                                                                                                                                                                                                                                                                                                                        |
| Contaminants in the groundwater beneath the site.                                            | Migration of contaminants into controlled waters         | An unnamed stream located immediately adjacent to the east of the site and Surface water drainage ditches across the site along field boundaries. (controlled waters) | Low  | Superficial deposits are predominately cohesive, limiting vertical migration of water and any potential contaminants. Soil results have recorded potential contaminants to be either below the laboratory limits of detection or below their respective GACs.                                                                                                                                                                                                                                                       |
|                                                                                              |                                                          | Secondary Undifferentiated and Secondary B Aquifers within the superficial deposits and bedrock. (controlled waters)                                                  |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

| Source(s)                                                                         | Pathway(s)                                | Receptor(s)                                                                 | Risk     | Comments/Mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Organic contamination in soils                                                    | Direct infiltration in water supply pipes | Drinking water supply pipes (controlled waters)                             | Possible | <p>Hydrocarbons, especially aromatics, are known to permeate plastic pipes. The majority of soil samples noted concentrations of TPH to be below the limits of detection.</p> <p>Assessment of the risk to water pipes for any new supply will have to be undertaken as a requirement of the statutory undertakers, who should be provided with a copy of this Assessment and provide recommendations for upgrading of potable water supply pipe.</p>                                                                                                                                                      |
| Hazardous ground gases arising from Made Ground soils and possible organic matter | Inhalation of noxious ground gases        | Proposed site end users, principally within enclosed spaces. (human health) | Low      | <p>The investigation recorded topsoil over natural deposits and Total Organic Matter testing of deeper natural materials recorded a maximum 0.2%.</p> <p>As per RB17<sup>1</sup>, Made Ground has not been encountered on-site, maximum TOC is 0.2% within the deeper natural material and limited organic matter was identified within natural materials during the ground investigation, as such, the risk from hazardous ground gas is therefore considered to be Low.</p> <p>The site is considered to be a Characteristic Situation 1 (CS1) where no ground gas protection measures are required.</p> |

<sup>1</sup> Contaminated Land: Applications in Real Environments. A Pragmatic Approach to Ground Gas Risk Assessment. RB17. CL:AIRE, 2012.

| Source(s)                                                         | Pathway(s)                                                      | Receptor(s)                                                                    | Risk     | Comments/Mitigation                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Radon associated with volcaniclastic deposits                     | Inhalation of Radon                                             | Proposed site end users, principally within enclosed spaces.<br>(human health) | Medium   | Volcaniclastic deposits have been identified on-site in the southern site area, as such, basic Radon protection measures will be required within proposed units 3 and 4 coinciding with the mapped volcaniclastic deposits and radon mapping.                                                                                                                                                                                                   |
| Potentially contaminated soils in areas not directly investigated | Direct contact/ingestion and inhalation of dust and/or vapours. | Proposed commercial site end users.<br>Maintenance workers.                    | Possible | A discovery strategy should be in place during any groundworks or shallow excavations for site users to act upon should suspected contamination be identified. Short term risk would be mitigated by use of PPE and provision of suitable welfare facilities. Groundworkers should use appropriate personal protective equipment (PPE) and maintain good standards of hygiene to be protected from any soil contamination which may be present. |
|                                                                   | Leaching and migration of contaminants (vertical and lateral)   | Groundwater beneath the site.<br>Surface waters.                               | Possible |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## 9.0 Conclusions and Recommendations

### 9.1 Conclusions

A Geo-Environmental Assessment of the site known as Markfield was undertaken, prior to proposed redevelopment of the site.

The purpose of the assessment was to evaluate the potential for risks to be posed to human health and controlled water receptors from historical and current use of the site as well as providing geotechnical data for preliminary design.

#### 9.1.1 Contaminated Land Considerations

During the site investigation undertaken, no visual evidence of contamination was identified on site.

The site has a very limited development history, largely used for agricultural purposes, as such the ground investigation recorded topsoil over natural superficial deposits. Soil chemical results recorded asbestos fibrous debris within near surface materials in TP116 at a concentration of 0.009%, however, this is not considered to represent a significant risk in the context of the proposed site redevelopment. Consequently, Geo<sup>2</sup> consider there to be a **Low** risk to post-development human health from soil contamination.

As no gross contamination has been identified during the investigation and superficial deposits predominantly comprise cohesive deposits, limiting vertical migration, Geo<sup>2</sup> considers the risk to controlled waters to be **Low**.

The investigation recorded topsoil over natural deposits and Total Organic Matter testing of deeper natural materials recorded a maximum 0.2% . Geo<sup>2</sup> considers the risk from hazardous ground gas to future site users to be **Low**. And as per RB17, the site is considered to be a Characteristic Situation 1 (CS1) where no ground gas protection measures are required.

Volcaniclastic deposits have been identified on-site in the southern site area, as such, basic Radon protection measures will be required within proposed units 3 and 4 coinciding with the mapped volcaniclastic deposits and radon mapping.

#### 9.1.2 Geotechnical Considerations

Based on the ground conditions encountered the firm cohesive material of the Oadby member is considered suitable as a bearing stratum in its present form, with foundation placed at a minimum of 2.0m bgl, an SLS bearing capacity of 100kN/m<sup>2</sup> is considered achievable.

Ground bearing floor slabs of up to 20kPa are considered suitable at the site. All unsuitable materials (Made Ground, Topsoil and soft zones) should be removed and replaced with

engineered granular fill as required. Ground improvement techniques could allow the adoption of ground bearing floor slabs which require a higher bearing capacity.

Where cut and fill earthworks are to be undertaken below ground bearing floor slabs, fill material should be placed and compacted in accordance with an agreed earthworks specification to match the long geotechnical properties of the ground in areas of cut to minimise the risk of differential settlement. This should account for any settlement of the fill material and the underlying soils.

Buried obstructions in the form of boulders/bedrock were encountered in several locations during the ground investigation. Buried concrete may be encountered within the area of the developed farm area on the south of the site. These may need breaking out during the enabling works.

Groundwater seepages were noted within two trial pits during the ground investigation and a shallow and deeper groundwater table was identified during the monitoring period, as such, shallow excavations may not be stable and will require to be supported.

A conservative design CBR of 3% is recommended on the near surface natural material for preliminary design purposes. It would be prudent to undertake further testing ahead of construction to assure the design process.

A design sulphate classification of DS1 would be required for buried concrete within the Oadby member, based on the Total Potential Sulphate.

## 9.2 Recommendations

The following measures are recommended to address the identified risks and facilitate future redevelopment:

- Eurocode 7 guidance notes that for large area structures, investigation points should be spaced in a grid pattern at points no more than 60m distance. Therefore, the geotechnical ground investigation completed to date and geotechnical recommendations contained herein are preliminary and not Eurocode 7 compliant. Further geotechnical ground investigation is recommended should a Eurocode 7 compliant investigation be required on this project.
- Site users during the redevelopment of the site should be advised during toolbox talks of the possibility of encountering contaminated soils. Given that asbestos is known to be on-site, workers should be informed of the appropriate protocols to minimise risk of exposure to themselves and others. Appropriate levels of Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE) should be implemented as and when needed. The Contractor, who should be appropriately qualified and experienced, shall prepare a Construction Environmental Management Plan (CEMP). The CEMP shall include a detailed Asbestos Management Plan (AMP) and full details of the measures to be taken during the

redevelopment, including control measures such as dampening down dry soils and wheel wash/road sweeper facilities.

- Basic radon protection measures will be required within proposed units 3 and 4 coinciding with the mapped volcanoclastic deposits and radon mapping
- Production of a Remediation Strategy to include, but not limited to, a hotspot protocol in the event of unidentified localised areas of contamination being encountered.
- Consideration to the production of a Materials Management Plan (MMP) to facilitate sustainable materials re-use.
- Although considered unlikely, the Local Water Authority should be contacted to advise whether they will require the installation of upgraded pipework for new services at the site.
- When areas of soils to be removed from site are identified, e.g. service trenches, surface water attenuation, additional sampling, analysis and assessment should be undertaken to inform off-site management routes. Waste classification was not undertaken as part of the scope of works.

## 10.0 Limitations

This Report was prepared by Geo<sup>2</sup> for the sole and exclusive use of the Client and for the specific purpose for which Geo<sup>2</sup> was instructed. Unless explicitly agreed otherwise, in writing, this Report has been prepared under Geo<sup>2</sup>'s Standard Terms and Conditions.

Geo<sup>2</sup> does not intend, without its written consent through a formal letter of reliance or warranty, for this Report to be disseminated to any party other than the named Client or to be used or relied upon by any party other than the named Client. Use of the Report by any other party is unauthorised and such use is at the sole risk of the user. Any party using or relying upon this Report, other than the Client, agrees by virtue of its use to indemnify and hold harmless Geo<sup>2</sup> from and against all claims, losses and damages (of whatsoever nature and howsoever or whensoever arising), arising out of or resulting from the performance of the work by Geo<sup>2</sup>.

The recommendations contained within this Report represent Geo<sup>2</sup>'s professional opinions, based upon the information detailed within the Report, exercising the reasonable skill and care to be expected of a professional consultant holding itself out as having the competence, experience, and resources necessary for the purpose of carrying out similar work in scope and character to the services performed. The Report needs to be considered in the light of the proposal and associated limitations of scope. The Report needs to be read and considered in full and isolated sections cannot be used without full reference to other elements of the Report and any previous works referenced within the Report.

## 11.0 References

### British Standards Institute

BS10175:2011 Investigation of potentially contaminated land sites – code of practice.

BS8485:2015 Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings

### British Geological Society

Geology of Britain Viewer, <https://mapapps2.bgs.ac.uk/geoindex/home.html>

### CIRIA

C552 Contaminated Land Risk Assessment, a guide to good practise, 2001.

C665, Assessing risks posed by hazardous ground gases to buildings, 2007.

### CL:AIRE

Good Practice For Risk Assessment For Coal Mine Gas Emissions, October 2021.

### Environmental Agency

Land Contamination Risk Management (LCRM) Guidance, 2020.

### Mining Remediation Authority

Mining Remediation Authority Interactive Viewer, <https://datamine-cauk.hub.arcgis.com/>

### Zetica UXO

Risk Maps Viewer, <https://zeticauxo.com/guidance/risk-maps/>

### Screening Assessment

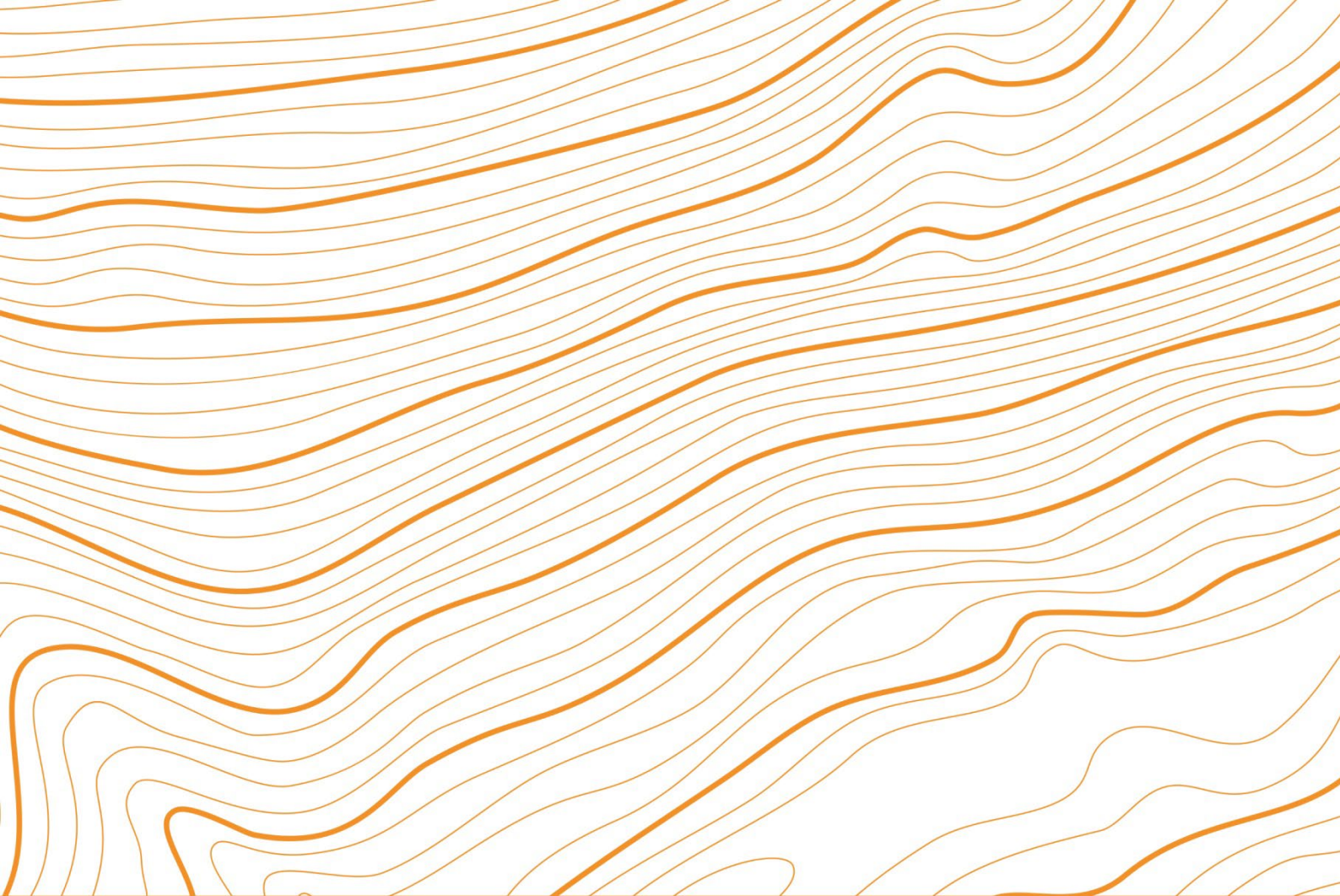
Category 4 Screening Levels (C4SLs) published by DEFRA.

Guidance values produced by the Environmental Industries Commission (EIC), the Associated of Geotechnical and Geoenvironmental Specialists (AGS) and Contaminated Land: Application in Real Environments (CL:AIRE) in December 2009.

Land Quality Management/CIEH S4UIs for Human Health Risk Assessment, 2014. *Copyright Land Quality Management Limited, reproduced with permission. Publication Number S4UL3369. All rights reserved.*

Acute Generic Assessment Criteria published by the Society of Brownfield Risk Assessment (SoBRA) 2019.

Society of Brownfield Risk Assessment “Development of Generic Assessment Criteria for Assessing Vapour Risks to Human Health from Volatile Contaminants in Groundwater”, dated September 2024 (Version 2.0).

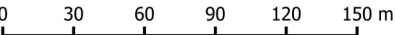


## **Appendix A – Drawings and Figures**

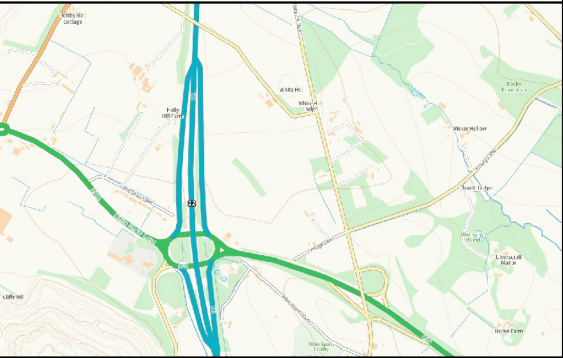


Legend

- SI Locations
-  RH10x - Rotary Borehole
  -  TP10x - Trial Pit
  -  Site Boundary



|                                     |                  |                      |
|-------------------------------------|------------------|----------------------|
| Figure<br>Exploratory Location Plan |                  |                      |
| Job<br>Markfield                    |                  |                      |
| Client<br>Burrows Graham            |                  |                      |
| Figure No.<br>1                     | Revision<br>1    | Date<br>29 July 2025 |
| Drawn by<br>EM                      | Checked by<br>AT | Scale<br>1:3,200     |
| Job No.<br>4467                     |                  |                      |

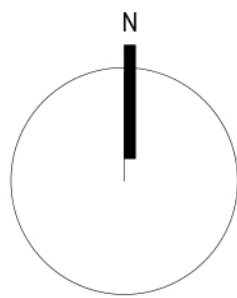


DO NOT SCALE. NOT FOR CONSTRUCTION



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SCHEDULE OF ACCOMMODATION

(Gross Internal Area)

|                                  |             |          |
|----------------------------------|-------------|----------|
| Total Area                       | 697440 ft²  | 64794 m² |
| Site Area                        | 69.79 acres | 28.24 ha |
| Net Development Area (Inc. Road) | 34 acres    | 13.75 ha |
| Green Infrastructure             | 35.79 acres | 14.49 ha |
| Road Infrastructure              | 3.94 acres  | 1.59 ha  |
| Site Density                     | 48.72%      |          |

|                                    |            |          |
|------------------------------------|------------|----------|
| Unit 01                            |            |          |
| Warehouse                          | 137356 ft² | 12761 m² |
| Undercroft                         | 4334 ft²   | 403 m²   |
| Office including ground floor core | 12097 ft²  | 1124m²   |
| Total Area                         | 153787 ft² | 14287 m² |

Staff Parking

150 Spaces including: 93 standard, 10 car share, 30 EV charging, 7 accessible, 2 accessible EV charging and 8 motorcycle.  
Cycle Storage: 48 no.

HGV Parking

39 Spaces including: 20 HGV and 19 HGV Trailer.

|                                    |            |          |
|------------------------------------|------------|----------|
| Unit 02                            |            |          |
| Warehouse                          | 208351 ft² | 19356 m² |
| Undercroft                         | 4026 ft²   | 374 m²   |
| Office including ground floor core | 11476 ft²  | 1066m²   |
| Transport Office                   | 2582 ft²   | 240 m²   |
| Gatehouse                          | 301 ft²    | 28m²     |
| Total Area                         | 226741 ft² | 21065 m² |

Staff Parking

219 Spaces including: 145 standard, 11 car share, 44 EV charging, 9 accessible, 2 accessible EV charging and 8 motorcycle.  
Cycle Storage: 72 no.

HGV Parking

74 Spaces including: 34 HGV and 40 HGV Trailer.

|                                    |           |         |
|------------------------------------|-----------|---------|
| Unit 03                            |           |         |
| Warehouse                          | 58216 ft² | 5501 m² |
| Undercroft                         | 1845 ft²  | 171 m²  |
| Office including ground floor core | 6372 ft²  | 582m²   |
| Total Area                         | 67433 ft² | 6265 m² |

Staff Parking

66 Spaces including: 41 standard, 4 car share, 14 EV charging, 1 accessible, 2 accessible EV charging and 4 motorcycle.  
Cycle Storage: 24 no.

HGV Parking

22 Spaces including: 9 HGV and 13 HGV Trailer.

|                                    |            |          |
|------------------------------------|------------|----------|
| Unit 04                            |            |          |
| Warehouse                          | 112397 ft² | 10442 m² |
| Undercroft                         | 3671 ft²   | 341 m²   |
| Office including ground floor core | 11207 ft²  | 1041m²   |
| Total Area                         | 127275 ft² | 11824 m² |

Staff Parking

124 Spaces including: 80 standard, 6 car share, 24 EV charging, 4 accessible, 2 accessible EV charging and 8 motorcycle.  
Cycle Storage: 36 no.

HGV Parking

46 Spaces including: 22 HGV and 24 HGV Trailer.

|                                    |           |         |
|------------------------------------|-----------|---------|
| Unit 05                            |           |         |
| Warehouse                          | 82684 ft² | 7682 m² |
| Undercroft                         | 2413 ft²  | 224 m²  |
| Office including ground floor core | 8697 ft²  | 808m²   |
| Total Area                         | 93794 ft² | 8714 m² |

Staff Parking

95 Spaces including: 59 standard, 5 car share, 18 EV charging, 3 accessible, 2 accessible EV charging and 8 motorcycle.  
Cycle Storage: 36 no.

HGV Parking

20 Spaces including: 16 HGV and 4 HGV Trailer.

|                                    |           |         |
|------------------------------------|-----------|---------|
| Unit 06                            |           |         |
| Warehouse                          | 23208 ft² | 2156 m² |
| Undercroft                         | 1707 ft²  | 159 m²  |
| Office including ground floor core | 3496 ft²  | 325m²   |
| Total Area                         | 28410 ft² | 2639 m² |

Staff Parking

32 Spaces including: 18 standard, 2 car share, 6 EV charging, 2 accessible EV charging and 4 motorcycle.  
Cycle Storage: 12 no.

HGV Parking

6 Spaces including: 6 HGV.



General Notes

- This document is to be used for the stated purpose only and should not be used for any other.
- Dimensions are all in millimetres, unless stated otherwise.
- It is the recipient's responsibility to print this document to the correct size & scale.
- All relevant drawings and specifications should be read in conjunction with this document.
- Scaling of this document is not recommended.



Scale 1:2000

SITE LEGEND

- Application Boundary
- Wildlife Tunnel
- Public Right of Way
- Existing Trees Retained
- Substation
- Transformer Enclosure
- Condenser Enclosure
- Bin / Recycling Enclosure
- Cycle Storage

Project Name

Land at Junction 22 M1, Cliffe Hill Farm

|                              |                                                                     |
|------------------------------|---------------------------------------------------------------------|
| Employer                     | Project Address                                                     |
| Caddick Developments Limited | Land at Junction 22 M1, Cliffe Hill Farm, Markfield, Leicestershire |

|                          |                         |
|--------------------------|-------------------------|
| RIBA Workstage           | Status                  |
| 3 - Spatial Coordination | A3 - Authorised Stage 3 |

|       |         |          |      |
|-------|---------|----------|------|
| Drawn | Checked | Created  | Size |
| JT    | DEB     | 15.08.25 | A1   |

|               |        |     |     |
|---------------|--------|-----|-----|
| UMC Reference | Scale  | LOD | LOI |
| 24473         | 1:2000 | 3   | 3   |

Document Title

Proposed Masterplan

Document Reference

24473 - UMC - ZZZZ - ZZ - DR - A - 0601

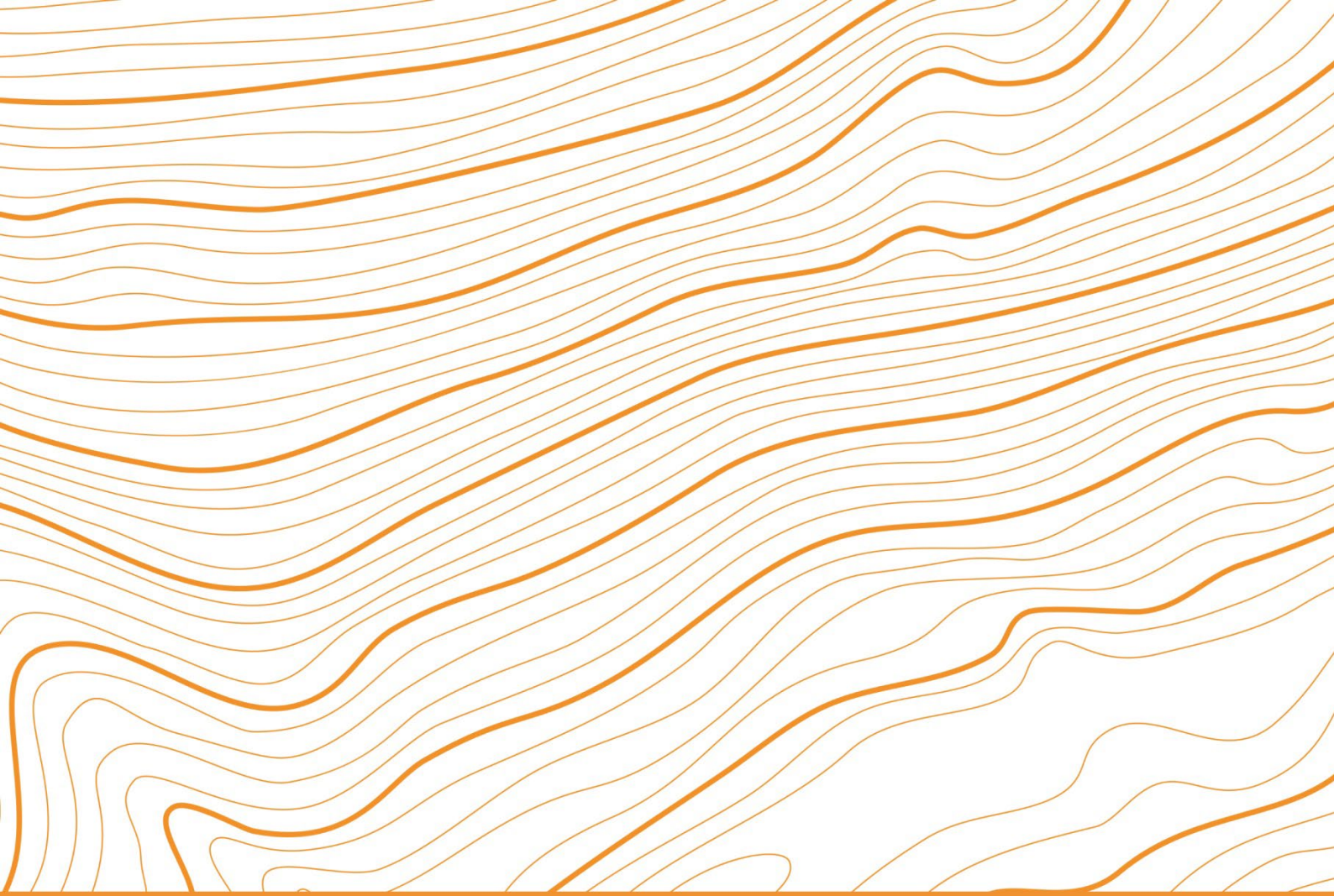
Revision Note

PLANNING ISSUE

|            |          |                  |
|------------|----------|------------------|
| Issue Date | Package  | Current Revision |
| 19.09.25   | PLANNING |                  |

PROPOSED MASTERPLAN

1 : 2000

A decorative background pattern consisting of numerous thin, wavy, orange lines that resemble contour lines on a topographic map, filling the upper half of the page.

## **Appendix B – Exploratory Hole Logs & SPT Calibration Certificates**



# Key to exploratory hole symbols and abbreviations

## SAMPLE TYPES

|                              |                           |                                   |
|------------------------------|---------------------------|-----------------------------------|
| ACM - Asbestos sample        | AMAL - Amalgamated sample | B - Bulk disturbed sample         |
| BLK - Block sample           | C - Core sample           | CBR - CBR test sample             |
| D - Disturbed sample         | ES - Environmental sample | EW - Environmental water sample   |
| G - Gas sample               | J - Jar sample            | L - Liner sample                  |
| TW - Pushed thin wall sample | U - Undisturbed sample    | UT - Undisturbed thin wall sample |
| W - Water sample             |                           |                                   |

## IN-SITU TESTS

|                        |                                  |                                 |
|------------------------|----------------------------------|---------------------------------|
| HV - Hand shear vane   | HV(r) - Hand shear vane residual | PID - Photo ionisation detector |
| PP - Hand penetrometer | SPT - Standard penetration test  | SPT(C) - SPT using cone         |

## GROUNDWATER



Groundwater strike



Groundwater rest level

## ROTARY CORE DETAILS

|                               |                               |                                    |
|-------------------------------|-------------------------------|------------------------------------|
| TCR - Total core recovery (%) | SCR - Solid core recovery (%) | RQD - Rock quality designation (%) |
| FI - Fracture index           | NI - Non-intact core          | AZCL - Assumed zone of core loss   |

## LEGEND

|                           |           |              |                 |
|---------------------------|-----------|--------------|-----------------|
| Topsoil                   | Clay      | Chalk        | Sand backfill   |
| Peat                      | Silt      | Breccia      | Gravel backfill |
| Made ground<br>[cohesive] | Sand      | Conglomerate | Arisings        |
| Concrete                  | Gravel    | Metamorphic  | Bentonite       |
| Wood                      | Cobbles   | Igneous      | Concrete        |
| Brick                     | Boulders  |              | Grout           |
| Bituminous<br>material    | Mudstone  |              | Plain pipe      |
| Gypsum                    | Siltstone |              |                 |
| Coal                      | Sandstone |              | Slotted pipe    |
| Void                      | Limestone |              |                 |



# Rotary Core Log

RH101  
Sheet 1 of 2

|                           |                      |                          |                            |               |
|---------------------------|----------------------|--------------------------|----------------------------|---------------|
| Hole Type<br>RC           | Easting<br>448071.87 | Northing<br>311747.30    | Ground Level (m)<br>213.71 | Scale<br>1:35 |
| Project Name<br>Markfield | Project No.<br>4467  | Start Date<br>2025-07-25 | End Date<br>2025-07-25     |               |

|                          |                  |                    |
|--------------------------|------------------|--------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>DSUK |
|--------------------------|------------------|--------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |              |                           | Coring      |            |            |            | Frac | Level<br>(m) | Depth<br>(m) | Strata                                       |                                                                                                                                                                                           |
|-------------------|-----------------|-------------------|--------------|---------------------------|-------------|------------|------------|------------|------|--------------|--------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   |                 | Depth (m)         | Type/<br>Ref | Results                   | Core<br>Run | TCR<br>(%) | SCR<br>(%) | RQD<br>(%) |      |              |              | Legend                                       | Description                                                                                                                                                                               |
|                   |                 | 1.00              | SPT          | N=7 (1,2/2,1,2,2) N60=8   |             |            |            |            |      | 213.46       | (0.25)       |                                              | TOPSOIL: Greyish brown gravelly SAND with rootlets. Gravel is angular to sub-rounded fine to coarse mudstone and sandstone.                                                               |
|                   |                 |                   |              |                           |             |            |            |            |      | 213.21       | (0.25)       |                                              | Yellowish brown gravelly clayey SAND. Sand is fine to coarse. Gravel is angular to sub-rounded fine to coarse sandstone, mudstone and coal.                                               |
|                   |                 |                   |              |                           |             |            |            |            |      |              | (0.50)       | NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR | [HEAD]                                                                                                                                                                                    |
|                   |                 |                   |              |                           |             |            |            |            |      | 212.71       | 1.00         | NR NR NR                                     | No Recovery.                                                                                                                                                                              |
|                   |                 | 2.00              | SPT          | N=9 (2,2/2,3,2,2) N60=10  |             |            |            |            |      | 211.71       | 2.00         |                                              | Firm orangish brown with black speckling mottled grey slightly gravelly slightly sandy CLAY. Gravel is angular to sub-rounded fine to coarse mudstone, sandstone and coal. [OADBY MEMBER] |
|                   |                 |                   |              |                           |             |            |            |            |      |              | (0.47)       |                                              | Firm reddish brown with black speckling slightly sandy gravelly CLAY. Gravel is angular to sub-angular fine to medium mudstone. [OADBY MEMBER]                                            |
|                   |                 |                   |              |                           |             |            |            |            |      | 211.24       | 2.47         |                                              | Black basalt cobble. [OADBY MEMBER]                                                                                                                                                       |
|                   |                 |                   |              |                           |             |            |            |            |      | 211.17       | (0.07)       |                                              | Firm orangish brown mottled grey slightly gravelly sandy CLAY. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone and granite. [OADBY MEMBER]                        |
|                   |                 | 3.00              | SPT          | N=13 (2,2/3,3,4,3) N60=14 |             |            |            |            |      |              | 2.54         |                                              |                                                                                                                                                                                           |
|                   |                 | 4.00              | SPT          | N=21 (2,3/3,4,5,9) N60=23 |             |            |            |            |      |              | (6.46)       |                                              |                                                                                                                                                                                           |
|                   |                 | 5.00              | SPT          | N=28 (2,4/6,8,8,6) N60=30 |             |            |            |            |      |              |              |                                              |                                                                                                                                                                                           |
|                   |                 | 6.00              | SPT          | N=28 (4,6/6,7,7,8) N60=30 |             |            |            |            |      |              |              |                                              |                                                                                                                                                                                           |
|                   |                 | 6.00-7.00         | B 1          |                           |             |            |            |            |      |              |              |                                              |                                                                                                                                                                                           |

Continued on next page

|                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                     |                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 10.00 m bgl 6. Borehole remained dry upon completion. | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 10.00m RC<br>Inclination: 90° Orientation: 0° | <b>Logger</b><br>GL |
|                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Checked By:</b> AT <b>Approved By:</b> TH <b>Status:</b> FINAL                                   |                     |



|              |             |           |                  |            |
|--------------|-------------|-----------|------------------|------------|
| Hole Type    | Easting     | Northing  | Ground Level (m) | Scale      |
| RC           | 448071.87   | 311747.30 | 213.71           | 1:35       |
| Project Name | Project No. |           | Start Date       | End Date   |
| Markfield    | 4467        |           | 2025-07-25       | 2025-07-25 |

**Client**  
Burrows Graham

**Consultant**  
GL

**Contractor**  
DSUK

[illegible]

### Remarks

1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 10.00 m bgl 6. Borehole remained dry upon completion.

## Method, Plant, Stability, Dimensions

0.00 - 10.00m RC  
Inclination: 90° Orientation: 0°

## Logger

GL

**Checked By: AT    Approved By: TH    Status: FINAL**

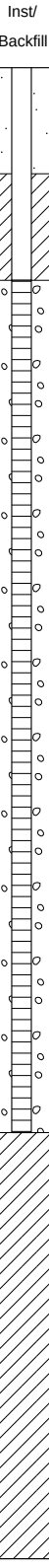


|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>RC           | Easting<br>448108.29 | Northing<br>311681.60 | Ground Level (m)<br>209.97 | Scale<br>1:35          |
| Project Name<br>Markfield |                      | Project No.<br>4467   | Start Date<br>2025-07-24   | End Date<br>2025-07-24 |

**Client**  
Burrows Graham

**Consultant**  
GL

**Contractor**  
DSUK

| Inst/<br>Backfill                                                                 | Water<br>Levels | Samples and Tests               |                                 |                         | Coring      |            |            |            | Frac | Level                  | Depth<br>(thickness) | Strata                                                                                                                                                      |                                                                                                                                                                       |                                                                                                                                                                                                             |     |
|-----------------------------------------------------------------------------------|-----------------|---------------------------------|---------------------------------|-------------------------|-------------|------------|------------|------------|------|------------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|                                                                                   |                 | Depth (m)                       | Type/<br>Ref                    | Results                 | Core<br>Run | TCR<br>(%) | SCR<br>(%) | RQD<br>(%) |      |                        |                      | Legend                                                                                                                                                      | Description                                                                                                                                                           |                                                                                                                                                                                                             |     |
|  |                 | 1.00                            | SPT                             | N=5 (1,1/1,1,2,1) N60=5 |             |            |            |            |      |                        | 209.77               | (0.20)<br>0.20                                                                                                                                              |                                                                                      | TOPSOIL: Greyish light brown slightly clayey silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone and mudstone. Rare sandstone cobbles. | 0.5 |
|                                                                                   | (0.85)          |                                 |                                 |                         |             |            |            |            |      |                        |                      | Soft to firm greyish brown slightly gravelly sandy CLAY. Gravel is angular to sub-rounded fine to coarse mudstone, sandstone and granite.<br>[OADBY MEMBER] |                                                                                                                                                                       |                                                                                                                                                                                                             |     |
|                                                                                   | 2.00            | SPT                             | N=6 (1,2/2,1,2,1) N60=7         | 208.92                  |             |            |            |            |      |                        | 1.05                 |                                                                                                                                                             | Firm reddish brown with black speckling slightly sandy gravelly CLAY. Gravel is angular to sub-angular fine to medium mudstone.<br>[OADBY MEMBER]                     | 1.0                                                                                                                                                                                                         |     |
|                                                                                   |                 |                                 |                                 | (1.65)                  |             |            |            |            |      |                        |                      |                                                                                                                                                             |                                                                                                                                                                       | 1.5                                                                                                                                                                                                         |     |
|                                                                                   | 3.00            | SPT                             | N=10<br>(1,1/2,2,3,3)<br>N60=11 | 207.27                  |             |            |            |            |      |                        | 2.70                 |                                                                                                                                                             | Firm orangish brown mottled grey slightly gravelly sandy CLAY. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone and granite.<br>[OADBY MEMBER] | 3.0                                                                                                                                                                                                         |     |
|                                                                                   |                 |                                 |                                 |                         |             |            |            |            |      |                        |                      |                                                                                                                                                             |                                                                                                                                                                       | 3.00-4.00                                                                                                                                                                                                   | B 1 |
|                                                                                   | 4.00            | SPT                             | N=15<br>(1,2/3,3,4,5)<br>N60=16 | (2.25)                  |             |            |            |            |      |                        |                      |                                                                                                                                                             |                                                                                                                                                                       |                                                                                                                                                                                                             |     |
|                                                                                   |                 |                                 |                                 |                         |             |            |            |            |      |                        |                      |                                                                                                                                                             |                                                                                                                                                                       | 4.5                                                                                                                                                                                                         |     |
|                                                                                   | 5.00            | SPT                             | N=15<br>(2,2/2,3,5,5)<br>N60=16 | 205.02                  |             |            |            |            |      |                        | 4.95                 |                                                                                                                                                             | Firm reddish brown with black speckling slightly sandy gravelly CLAY. Gravel is angular to sub-angular fine to medium mudstone.<br>[OADBY MEMBER]                     |                                                                                                                                                                                                             |     |
|                                                                                   |                 |                                 |                                 |                         |             |            |            |            |      |                        |                      |                                                                                                                                                             |                                                                                                                                                                       | 5.5                                                                                                                                                                                                         |     |
| 6.00                                                                              | SPT             | N=21<br>(2,3/4,4,6,7)<br>N60=23 | (2.25)                          |                         |             |            |            |            |      | 6.0                    |                      |                                                                                                                                                             |                                                                                                                                                                       |                                                                                                                                                                                                             |     |
|                                                                                   |                 |                                 |                                 |                         |             |            |            |            |      | 6.5                    |                      |                                                                                                                                                             |                                                                                                                                                                       |                                                                                                                                                                                                             |     |
| 7.0                                                                               |                 |                                 |                                 |                         |             |            |            |            |      |                        |                      |                                                                                                                                                             |                                                                                                                                                                       |                                                                                                                                                                                                             |     |
|                                                                                   |                 |                                 |                                 |                         |             |            |            |            |      | Continued on next page |                      |                                                                                                                                                             |                                                                                                                                                                       |                                                                                                                                                                                                             |     |

### Remarks

1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 5.00 m bgl. 6. Borehole remained dry upon completion.

## Method, Plant, Stability, Dimensions

0.00 - 10.00m RC  
Inclination: 90° Orientation: 0°

## Logger

GL

**Checked By: AT    Approved By: TH    Status: FINAL**



|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>RC           | Easting<br>448108.29 | Northing<br>311681.60 | Ground Level (m)<br>209.97 | Scale<br>1:35          |
| Project Name<br>Markfield |                      | Project No.<br>4467   | Start Date<br>2025-07-24   | End Date<br>2025-07-24 |

**Client**  
Burrows Graham

**Consultant**  
GL

**Contractor**  
DSUK

[illegible]

**Remarks**  
1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 5.00 m bgl 6. Borehole remained dry upon completion.

**Method, Plant, Stability, Dimensions**  
0.00 - 10.00m RC  
*Inclination: 90° Orientation: 0°*

## Logger

**Checked By: AT    Approved By: TH    Status: FINAL**

# RH103

Sheet 1 of 2

|              |             |           |                  |            |
|--------------|-------------|-----------|------------------|------------|
| Hole Type    | Easting     | Northing  | Ground Level (m) | Scale      |
| RC           | 448243.10   | 311623.28 | 208.74           | 1:35       |
| Project Name | Project No. |           | Start Date       | End Date   |
| Markfield    | 4467        |           | 2025-07-23       | 2025-07-23 |

|                                 |                         |                           |
|---------------------------------|-------------------------|---------------------------|
| <b>Client</b><br>Burrows Graham | <b>Consultant</b><br>GL | <b>Contractor</b><br>DSUK |
|---------------------------------|-------------------------|---------------------------|

| Inst/<br>Backfill                                                                 | Water<br>Levels | Samples and Tests |              |                                           | Coring                           |            |            |            | Frac | Level  | Depth<br><small>(thickness)</small> | Strata                                                                              |                                                                                                                                                                                                             |                                                                                                                                                                       |     |
|-----------------------------------------------------------------------------------|-----------------|-------------------|--------------|-------------------------------------------|----------------------------------|------------|------------|------------|------|--------|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|                                                                                   |                 | Depth (m)         | Type/<br>Ref | Results                                   | Core<br>Run                      | TCR<br>(%) | SCR<br>(%) | RQD<br>(%) |      |        |                                     | Legend                                                                              | Description                                                                                                                                                                                                 |                                                                                                                                                                       |     |
|  |                 | 0.30              | SPT          | N=35<br>(12,11/8,8,9,10)<br>N60=38        |                                  |            |            |            |      | 208.44 | 0.30                                |    | TOPSOIL: Greyish light brown slightly clayey silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone and mudstone. Rare sandstone cobbles. | 0.5                                                                                                                                                                   |     |
|                                                                                   |                 |                   |              |                                           |                                  |            |            |            |      | 208.14 | 0.60                                |    | Yellowish brown mottled grey gravelly clayey SAND with rare rootlets. Sand is fine to coarse. Gravel is angular to sub-rounded fine to coarse sandstone, mudstone and coal.<br>[HEAD]                       |                                                                                                                                                                       |     |
|                                                                                   |                 | 1.50              | SPT          | N=9 (1,2/2,2,3,2) N60=10                  |                                  |            |            |            |      |        |                                     |                                                                                     |                                                                                                                            | Red very clayey sandy GRAVEL. Gravel is angular to sub-rounded fine to coarse mudstone, sandstone and granite.<br>[OADBY MEMBER]                                      | 1.0 |
|                                                                                   |                 | 2.00              | SPT          | N=41<br>(25 for 50mm/17,7,6,11)<br>N60=44 |                                  |            |            |            |      |        |                                     | (2.40)                                                                              |                                                                                                                            | Firm orangish brown mottled grey slightly gravelly sandy CLAY. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone and granite.<br>[OADBY MEMBER] | 1.5 |
|                                                                                   |                 | 3.00              | SPT          | N=22<br>(2,3/5,6,5,6)<br>N60=24           |                                  |            |            |            |      |        | 205.74                              | 3.00                                                                                |                                                                                                                            | Firm orangish brown mottled grey slightly gravelly sandy CLAY. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone and granite.<br>[OADBY MEMBER] | 3.0 |
|                                                                                   |                 | 4.00              | SPT          | N=29<br>(3,4/5,6,7,11)<br>N60=31          |                                  |            |            |            |      |        |                                     | (1.50)                                                                              |                                                                                                                            | Firm orangish brown mottled grey slightly gravelly sandy CLAY. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone and granite.<br>[OADBY MEMBER] | 3.5 |
|                                                                                   |                 |                   |              |                                           |                                  |            |            |            |      |        | 204.24                              | 4.50                                                                                |                                                                                                                            | No Recovery.                                                                                                                                                          | 4.5 |
|                                                                                   |                 |                   |              |                                           |                                  |            |            |            |      |        |                                     | (0.85)                                                                              |                                                                                                                            | No Recovery.                                                                                                                                                          | 5.0 |
|                                                                                   |                 |                   | 5.50-6.00    | B 1                                       |                                  |            |            |            |      |        | 203.39                              | 5.35                                                                                |                                                                                                                            | Black basalt cobble.<br>[OADBY MEMBER]                                                                                                                                | 5.5 |
|                                                                                   |                 |                   | 6.00         | SPT                                       | N=31<br>(4,6/9,11,6,5)<br>N60=34 |            |            |            |      |        | 203.24                              | 5.50                                                                                |                                                                                                                            | Firm reddish brown with black speckling slightly sandy gravelly CLAY. Gravel is angular to sub-angular fine to medium mudstone.<br>[OADBY MEMBER]                     | 6.0 |
|                                                                                   |                 |                   |              |                                           |                                  |            |            |            |      | 202.74 | 6.00                                |   | No Recovery.                                                                                                                                                                                                | 6.5                                                                                                                                                                   |     |
|                                                                                   |                 |                   |              |                                           |                                  |            |            |            |      |        | (1.00)                              |  | No Recovery.                                                                                                                                                                                                | 7.0                                                                                                                                                                   |     |
|                                                                                   |                 |                   |              |                                           |                                  |            |            |            |      | 201.74 | 7.00                                |  | Continued on next page                                                                                                                                                                                      |                                                                                                                                                                       |     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                   |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 5.00 m bgl 6. Borehole remained dry upon completion. | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 10.00m RC<br><i>Inclination:</i> 90° <i>Orientation:</i> 0° | <b>Logger</b><br>GL |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------|



# Rotary Core Log

RH103  
Sheet 2 of 2

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>RC           | Easting<br>448243.10 | Northing<br>311623.28 | Ground Level (m)<br>208.74 | Scale<br>1:35          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-23   | End Date<br>2025-07-23 |

|                          |                  |                    |
|--------------------------|------------------|--------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>DSUK |
|--------------------------|------------------|--------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |              |                                   | Coring      |            |            |            | Frac | Level<br>(m) | Depth<br>(m) | Strata   |                                                                                                                                                                                                                                               |
|-------------------|-----------------|-------------------|--------------|-----------------------------------|-------------|------------|------------|------------|------|--------------|--------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   |                 | Depth (m)         | Type/<br>Ref | Results                           | Core<br>Run | TCR<br>(%) | SCR<br>(%) | RQD<br>(%) |      |              |              | Legend   | Description                                                                                                                                                                                                                                   |
|                   |                 | 7.35-7.50         | C 8          | N=37<br>(4,5/7,8,10,12)<br>N60=40 |             |            |            |            |      | 201.24       | 7.50         |          | Interbedded extremely weak reddish brown thinly laminated mudstone with frequent coal inclusions and smooth to rough planar fissures interbedded with extremley weak grey structureless sandstone with coal inclusions.<br>[GUNTHORPE MEMBER] |
|                   |                 | 7.50              | SPT          |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 | 8.50-8.60         | C 9          | N=33<br>(5,5/6,8,9,10)<br>N60=36  |             |            |            |            |      | 200.24       | 8.50         |          | Interbedded extremely weak reddish brown thinly laminated mudstone with frequent coal inclusions and smooth to rough planar fissures interbedded with extremley weak grey structureless sandstone with coal inclusions.<br>[GUNTHORPE MEMBER] |
|                   |                 | 8.50-9.00         | B 2          |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 | 9.00              | SPT          |                                   |             |            |            |            |      | 199.74       | 9.00         |          | No Recovery.                                                                                                                                                                                                                                  |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              | NR NR NR |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      | 198.74       | 10.00        |          | End of Borehole at 10.00m                                                                                                                                                                                                                     |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                   |             |            |            |            |      |              |              |          |                                                                                                                                                                                                                                               |

|                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |  |  |  |  |                                                                                                     |  |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|-----------------------------------------------------------------------------------------------------|--|---------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 5.00 m bgl 6. Borehole remained dry upon completion. |  |  |  |  |  |  |  |  |  |  | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 10.00m RC<br>Inclination: 90° Orientation: 0° |  | <b>Logger</b><br>GL |
| Checked By: AT    Approved By: TH    Status: FINAL                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |  |                                                                                                     |  |                     |



# Rotary Core Log

RH104  
Sheet 1 of 2

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>RC           | Easting<br>448251.75 | Northing<br>311519.72 | Ground Level (m)<br>204.68 | Scale<br>1:35          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-24   | End Date<br>2025-07-24 |

|                          |                  |                    |
|--------------------------|------------------|--------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>DSUK |
|--------------------------|------------------|--------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |              |                                 | Coring      |            |            |            | Frac | Level<br>(m) | Depth<br>(m)<br>(thickness) | Strata |                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------|-----------------|-------------------|--------------|---------------------------------|-------------|------------|------------|------------|------|--------------|-----------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   |                 | Depth (m)         | Type/<br>Ref | Results                         | Core<br>Run | TCR<br>(%) | SCR<br>(%) | RQD<br>(%) |      |              |                             | Legend | Description                                                                                                                                                                                                                                                                                                                                                          |
|                   |                 | 1.00              | SPT          | N=16<br>(2,3/3,4,4,5)<br>N60=18 |             |            |            |            |      | 204.48       | (0.20)<br>0.20              |        | TOPSOIL: Greyish light brown slightly clayey silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone and mudstone. Rare sandstone cobbles.<br><br>Soft reddish brown with black speckling slightly sandy gravelly CLAY. Gravel is angular to sub-angular fine to medium mudstone.<br>[OADBY MEMBER] |
|                   |                 | 2.00              | SPT          | N=10<br>(1,2/2,2,3,3)<br>N60=12 |             |            |            |            |      | 202.88       | 1.80                        |        | Firm orangish brown mottled grey slightly gravelly sandy CLAY. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone and granite.<br>[OADBY MEMBER]                                                                                                                                                                                                |
|                   |                 | 3.00              | SPT          | N=10<br>(1,2/2,3,2,3)<br>N60=12 |             |            |            |            |      |              |                             |        |                                                                                                                                                                                                                                                                                                                                                                      |
|                   |                 | 3.00-4.00         | B 1          |                                 |             |            |            |            |      |              | (3.20)                      |        |                                                                                                                                                                                                                                                                                                                                                                      |
|                   |                 | 4.00              | SPT          | N=10<br>(2,2/2,2,3,3)<br>N60=12 |             |            |            |            |      |              |                             |        |                                                                                                                                                                                                                                                                                                                                                                      |
|                   |                 | 5.00              | SPT          | N=13<br>(2,2/3,3,3,4)<br>N60=15 |             |            |            |            |      | 199.68       | 5.00                        |        | Firm reddish brown with black speckling slightly sandy gravelly CLAY. Gravel is angular to sub-angular fine to medium mudstone.<br>[OADBY MEMBER]                                                                                                                                                                                                                    |
|                   |                 | 6.00              | SPT          | N=20<br>(3,4/4,5,5,6)<br>N60=23 |             |            |            |            |      | 197.68       | 7.00                        |        |                                                                                                                                                                                                                                                                                                                                                                      |
|                   |                 |                   |              |                                 |             |            |            |            |      |              |                             |        | Continued on next page                                                                                                                                                                                                                                                                                                                                               |

|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                     |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 5.00 m bgl 6. Borehole remained dry upon completion. | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 10.00m RC<br>Inclination: 90° Orientation: 0° | <b>Logger</b><br>GL |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Checked By:</b> AT <b>Approved By:</b> TH <b>Status:</b> FINAL                                   |                     |



|              |             |           |                  |            |
|--------------|-------------|-----------|------------------|------------|
| Hole Type    | Easting     | Northing  | Ground Level (m) | Scale      |
| RC           | 448251.75   | 311519.72 | 204.68           | 1:35       |
| Project Name | Project No. |           | Start Date       | End Date   |
| Markfield    | 4467        |           | 2025-07-24       | 2025-07-24 |

**Client**  
Burrows Graham

**Consultant**  
GL

**Contractor**  
DSUK

[illegible]

**Remarks**  
1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 5.00 m bgl 6. Borehole remained dry upon completion.

**Method, Plant, Stability, Dimensions**  
**0.00 - 10.00m** RC  
**Inclination: 90° Orientation: 0°**

Logger  
GL

**Checked By: AT    Approved By: TH    Status: FINAL**

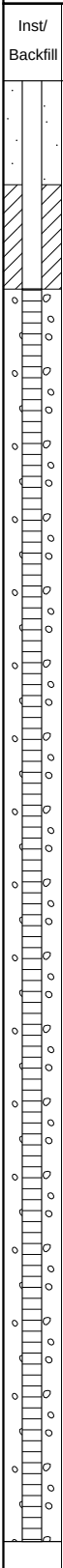


# Rotary Core Log

RH105  
Sheet 1 of 2

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>RC           | Easting<br>448038.63 | Northing<br>311459.74 | Ground Level (m)<br>204.62 | Scale<br>1:35          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-22   | End Date<br>2025-07-22 |

|                          |                  |                    |
|--------------------------|------------------|--------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>DSUK |
|--------------------------|------------------|--------------------|

| Inst/<br>Backfill                                                                 | Water<br>Levels                                                                    | Samples and Tests |              |                           | Coring      |            |            |            | Frac | Level  | Depth<br>(thickness) | Strata                                                                            |                                                                                                                                                                                                                      |     |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------|--------------|---------------------------|-------------|------------|------------|------------|------|--------|----------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|                                                                                   |                                                                                    | Depth (m)         | Type/<br>Ref | Results                   | Core<br>Run | TCR<br>(%) | SCR<br>(%) | RQD<br>(%) |      |        |                      | Legend                                                                            | Description                                                                                                                                                                                                          |     |
|  |  | 1.00              | SPT          | N=6 (1,1/1,2,1,2) N60=7   |             |            |            |            |      | 204.32 | 0.30                 |  | TOPSOIL: Greyish light brown slightly clayey silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone and mudstone. Rare sandstone cobbles.          | 0.5 |
|                                                                                   |                                                                                    |                   |              |                           |             |            |            |            |      |        |                      |  | Firm reddish brown with black speckling slightly silty slightly gravelly slightly sandy CLAY with lithorelicts. Gravel is angular to sub-rounded fine to medium sandstone, mudstone, coal and basalt. [OADBY MEMBER] | 1.0 |
|                                                                                   |                                                                                    | 2.00              | SPT          | N=11 (1,1/2,2,3,4) N60=12 |             |            |            |            |      |        | (3.35)               |  |                                                                                                                                                                                                                      | 2.0 |
|                                                                                   |                                                                                    |                   |              |                           |             |            |            |            |      |        |                      |  |                                                                                                                                                                                                                      | 2.5 |
|                                                                                   |                                                                                    | 3.00              | SPT          | N=4 (1,0/1,0,1,2) N60=4   |             |            |            |            |      |        |                      |  |                                                                                                                                                                                                                      | 3.0 |
|                                                                                   |                                                                                    |                   |              |                           |             |            |            |            |      |        |                      |  |                                                                                                                                                                                                                      | 3.5 |
|                                                                                   |                                                                                    | 4.00<br>4.00-5.00 | SPT<br>B 1   | N=8 (1,1/1,2,2,3) N60=9   |             |            |            |            |      | 200.97 | 3.65                 |  | Firm orangish brown mottled grey slightly gravelly sandy CLAY. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone and granite. [OADBY MEMBER]                                                   | 4.0 |
|                                                                                   |                                                                                    |                   |              |                           |             |            |            |            |      |        | (1.60)               |  |                                                                                                                                                                                                                      | 4.5 |
|                                                                                   |                                                                                    | 5.00              | SPT          | N=17 (2,2/3,4,5,5) N60=18 |             |            |            |            |      | 199.37 | 5.25                 |  | Firm reddish brown with black speckling slightly silty slightly gravelly slightly sandy CLAY with lithorelicts. Gravel is angular to sub-rounded fine to medium sandstone, mudstone, coal and basalt. [OADBY MEMBER] | 5.5 |
|                                                                                   |                                                                                    |                   |              |                           |             |            |            |            |      |        | (1.05)               |  |                                                                                                                                                                                                                      | 6.0 |
|                                                                                   |                                                                                    | 6.00              | SPT          | N=17 (1,3/3,4,5,5) N60=18 |             |            |            |            |      | 198.32 | 6.30                 |  | Greyish brown sandy clayey GRAVEL. Gravel is angular to sub-rounded fine to coarse mudstone, sandstone and granite. [OADBY MEMBER]                                                                                   | 6.5 |
|                                                                                   |                                                                                    |                   |              |                           |             |            |            |            |      | 198.12 | 6.50                 |  | Firm reddish brown and grey with black speckling slightly                                                                                                                                                            | 7.0 |
|                                                                                   |                                                                                    |                   |              |                           |             |            |            |            |      |        | (1.70)               |  |                                                                                                                                                                                                                      |     |
|                                                                                   |                                                                                    |                   |              |                           |             |            |            |            |      |        |                      |                                                                                   | Continued on next page                                                                                                                                                                                               |     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                     |                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 10.00 m bgl 6. Borehole remained dry upon completion. | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 10.00m RC<br>Inclination: 90° Orientation: 0° | <b>Logger</b><br>GL |
|                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Checked By:</b> AT <b>Approved By:</b> TH <b>Status:</b> FINAL                                   |                     |



|              |             |           |                  |            |
|--------------|-------------|-----------|------------------|------------|
| Hole Type    | Easting     | Northing  | Ground Level (m) | Scale      |
| RC           | 448038.63   | 311459.74 | 204.62           | 1:35       |
| Project Name | Project No. |           | Start Date       | End Date   |
| Markfield    | 4467        |           | 2025-07-22       | 2025-07-22 |

**Client**  
Burrows Graham

**Consultant**  
GL

**Contractor**  
DSUK

[illegible]

**Remarks**  
1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 10.00 m bgl 6. Borehole remained dry upon completion.

**Method, Plant, Stability, Dimensions**  
0.00 - 10.00m RC  
*Inclination: 90° Orientation: 0°*

## Logger

**Checked By: AT    Approved By: TH    Status: FINAL**



| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |              |                                 | Coring      |            |                        |            | Frac                                               | Level  | Depth<br><small>(thickness)</small> | Strata |                                                                                                                                                                                                             |                                                                                                                                                           |  |                                                                                                                                                                       |        |      |        |                                                                                                                                                                                                                                  |
|-------------------|-----------------|-------------------|--------------|---------------------------------|-------------|------------|------------------------|------------|----------------------------------------------------|--------|-------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   |                 | Depth (m)         | Type/<br>Ref | Results                         | Core<br>Run | TCR<br>(%) | SCR<br>(%)             | RQD<br>(%) |                                                    |        |                                     | Legend | Description                                                                                                                                                                                                 |                                                                                                                                                           |  |                                                                                                                                                                       |        |      |        |                                                                                                                                                                                                                                  |
|                   |                 | 1.00              | SPT          | N=20<br>(6,7/4,5,6,5)<br>N60=22 |             |            |                        |            |                                                    | 198.57 | (0.20)<br>0.20                      |        | TOPSOIL: Greyish light brown slightly clayey silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone and mudstone. Rare sandstone cobbles. |                                                                                                                                                           |  |                                                                                                                                                                       |        |      |        |                                                                                                                                                                                                                                  |
|                   |                 |                   |              |                                 |             |            |                        |            |                                                    |        |                                     | (0.80) |                                                                                                                                                                                                             | Brownish grey clayey sandy GRAVEL with occasional cobbles. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone and granite.<br>[HEAD] |  |                                                                                                                                                                       |        |      |        |                                                                                                                                                                                                                                  |
|                   |                 |                   |              |                                 |             |            |                        |            |                                                    |        |                                     |        |                                                                                                                                                                                                             | (2.15)                                                                                                                                                    |  | Firm orangish brown mottled grey slightly gravelly sandy CLAY. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone and granite.<br>[OADBY MEMBER] |        |      |        |                                                                                                                                                                                                                                  |
|                   |                 |                   |              |                                 |             |            |                        |            |                                                    |        |                                     | 3.00   | SPT                                                                                                                                                                                                         |                                                                                                                                                           |  | N=19<br>(3,3/4,4,6,5)<br>N60=21                                                                                                                                       | 195.62 | 3.15 |        | Firm reddish brown and grey with black speckling slightly silty slightly gravelly slightly sandy CLAY with lithorelicts. Gravel is angular to sub-rounded fine to medium sandstone, mudstone, coal and basalt.<br>[OADBY MEMBER] |
|                   |                 |                   |              |                                 |             |            |                        |            |                                                    |        |                                     |        |                                                                                                                                                                                                             |                                                                                                                                                           |  |                                                                                                                                                                       |        |      |        | 3.50-4.00                                                                                                                                                                                                                        |
|                   |                 |                   |              |                                 |             |            |                        |            |                                                    |        |                                     | 4.00   | SPT                                                                                                                                                                                                         |                                                                                                                                                           |  | N=50 for 115mm<br>(10,15/30,20 for 40mm)<br>N60=54                                                                                                                    | 194.77 | 4.00 | (0.30) |                                                                                                                                                                                                                                  |
|                   |                 | 5.15-5.30         | C 7          | 193.22                          | 5.55        |            | No Recovery            |            |                                                    |        |                                     |        |                                                                                                                                                                                                             |                                                                                                                                                           |  |                                                                                                                                                                       |        |      |        |                                                                                                                                                                                                                                  |
|                   |                 |                   |              |                                 |             |            | 6.00                   | SPT        | N=50 for 210mm<br>(7,7/9,21,30 for 60mm)<br>N60=65 | 192.32 | 6.45                                | (0.90) |                                                                                                                                                                                                             | No Recovery                                                                                                                                               |  |                                                                                                                                                                       |        |      |        |                                                                                                                                                                                                                                  |
|                   |                 |                   |              |                                 |             |            |                        |            |                                                    |        |                                     |        |                                                                                                                                                                                                             | (1.05)                                                                                                                                                    |  | Extremely weak reddish brown thinly laminated MUDSTONE with frequent coal inclusions and smooth to rough planar fissures.<br>[GUNTHORPE MEMBER]                       |        |      |        |                                                                                                                                                                                                                                  |
|                   |                 |                   |              |                                 |             |            | Continued on next page |            |                                                    |        |                                     |        |                                                                                                                                                                                                             |                                                                                                                                                           |  |                                                                                                                                                                       |        |      |        |                                                                                                                                                                                                                                  |

Checked By: AT    Approved By: TH    Status: FINAL

SPT N60 = N(raw) \* (Hammer Energy Ratio / 60) to nearest whole number

Created using Pebble Geo



# Rotary Core Log

RH106  
Sheet 2 of 2

|                           |                      |                          |                            |               |
|---------------------------|----------------------|--------------------------|----------------------------|---------------|
| Hole Type<br>RC           | Easting<br>448088.78 | Northing<br>311282.70    | Ground Level (m)<br>198.77 | Scale<br>1:35 |
| Project Name<br>Markfield | Project No.<br>4467  | Start Date<br>2025-07-21 | End Date<br>2025-07-21     |               |

|                          |                  |                    |
|--------------------------|------------------|--------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>DSUK |
|--------------------------|------------------|--------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |              |                                                          | Coring      |            |            |            | Frac | Level<br>(m) | Depth<br>(m)<br><small>(thickness)</small> | Strata                                                                           |                                                                                                                                                            |      |
|-------------------|-----------------|-------------------|--------------|----------------------------------------------------------|-------------|------------|------------|------------|------|--------------|--------------------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
|                   |                 | Depth (m)         | Type/<br>Ref | Results                                                  | Core<br>Run | TCR<br>(%) | SCR<br>(%) | RQD<br>(%) |      |              |                                            | Legend                                                                           | Description                                                                                                                                                |      |
|                   |                 | 7.50              | SPT          | N=50 for 70mm<br>(10,15/50 for 70mm)<br>N60=54           |             |            |            |            |      | 191.27       | 7.50                                       | NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR                         | As previous page.                                                                                                                                          |      |
|                   |                 | 7.50-8.50         | B 2          |                                                          |             |            |            |            |      |              | (1.00)                                     | NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR | No Recovery                                                                                                                                                | 7.5  |
|                   |                 |                   |              |                                                          |             |            |            |            |      |              |                                            |                                                                                  |                                                                                                                                                            | 8.0  |
|                   |                 |                   |              |                                                          |             |            |            |            |      | 190.27       | 8.50                                       |                                                                                  | Brownish grey slightly clayey slightly sandy GRAVEL. Gravel is angular to sub-angular fine to coarse dark igneous rock. [BEACON HILL / BRADGATE FORMATION] | 8.5  |
|                   |                 |                   |              |                                                          |             |            |            |            |      |              | (0.50)                                     |                                                                                  |                                                                                                                                                            |      |
|                   |                 | 9.00              | SPT          | N=50 for 100mm<br>(25 for 60mm/36,14 for 25mm)<br>N60=54 |             |            |            |            |      | 189.77       | 9.00                                       | NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR | No Recovery.                                                                                                                                               | 9.0  |
|                   |                 |                   |              |                                                          |             |            |            |            |      |              | (1.00)                                     | NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR |                                                                                                                                                            | 9.5  |
|                   |                 |                   |              |                                                          |             |            |            |            |      | 188.77       | 10.00                                      |                                                                                  | End of Borehole at 10.00m                                                                                                                                  | 10.0 |
|                   |                 |                   |              |                                                          |             |            |            |            |      |              |                                            |                                                                                  |                                                                                                                                                            | 10.5 |
|                   |                 |                   |              |                                                          |             |            |            |            |      |              |                                            |                                                                                  |                                                                                                                                                            | 11.0 |
|                   |                 |                   |              |                                                          |             |            |            |            |      |              |                                            |                                                                                  |                                                                                                                                                            | 11.5 |
|                   |                 |                   |              |                                                          |             |            |            |            |      |              |                                            |                                                                                  |                                                                                                                                                            | 12.0 |
|                   |                 |                   |              |                                                          |             |            |            |            |      |              |                                            |                                                                                  |                                                                                                                                                            | 12.5 |
|                   |                 |                   |              |                                                          |             |            |            |            |      |              |                                            |                                                                                  |                                                                                                                                                            | 13.0 |
|                   |                 |                   |              |                                                          |             |            |            |            |      |              |                                            |                                                                                  |                                                                                                                                                            | 13.5 |
|                   |                 |                   |              |                                                          |             |            |            |            |      |              |                                            |                                                                                  |                                                                                                                                                            | 14.0 |

|                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |  |  |  |                                                                                                     |  |  |  |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|-----------------------------------------------------------------------------------------------------|--|--|--|---------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 9.00 m bgl 6. Borehole remained dry upon completion. |  |  |  |  |  |  |  |  |  | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 10.00m RC<br>Inclination: 90° Orientation: 0° |  |  |  | <b>Logger</b><br>GL |
| Checked By: AT    Approved By: TH    Status: FINAL                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |                                                                                                     |  |  |  |                     |



# Rotary Core Log

RH107  
Sheet 1 of 2

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>RC           | Easting<br>448144.94 | Northing<br>311249.16 | Ground Level (m)<br>198.70 | Scale<br>1:35          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-21   | End Date<br>2025-07-21 |

|                          |                  |                    |
|--------------------------|------------------|--------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>DSUK |
|--------------------------|------------------|--------------------|

| Inst/<br>Backfill      | Water<br>Levels | Samples and Tests                                  |                                                          |                                                    | Coring                                                                                                                                                       |                                                                             |            |            | Frac | Level  | Depth<br>(thickness) | Strata                                                                           |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|------------------------|-----------------|----------------------------------------------------|----------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------|------------|------|--------|----------------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |                 | Depth (m)                                          | Type/<br>Ref                                             | Results                                            | Core<br>Run                                                                                                                                                  | TCR<br>(%)                                                                  | SCR<br>(%) | RQD<br>(%) |      |        |                      | Legend                                                                           | Description                                                                                                                                                                                                 |     |                                                                            |                                                                                                                                                                                |
|                        |                 | 1.50                                               | SPT                                                      | N=50 for 205mm<br>(7,7/8,14,28 for 55mm)<br>N60=57 |                                                                                                                                                              |                                                                             |            |            |      | 198.45 | (0.25)               |                                                                                  | TOPSOIL: Greyish light brown slightly clayey silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone and mudstone. Rare sandstone cobbles. | 0.5 |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        | 0.25                 | NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR | No Recovery.                                                                                                                                                                                                |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        | (1.45)               | NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        | 197.00               | 1.70                                                                             |                                                                                                                                                                                                             |     | Brownish grey slightly sandy slightly clayey sub-angular COBBLE of basalt. |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        | (0.30)               | 196.70                                                                           | 2.00                                                                                                                                                                                                        |     | NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR                   | [OADBY MEMBER]<br>No Recovery.                                                                                                                                                 |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        | (0.56)               | NR NR NR<br>NR NR NR<br>NR NR NR                                                 |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        | 196.14               | 2.56                                                                             |                                                                                                                                                                                                             |     | Brownish grey slightly sandy slightly clayey sub-angular COBBLE of basalt. |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        | (0.24)               | 195.90                                                                           | 2.80                                                                                                                                                                                                        |     |                                                                            | [OADBY MEMBER]<br>Firm reddish dark brown mottled grey slightly gravelly slightly sandy CLAY. Gravel is angular to sub-rounded fine to coarse sandstone, mudstone and granite. |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        | (2.20)               |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        | 3.00                 | SPT                                                                              | N=24<br>(3,3/5,6,6,7)<br>N60=28                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 | (0.92)                                             | NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 | 192.78                                             | 5.92                                                     |                                                    | Firm reddish dark brown mottled grey slightly gravelly slightly sandy CLAY. Gravel is angular to sub-rounded fine to coarse sandstone, mudstone and granite. |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 | (0.33)                                             | 192.45                                                   | 6.25                                               |                                                                                                                                                              | [OADBY MEMBER]<br>Interbedded extremely weak grey closely bedded SANDSTONE. |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 | (0.25)                                             | 192.20                                                   | 6.50                                               | NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR                                                                                                     | [GUNTORPE MEMBER]<br>No Recovery.                                           |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 | 4.00-5.00                                          | B 1                                                      | N=21<br>(3,4/4,5,6,6)<br>N60=24                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 | 5.00                                               | SPT                                                      | N=50 for 140mm<br>(8,11/19,31 for 65mm)<br>N60=57  |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
| 6.50                   | SPT             | N=50 for 155mm<br>(8,11/21,23,6 for 5mm)<br>N60=57 |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
|                        |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |
| Continued on next page |                 |                                                    |                                                          |                                                    |                                                                                                                                                              |                                                                             |            |            |      |        |                      |                                                                                  |                                                                                                                                                                                                             |     |                                                                            |                                                                                                                                                                                |

|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                     |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 5.00 m bgl 6. Borehole remained dry upon completion. | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 10.00m RC<br>Inclination: 90° Orientation: 0° | <b>Logger</b><br>GL |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | Checked By: AT    Approved By: TH    Status: FINAL                                                  |                     |



# Rotary Core Log

RH107  
Sheet 2 of 2

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>RC           | Easting<br>448144.94 | Northing<br>311249.16 | Ground Level (m)<br>198.70 | Scale<br>1:35          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-21   | End Date<br>2025-07-21 |

|                          |                  |                    |
|--------------------------|------------------|--------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>DSUK |
|--------------------------|------------------|--------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |              |                                                      | Coring      |            |            |            | Frac | Level<br>(m) | Depth<br>(m)<br>(thickness) | Strata                                       |                                                                                                                                                                                                                                               |      |
|-------------------|-----------------|-------------------|--------------|------------------------------------------------------|-------------|------------|------------|------------|------|--------------|-----------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
|                   |                 | Depth (m)         | Type/<br>Ref | Results                                              | Core<br>Run | TCR<br>(%) | SCR<br>(%) | RQD<br>(%) |      |              |                             | Legend                                       | Description                                                                                                                                                                                                                                   |      |
|                   |                 | 7.35-7.50         | C 3          |                                                      |             |            |            |            |      |              | (0.85)                      |                                              | Interbedded extremely weak reddish brown thinly laminated mudstone with frequent coal inclusions and smooth to rough planar fissures interbedded with extremley weak grey structureless sandstone with coal inclusions.<br>[GUNTHORPE MEMBER] | 7.5  |
|                   |                 | 8.00              | SPT          | N=50 for 70mm<br>(25 for 60mm/50 for 70mm)<br>N60=57 |             |            |            |            |      | 190.85       | 7.85<br>(0.15)              | • • • •                                      | Interbedded extremely weak grey closely bedded SANDSTONE.<br>[GUNTHORPE MEMBER]                                                                                                                                                               | 8.0  |
|                   |                 |                   |              |                                                      |             |            |            |            |      | 190.70       | 8.00<br>(0.32)              | NR NR NR<br>NR NR NR<br>NR NR NR             | No Recovery.                                                                                                                                                                                                                                  |      |
|                   |                 |                   |              |                                                      |             |            |            |            |      | 190.38       | 8.32<br>(0.28)              | • • • •                                      | Interbedded extremely weak grey closely bedded SANDSTONE.<br>[GUNTHORPE MEMBER]                                                                                                                                                               | 8.5  |
|                   |                 | 8.85-9.00         | C 4          |                                                      |             |            |            |            |      |              |                             |                                              | Interbedded extremely weak reddish brown thinly laminated mudstone with frequent coal inclusions and smooth to rough planar fissures interbedded with extremley weak grey structureless sandstone with coal inclusions.<br>[GUNTHORPE MEMBER] | 9.0  |
|                   |                 | 9.00-10.00        | B 2          |                                                      |             |            |            |            |      |              | (0.72)                      |                                              |                                                                                                                                                                                                                                               |      |
|                   |                 | 9.50              | SPT          | N=50 for 90mm<br>(19,6/39,11 for 15mm)<br>N60=57     |             |            |            |            |      | 189.38       | 9.32<br>(0.18)              | • • • •                                      | Interbedded extremely weak grey closely bedded SANDSTONE.<br>[GUNTHORPE MEMBER]                                                                                                                                                               | 9.5  |
|                   |                 |                   |              |                                                      |             |            |            |            |      | 189.20       | 9.50<br>(0.50)              | NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR | No Recovery                                                                                                                                                                                                                                   |      |
|                   |                 | 10.00             | SPT          | N=50 for 70mm<br>(25 for 65mm/50 for 70mm)<br>N60=57 |             |            |            |            |      | 188.70       | 10.00                       |                                              |                                                                                                                                                                                                                                               | 10.0 |
|                   |                 |                   |              |                                                      |             |            |            |            |      |              |                             |                                              | End of Borehole at 10.00m                                                                                                                                                                                                                     |      |
|                   |                 |                   |              |                                                      |             |            |            |            |      |              |                             |                                              |                                                                                                                                                                                                                                               | 10.5 |
|                   |                 |                   |              |                                                      |             |            |            |            |      |              |                             |                                              |                                                                                                                                                                                                                                               | 11.0 |
|                   |                 |                   |              |                                                      |             |            |            |            |      |              |                             |                                              |                                                                                                                                                                                                                                               | 11.5 |
|                   |                 |                   |              |                                                      |             |            |            |            |      |              |                             |                                              |                                                                                                                                                                                                                                               | 12.0 |
|                   |                 |                   |              |                                                      |             |            |            |            |      |              |                             |                                              |                                                                                                                                                                                                                                               | 12.5 |
|                   |                 |                   |              |                                                      |             |            |            |            |      |              |                             |                                              |                                                                                                                                                                                                                                               | 13.0 |
|                   |                 |                   |              |                                                      |             |            |            |            |      |              |                             |                                              |                                                                                                                                                                                                                                               | 13.5 |
|                   |                 |                   |              |                                                      |             |            |            |            |      |              |                             |                                              |                                                                                                                                                                                                                                               | 14.0 |

|                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |  |  |  |  |                                                                                                     |  |  |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|-----------------------------------------------------------------------------------------------------|--|--|---------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 5.00 m bgl 6. Borehole remained dry upon completion. |  |  |  |  |  |  |  |  |  |  | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 10.00m RC<br>Inclination: 90° Orientation: 0° |  |  | <b>Logger</b><br>GL |
| Checked By: AT    Approved By: TH    Status: FINAL                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |  |                                                                                                     |  |  |                     |



# Rotary Core Log

RH108  
Sheet 1 of 2

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>RC           | Easting<br>448309.42 | Northing<br>311260.86 | Ground Level (m)<br>196.96 | Scale<br>1:35          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-22   | End Date<br>2025-07-22 |

|                          |                  |                    |
|--------------------------|------------------|--------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>DSUK |
|--------------------------|------------------|--------------------|

| Inst/<br>Backfill      | Water<br>Levels | Samples and Tests |              |                                                   | Coring      |            |                                                                                                                                                                           |            | Frac | Level  | Depth<br>(thickness) | Strata                                                                                                                                                                |                                                                                                                                                                                                             |        |      |                                  |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                               |      |      |                                 |                                    |        |
|------------------------|-----------------|-------------------|--------------|---------------------------------------------------|-------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------|--------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|---------------------------------|------------------------------------|--------|
|                        |                 | Depth (m)         | Type/<br>Ref | Results                                           | Core<br>Run | TCR<br>(%) | SCR<br>(%)                                                                                                                                                                | RQD<br>(%) |      |        |                      | Legend                                                                                                                                                                | Description                                                                                                                                                                                                 |        |      |                                  |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                               |      |      |                                 |                                    |        |
|                        |                 | 1.00              | SPT          | N=13<br>(2,3/3,3,3,4)<br>N60=15                   |             |            |                                                                                                                                                                           |            |      | 196.71 | (0.25)<br>0.25       |                                                                                                                                                                       | TOPSOIL: Greyish light brown slightly clayey silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone and mudstone. Rare sandstone cobbles. | 0.5    |      |                                  |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                               |      |      |                                 |                                    |        |
|                        |                 |                   |              |                                                   |             |            |                                                                                                                                                                           |            |      | (1.90) |                      | Firm orangish brown mottled grey slightly gravelly sandy CLAY. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone and granite.<br>[OADBY MEMBER] | 2.0                                                                                                                                                                                                         |        |      |                                  |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                               |      |      |                                 |                                    |        |
|                        |                 | 2.00              | SPT          | N=12<br>(2,2/3,3,3,3)<br>N60=14                   |             |            |                                                                                                                                                                           |            |      |        |                      |                                                                                                                                                                       |                                                                                                                                                                                                             | 194.81 | 2.15 |                                  | Firm reddish brown with black speckling slightly silty slightly gravelly slightly sandy CLAY with lithorelicts. Gravel is angular to sub-rounded fine to medium sandstone, mudstone, coal and basalt.<br>[OADBY MEMBER] | 2.5                                                                                                                                                                                                                                           |      |      |                                 |                                    |        |
|                        |                 |                   |              |                                                   |             |            |                                                                                                                                                                           |            |      |        |                      |                                                                                                                                                                       |                                                                                                                                                                                                             |        |      |                                  |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                               | 3.00 | SPT  | N=15<br>(3,3/4,3,4,4)<br>N60=17 | (2.75)                             |        |
|                        |                 | 4.00              | SPT          | N=27<br>(4,4/5,6,7,9)<br>N60=31                   |             |            |                                                                                                                                                                           |            |      |        |                      |                                                                                                                                                                       |                                                                                                                                                                                                             |        |      | 4.0                              |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                               |      |      |                                 |                                    |        |
|                        |                 |                   |              |                                                   |             |            |                                                                                                                                                                           |            |      |        |                      |                                                                                                                                                                       |                                                                                                                                                                                                             |        |      |                                  | 4.00-6.00                                                                                                                                                                                                               | B 1                                                                                                                                                                                                                                           |      |      | 4.5                             |                                    |        |
|                        |                 | 4.50              | SPT          | N=50 for 130mm<br>(18,7/32,18 for 55mm)<br>N60=57 |             |            |                                                                                                                                                                           |            |      |        |                      |                                                                                                                                                                       |                                                                                                                                                                                                             |        |      | 4.90<br>192.06<br>192.00<br>4.96 |                                                                                                                                                                                                                         | Black basalt cobble.<br>[OADBY MEMBER]                                                                                                                                                                                                        |      |      |                                 | 5.0                                |        |
|                        |                 | 6.00-8.00         | B 2          |                                                   |             |            |                                                                                                                                                                           |            |      |        |                      |                                                                                                                                                                       |                                                                                                                                                                                                             |        |      | (1.04)                           |                                                                                                                                                                                                                         | Interbedded extremely weak reddish brown thinly laminated mudstone with frequent coal inclusions and smooth to rough planar fissures interbedded with extremley weak grey structureless sandstone with coal inclusions.<br>[GUNTHORPE MEMBER] | 5.5  |      |                                 |                                    |        |
|                        |                 |                   |              |                                                   |             |            |                                                                                                                                                                           |            |      |        |                      |                                                                                                                                                                       |                                                                                                                                                                                                             |        |      |                                  |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                               |      | 6.00 | SPT                             | N=41<br>(7,7/8,10,11,12)<br>N60=47 | 190.96 |
|                        |                 |                   |              |                                                   |             |            |                                                                                                                                                                           |            |      | 6.50   |                      |                                                                                                                                                                       | 6.5                                                                                                                                                                                                         |        |      |                                  |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                               |      |      |                                 |                                    |        |
| 6.80-6.90              | C 1             |                   |              |                                                   | (0.94)      |            | Interbedded extremely weak reddish brown thinly laminated mudstone with frequent coal inclusions and smooth to rough planar fissures interbedded with extremley weak grey | 7.0        |      |        |                      |                                                                                                                                                                       |                                                                                                                                                                                                             |        |      |                                  |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                               |      |      |                                 |                                    |        |
| Continued on next page |                 |                   |              |                                                   |             |            |                                                                                                                                                                           |            |      |        |                      |                                                                                                                                                                       |                                                                                                                                                                                                             |        |      |                                  |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                               |      |      |                                 |                                    |        |

|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                     |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 4.00 m bgl 6. Borehole remained dry upon completion. | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 10.00m RC<br>Inclination: 90° Orientation: 0° | <b>Logger</b><br>GL |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | Checked By: AT    Approved By: TH    Status: FINAL                                                  |                     |

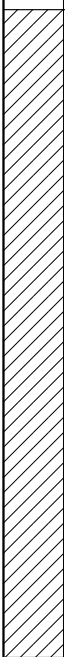


# Rotary Core Log

RH108  
Sheet 2 of 2

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>RC           | Easting<br>448309.42 | Northing<br>311260.86 | Ground Level (m)<br>196.96 | Scale<br>1:35          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-22   | End Date<br>2025-07-22 |

|                          |                  |                    |
|--------------------------|------------------|--------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>DSUK |
|--------------------------|------------------|--------------------|

| Inst/<br>Backfill                                                                 | Water<br>Levels | Samples and Tests |              |                                                      | Coring      |            |            |            | Frac | Level  | Depth<br><small>(thickness)</small> | Strata   |                                                                     |                                                                                                                                                                                                                                                        |                                                                                                      |
|-----------------------------------------------------------------------------------|-----------------|-------------------|--------------|------------------------------------------------------|-------------|------------|------------|------------|------|--------|-------------------------------------|----------|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
|                                                                                   |                 | Depth (m)         | Type/<br>Ref | Results                                              | Core<br>Run | TCR<br>(%) | SCR<br>(%) | RQD<br>(%) |      |        |                                     | Legend   | Description                                                         |                                                                                                                                                                                                                                                        |                                                                                                      |
|  |                 | 7.50              | SPT          | N=50 for 195mm<br>(8,13/18,22,10 for 45mm)<br>N60=57 |             |            |            |            |      | 189.46 | 7.50<br>(0.40)                      | NR NR NR | structureless sandstone with coal inclusions.<br>[GUNTHORPE MEMBER] | 7.5                                                                                                                                                                                                                                                    |                                                                                                      |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     | NR NR NR |                                                                     |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     | NR NR NR |                                                                     |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     | NR NR NR |                                                                     |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     | NR NR NR |                                                                     |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 | 8.60-8.75         | C 2          |                                                      |             |            |            |            |      |        | 189.06                              | 7.90     | NR NR NR                                                            | Interbedded extremely weak reddish brown thinly laminated<br>mudstone with frequent coal inclusions and smooth to rough<br>planar fissures interbedded with extremely weak grey<br>structureless sandstone with coal inclusions.<br>[GUNTHORPE MEMBER] | 8.0<br><br>8.5                                                                                       |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     |          | NR NR NR                                                            |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     |          | NR NR NR                                                            |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     |          | NR NR NR                                                            |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     |          | NR NR NR                                                            |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 | 9.00              | SPT          | N=50 for 80mm<br>(21,4/44,6 for 5mm)<br>N60=57       |             |            |            |            |      |        |                                     | (2.10)   | NR NR NR                                                            |                                                                                                                                                                                                                                                        | 9.0<br><br>9.5                                                                                       |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     |          | NR NR NR                                                            |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     |          | NR NR NR                                                            |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     |          | NR NR NR                                                            |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     |          | NR NR NR                                                            |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 | 10.00             | SPT          | N=50 for 85mm<br>(19,6/41,9 for 10mm)<br>N60=57      |             |            |            |            |      |        | 186.96                              | 10.00    | NR NR NR                                                            | -----<br><i>End of Borehole at 10.00m</i>                                                                                                                                                                                                              | 10.0<br><br>10.5<br><br>11.0<br><br>11.5<br><br>12.0<br><br>12.5<br><br>13.0<br><br>13.5<br><br>14.0 |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     |          | NR NR NR                                                            |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     |          | NR NR NR                                                            |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     |          | NR NR NR                                                            |                                                                                                                                                                                                                                                        |                                                                                                      |
|                                                                                   |                 |                   |              |                                                      |             |            |            |            |      |        |                                     |          | NR NR NR                                                            |                                                                                                                                                                                                                                                        |                                                                                                      |

|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                    |               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 4.00 m bgl 6. Borehole remained dry upon completion. | <b>Method, Plant, Stability, Dimensions</b>                        | <b>Logger</b> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | 0.00 - 10.00m RC<br><i>Inclination:</i> 90° <i>Orientation:</i> 0° | GL            |
| <b>Checked By:</b> AT <b>Approved By:</b> TH <b>Status:</b> FINAL                                                                                                                                                                                                                                                                                                                                                                            |                                                                    |               |



|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                            |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 5.00 m bgl 6. Borehole remained dry upon completion. | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 10.00m RC<br><i>Inclination: 90° Orientation: 0°</i> | <b>Logger</b><br>GL |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Checked By:</b> AT <b>Approved By:</b> TH <b>Status:</b> FINAL                                          |                     |



# Rotary Core Log

RH109  
Sheet 2 of 2

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>RC           | Easting<br>448356.31 | Northing<br>311239.42 | Ground Level (m)<br>195.06 | Scale<br>1:35          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-23   | End Date<br>2025-07-23 |

|                          |                  |                    |
|--------------------------|------------------|--------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>DSUK |
|--------------------------|------------------|--------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |              |                                                        | Coring      |            |            |            | Frac | Level<br>(m)     | Depth<br>(m)<br>(thickness) | Strata                                       |                                                                                                                                                                                                                                               |
|-------------------|-----------------|-------------------|--------------|--------------------------------------------------------|-------------|------------|------------|------------|------|------------------|-----------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   |                 | Depth (m)         | Type/<br>Ref | Results                                                | Core<br>Run | TCR<br>(%) | SCR<br>(%) | RQD<br>(%) |      |                  |                             | Legend                                       | Description                                                                                                                                                                                                                                   |
|                   |                 | 8.00              | SPT          | N=50 for 210mm<br>(10,12/14,19,18 for 60mm)<br>N60=59  |             |            |            |            |      | 187.96           | 7.10                        | NR NR NR                                     | As previous page.                                                                                                                                                                                                                             |
|                   |                 | 8.00-9.00         | B 2          |                                                        |             |            |            |            |      |                  | (2.40)                      |                                              | Interbedded extremely weak reddish brown thinly laminated mudstone with frequent coal inclusions and smooth to rough planar fissures interbedded with extremely weak grey structureless sandstone with coal inclusions.<br>[GUNTHORPE MEMBER] |
|                   |                 | 8.60-8.72         | C 6          |                                                        |             |            |            |            |      |                  |                             |                                              |                                                                                                                                                                                                                                               |
|                   |                 | 8.62-8.78         | C 5          |                                                        |             |            |            |            |      |                  |                             |                                              |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                                        |             |            |            |            |      |                  |                             |                                              |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                                        |             |            |            |            |      |                  |                             |                                              |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                                        |             |            |            |            |      |                  |                             |                                              |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                                        |             |            |            |            |      |                  |                             |                                              |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                                        |             |            |            |            |      |                  |                             |                                              |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                                        |             |            |            |            |      |                  |                             |                                              |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                                        |             |            |            |            |      |                  |                             |                                              |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                                        |             |            |            |            |      |                  |                             |                                              |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                                        |             |            |            |            |      |                  |                             |                                              |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                                        |             |            |            |            |      |                  |                             |                                              |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                                        |             |            |            |            |      |                  |                             |                                              |                                                                                                                                                                                                                                               |
|                   |                 |                   |              |                                                        |             |            |            |            |      |                  |                             |                                              |                                                                                                                                                                                                                                               |
|                   |                 | 9.50              | SPT          | N=50 for 100mm<br>(18,7/39,11 for 25mm)<br>N60=57      |             |            |            |            |      | 185.56           | 9.50                        | NR NR NR<br>NR NR NR<br>NR NR NR<br>NR NR NR | No Recovery.                                                                                                                                                                                                                                  |
|                   |                 |                   |              |                                                        |             |            |            |            |      |                  | (0.40)                      |                                              |                                                                                                                                                                                                                                               |
|                   |                 | 10.00             | SPT          | N=50 for 90mm<br>(25 for 55mm/42.8 for 15mm)<br>N60=57 |             |            |            |            |      | 185.16<br>185.06 | 9.90<br>(0.10)<br>10.00     | NR NR NR<br>NR NR NR<br>NR NR NR             | Extremely weak reddish brown thinly laminated MUDSTONE with frequent coal inclusions and smooth to rough planar fissures.<br>[GUNTHORPE MEMBER]                                                                                               |
|                   |                 |                   |              |                                                        |             |            |            |            |      |                  |                             |                                              | End of Borehole at 10.00m                                                                                                                                                                                                                     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |  |  |  |                                                                                                     |  |  |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|-----------------------------------------------------------------------------------------------------|--|--|---------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 5.00 m bgl 6. Borehole remained dry upon completion. |  |  |  |  |  |  |  |  |  | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 10.00m RC<br>Inclination: 90° Orientation: 0° |  |  | <b>Logger</b><br>GL |
| Checked By: AT    Approved By: TH    Status: FINAL                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |                                                                                                     |  |  |                     |





# Rotary Core Log

RH110  
Sheet 2 of 2

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>RC           | Easting<br>448495.95 | Northing<br>311084.93 | Ground Level (m)<br>196.11 | Scale<br>1:35          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-25   | End Date<br>2025-07-25 |

|                          |                  |                    |
|--------------------------|------------------|--------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>DSUK |
|--------------------------|------------------|--------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |              |                                                   | Coring      |            |            |            | Frac | Level<br>(m) | Depth<br>(m)<br>(thickness) | Strata |                                                                                                                                                                              |      |
|-------------------|-----------------|-------------------|--------------|---------------------------------------------------|-------------|------------|------------|------------|------|--------------|-----------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
|                   |                 | Depth (m)         | Type/<br>Ref | Results                                           | Core<br>Run | TCR<br>(%) | SCR<br>(%) | RQD<br>(%) |      |              |                             | Legend | Description                                                                                                                                                                  |      |
|                   |                 | 7.00              | SPT          | N=50 for 145mm<br>(9,11/24,26 for 70mm)<br>N60=57 |             |            |            |            |      | 188.91       | 7.20                        |        | As previous page.                                                                                                                                                            |      |
|                   |                 | 7.50-8.00         | B 1          |                                                   |             |            |            |            |      |              | (1.00)                      |        | Stiff red with black speckling slightly sandy slightly gravelly CLAY. Gravel is sub-angular to sub-rounded fine to coarse mudstone, granite and sandstone.<br>[OADBY MEMBER] | 7.5  |
|                   |                 |                   |              |                                                   |             |            |            |            |      |              |                             |        |                                                                                                                                                                              | 8.0  |
|                   |                 | 8.50              | SPT          | N=50 for 80mm<br>(11,12/41,9 for 5mm)<br>N60=57   |             |            |            |            |      | 187.91       | 8.20                        |        | Stiff greyish dark brown slightly sandy slightly gravelly CLAY. Gravel is angular to sub-angular fine to medium mudstone, sandstone and granite.<br>[OADBY MEMBER]           | 8.5  |
|                   |                 | 9.00-10.00        | B 2          |                                                   |             |            |            |            |      |              | (1.80)                      |        |                                                                                                                                                                              | 9.0  |
|                   |                 | 10.00             | SPT          | N=50 for 70mm<br>(12,13/50 for 70mm)<br>N60=57    |             |            |            |            |      | 186.11       | 10.00                       |        | Damp fine to corase gravel encountered. (9.67 - 9.73m)<br><br>End of Borehole at 10.00m                                                                                      | 10.0 |
|                   |                 |                   |              |                                                   |             |            |            |            |      |              |                             |        |                                                                                                                                                                              | 10.5 |
|                   |                 |                   |              |                                                   |             |            |            |            |      |              |                             |        |                                                                                                                                                                              | 11.0 |
|                   |                 |                   |              |                                                   |             |            |            |            |      |              |                             |        |                                                                                                                                                                              | 11.5 |
|                   |                 |                   |              |                                                   |             |            |            |            |      |              |                             |        |                                                                                                                                                                              | 12.0 |
|                   |                 |                   |              |                                                   |             |            |            |            |      |              |                             |        |                                                                                                                                                                              | 12.5 |
|                   |                 |                   |              |                                                   |             |            |            |            |      |              |                             |        |                                                                                                                                                                              | 13.0 |
|                   |                 |                   |              |                                                   |             |            |            |            |      |              |                             |        |                                                                                                                                                                              | 13.5 |
|                   |                 |                   |              |                                                   |             |            |            |            |      |              |                             |        |                                                                                                                                                                              | 14.0 |

|                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                     |                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Borehole terminated at 10.00 m bgl due to target depth reached. 5. Borehole installed with a 50 mm HDPE standpipe, gas bung and flush cover to 10.00 m bgl 6. Borehole remained dry upon completion. | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 10.00m RC<br>Inclination: 90° Orientation: 0° | <b>Logger</b><br>GL |
|                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Checked By:</b> AT <b>Approved By:</b> TH <b>Status:</b> FINAL                                   |                     |



# Key to exploratory hole symbols and abbreviations

## SAMPLE TYPES

|                              |                           |                                   |
|------------------------------|---------------------------|-----------------------------------|
| ACM - Asbestos sample        | AMAL - Amalgamated sample | B - Bulk disturbed sample         |
| BLK - Block sample           | C - Core sample           | CBR - CBR test sample             |
| D - Disturbed sample         | ES - Environmental sample | EW - Environmental water sample   |
| G - Gas sample               | J - Jar sample            | L - Liner sample                  |
| TW - Pushed thin wall sample | U - Undisturbed sample    | UT - Undisturbed thin wall sample |
| W - Water sample             |                           |                                   |

## IN-SITU TESTS

|                        |                                  |                                 |
|------------------------|----------------------------------|---------------------------------|
| HV - Hand shear vane   | HV(r) - Hand shear vane residual | PID - Photo ionisation detector |
| PP - Hand penetrometer | SPT - Standard penetration test  | SPT(C) - SPT using cone         |

## GROUNDWATER



Groundwater strike



Groundwater rest level

## ROTARY CORE DETAILS

|                               |                               |                                    |
|-------------------------------|-------------------------------|------------------------------------|
| TCR - Total core recovery (%) | SCR - Solid core recovery (%) | RQD - Rock quality designation (%) |
| FI - Fracture index           | NI - Non-intact core          | AZCL - Assumed zone of core loss   |

## LEGEND

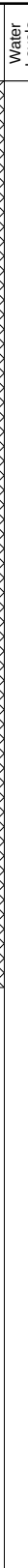
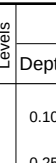
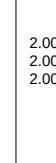
|  |                           |  |           |  |              |  |                 |
|--|---------------------------|--|-----------|--|--------------|--|-----------------|
|  | Topsoil                   |  | Clay      |  | Chalk        |  | Sand backfill   |
|  | Peat                      |  | Silt      |  | Breccia      |  | Gravel backfill |
|  | Made ground<br>[cohesive] |  | Sand      |  | Conglomerate |  | Arisings        |
|  | Concrete                  |  | Gravel    |  | Metamorphic  |  | Bentonite       |
|  | Wood                      |  | Cobbles   |  | Igneous      |  | Concrete        |
|  | Brick                     |  | Boulders  |  |              |  | Grout           |
|  | Bituminous<br>material    |  | Mudstone  |  |              |  | Plain pipe      |
|  | Gypsum                    |  | Siltstone |  |              |  |                 |
|  | Coal                      |  | Sandstone |  |              |  | Slotted pipe    |
|  | Void                      |  | Limestone |  |              |  |                 |



Sheet 1 of 1

|              |             |           |                  |            |
|--------------|-------------|-----------|------------------|------------|
| Hole Type    | Easting     | Northing  | Ground Level (m) | Scale      |
| TP           | 448062.89   | 311800.11 | 216.56           | 1:25       |
| Project Name | Project No. |           | Start Date       | End Date   |
| Markfield    | 4467        |           | 2025-07-25       | 2025-07-25 |

|                                 |                         |                                |
|---------------------------------|-------------------------|--------------------------------|
| <b>Client</b><br>Burrows Graham | <b>Consultant</b><br>GL | <b>Contractor</b><br>Pammenter |
|---------------------------------|-------------------------|--------------------------------|

| Inst/<br>Backfill                                                                 | Water<br>Levels                                                                    | Samples and Tests                   |                   |         | Level<br>(m) | Depth<br>(thickness)<br>(m) | Strata                                                                              |                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------|-------------------|---------|--------------|-----------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                   |                                                                                    | Depth (m)                           | Type/<br>Ref      | Results |              |                             | Legend                                                                              | Description                                                                                                                                                                                                                                       |
|  |  | 0.10-0.15                           | ES 1              |         | 216.32       | (0.24)                      |    | TOPSOIL: Greyish brown gravelly SAND. Sand is fine to coarse. Gravel is angular to sub-rounded fine to coarse mudstone, sandstone and slate.                                                                                                      |
|                                                                                   |                                                                                    | 0.25-0.30                           | ES 2              |         |              | (0.26)                      |    | Yellowish brown clayey gravelly SAND. Sand is fine to coarse. Gravel is angular to rounded fine to coarse sandstone, mudstone, coal and slate. [HEAD]                                                                                             |
|                                                                                   |                                                                                    |                                     |                   |         |              | (0.50)                      |    | Firm reddish orangish brown slightly sandy gravelly CLAY with rare cobbles of fine to coarse subangular to rounded sandstone. Sand is fine to coarse. Gravel is angular to subrounded fine to coarse coal, sandstone and mudstone. [OADBY MEMBER] |
|                                                                                   |                                                                                    |                                     |                   |         |              | (0.92)                      |    |                                                                                                                                                                                                                                                   |
|                                                                                   |                                                                                    |                                     |                   |         |              | 1.42                        |   | Soft orangish brown mottled grey sandy gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone, mudstone and slate. [OADBY MEMBER]                                                                   |
|                                                                                   |                                                                                    |                                     |                   |         |              | (1.68)                      |  |                                                                                                                                                                                                                                                   |
|                                                                                   |                                                                                    |                                     |                   |         |              |                             |  |                                                                                                                                                                                                                                                   |
|                                                                                   |                                                                                    |                                     |                   |         |              |                             |  |                                                                                                                                                                                                                                                   |
|                                                                                   |                                                                                    |                                     |                   |         |              |                             |  |                                                                                                                                                                                                                                                   |
|                                                                                   |                                                                                    |                                     |                   |         |              |                             |  |                                                                                                                                                                                                                                                   |
|                                                                                   |                                                                                    | 2.00-2.50<br>2.00-2.50<br>2.00-2.50 | B 1<br>B 2<br>B 3 |         | 213.46       | 3.10                        |                                                                                     | End of Trial Pit at 3.10m                                                                                                                                                                                                                         |

|                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                           |                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Dry until completion. 5. Trial pit terminated at 3.10 m bgl due sufficient depth reached. | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 3.10m TP CAT 310<br>Stable<br> | <b>Logge</b><br>E |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|

Checked By: AT    Approved By: TH    Status: FINAL

Created using Pebble Geo





# Trial Pit

TP103  
Sheet 1 of 1

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>TP           | Easting<br>448026.01 | Northing<br>311729.06 | Ground Level (m)<br>214.19 | Scale<br>1:25          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-25   | End Date<br>2025-07-25 |

|                          |                  |                         |
|--------------------------|------------------|-------------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>Pammenter |
|--------------------------|------------------|-------------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |              |         | Level  | Depth                             | Strata |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|-------------------|-----------------|-------------------|--------------|---------|--------|-----------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|
|                   |                 | Depth (m)         | Type/<br>Ref | Results | (m)    | (m)<br><small>(thickness)</small> | Legend | Description                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 | 0.10-0.15         | ES 1         |         | 213.94 | (0.25)                            |        | TOPSOIL: Greyish brown slightly clayey gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone, granite, quartz and slate.                                                           | 0.5                                                                                                                                                                                                                                                                    |     |     |
|                   |                 | 0.30-0.35         | ES 2         |         |        | 0.25                              |        | Yellowish brown clayey gravelly SAND with rare rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone, mudstone, coal, quartz and slate. Occasional sub-rounded cobbles of mudstone present.<br>[HEAD] |                                                                                                                                                                                                                                                                        | 1.0 |     |
|                   |                 | 0.40-0.50         | B 1          |         |        | (0.29)                            |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        | 213.65                            | 0.54   |                                                                                                                                                                                                                                                 | Firm orangish brown mottled grey slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone mudstone, coal and slate. Ocaasional cobbles of fine to coarse subangular to rounded sandstone.<br>[OADBY MEMBER] | 1.5 |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        | (2.46)                            |        |                                                                                                                                                                                                                                                 | 2.0                                                                                                                                                                                                                                                                    |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     |     |
|                   |                 |                   |              |         |        | 211.19                            | 3.00   | End of Trial Pit at 3.00m                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                        |     | 3.0 |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     | 3.5 |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     | 4.0 |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     | 4.5 |
|                   |                 |                   |              |         |        |                                   |        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                        |     | 5.0 |





# Trial Pit

TP105  
Sheet 1 of 1

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>TP           | Easting<br>448126.89 | Northing<br>311719.19 | Ground Level (m)<br>211.72 | Scale<br>1:25          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-24   | End Date<br>2025-07-24 |

|                          |                  |                         |
|--------------------------|------------------|-------------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>Pammenter |
|--------------------------|------------------|-------------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |              |         | Level<br>(m) | Depth<br>(m)<br><small>(thickness)</small> | Strata                    |                                                                                                                                                                                                                                                                 |
|-------------------|-----------------|-------------------|--------------|---------|--------------|--------------------------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   |                 | Depth (m)         | Type/<br>Ref | Results |              |                                            | Legend                    | Description                                                                                                                                                                                                                                                     |
|                   |                 | 0.20-0.25         | ES 1         |         | 211.45       | (0.27)                                     |                           | TOPSOIL: Greyish brown silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse slate, mudstone, sandstone and quartz. Occasional sub-angular to sub-rounded cobbles of slate, mudstone and sandstone.    |
|                   |                 | 0.30-0.35         | ES 2         |         |              | 0.27                                       |                           | Firm yellowish brown mottled grey slightly sandy gravelly CLAY with rare roots. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone and mudstone. Frequent cobbles of rounded to angular slate and sandstone.<br>[HEAD]       |
|                   |                 |                   |              |         | 210.97       | (0.48)                                     |                           |                                                                                                                                                                                                                                                                 |
|                   |                 |                   |              |         |              | 0.75                                       |                           | Soft orangish brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse mudstone, slate and sandstone. Occasional sub-angular to sub-rounded cobbles of slate and sandstone.<br>[OADBY MEMBER]            |
|                   |                 |                   |              |         | 210.22       | (0.75)                                     |                           |                                                                                                                                                                                                                                                                 |
|                   |                 |                   |              |         |              | 1.50                                       |                           | Soft reddish brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium slate, mudstone and quartz.<br>[OADBY MEMBER]                                                                             |
|                   |                 |                   |              |         | 209.32       | (0.90)                                     |                           |                                                                                                                                                                                                                                                                 |
|                   |                 |                   |              |         |              | 2.40                                       |                           | Soft to firm reddish brown mottled grey slightly sandy gravelly CLAY. Sand fine to coarse. Gravel is sub-angular to sub-rounded fine to medium mudstone, slate and sandstone. Rare sub-angular to sub-rounded cobbles of slate and sandstone.<br>[OADBY MEMBER] |
|                   |                 | 2.50-3.00         | B 1          |         |              | (0.75)                                     |                           |                                                                                                                                                                                                                                                                 |
|                   |                 | 2.50-3.00         | B 2          |         |              |                                            |                           |                                                                                                                                                                                                                                                                 |
|                   |                 | 2.50-3.00         | B 3          |         |              |                                            |                           |                                                                                                                                                                                                                                                                 |
|                   |                 |                   |              |         | 208.57       | 3.15                                       | End of Trial Pit at 3.15m |                                                                                                                                                                                                                                                                 |

|                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                         |                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Dry until completion. 5. Trial pit terminated at 3.15 m bgl due sufficient depth reached. | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 3.15m TP CAT 310<br>Stable<br><div><div>L = 2.00m</div><div>W = 0.60m</div></div> | <b>Logger</b><br>EH&EM |
|                                                                                                                                                                                                                                                                                                                                    | Checked By: AT    Approved By: TH    Status: FINAL                                                                                      |                        |



# Trial Pit

TP106  
Sheet 1 of 1

|                           |                      |                          |                            |               |
|---------------------------|----------------------|--------------------------|----------------------------|---------------|
| Hole Type<br>TP           | Easting<br>448035.21 | Northing<br>311667.40    | Ground Level (m)<br>211.08 | Scale<br>1:25 |
| Project Name<br>Markfield | Project No.<br>4467  | Start Date<br>2025-07-24 | End Date<br>2025-07-24     |               |

|                          |                  |                         |
|--------------------------|------------------|-------------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>Pammenter |
|--------------------------|------------------|-------------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |              | Level<br>(m) | Depth<br>(m)<br><small>(thickness)</small> | Strata |                                                                                                                                                                                                                                          |
|-------------------|-----------------|-------------------|--------------|--------------|--------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   |                 | Depth (m)         | Type/<br>Ref |              |                                            | Legend | Description                                                                                                                                                                                                                              |
|                   |                 | 0.10-0.15         | ES 1         |              | (0.30)                                     |        | TOPSOIL: Greyish light brown silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone, slate and mudstone. Frequent sub-angular to sub-rounded cobbles of sandstone.     |
|                   |                 | 0.30-0.35         | ES 2         | 210.78       | 0.30                                       |        | Yellowish brown slightly clayey sandy GRAVEL. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone, slate and coal. Occasional sub-angular to sub-rounded cobbles of sandstone.               |
|                   |                 | 0.30-0.35         | B 1          |              | (0.28)                                     |        | [HEAD]                                                                                                                                                                                                                                   |
|                   |                 | 0.40-0.50         | B 2          | 210.50       | 0.58                                       |        | Firm orangish brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone, mudstone, slate and coal. Occasional sub-angular to sub-rounded cobbles of sandstone and slate. |
|                   |                 |                   |              |              |                                            |        | [OADBY MEMBER]                                                                                                                                                                                                                           |
|                   |                 | 2.40-2.50         | B 3          |              | (2.72)                                     |        |                                                                                                                                                                                                                                          |
|                   |                 |                   |              | 207.78       | 3.30                                       |        | End of Trial Pit at 3.30m                                                                                                                                                                                                                |

|                                                                                                                                                                                                                                                                                                                             |                                                                                                                                  |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Remarks<br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Dry until completion. 5. Trial pit terminated at 3.30 m bgl due sufficient depth reached. | Method, Plant, Stability, Dimensions<br>0.00 - 3.30m TP CAT 310<br>Stable<br><div><div>L = 2.20m</div><div>W = 0.60m</div></div> | Logger<br>EH&EM |
| Checked By: AT    Approved By: TH    Status: FINAL                                                                                                                                                                                                                                                                          |                                                                                                                                  |                 |



|              |             |           |                  |            |
|--------------|-------------|-----------|------------------|------------|
| Hole Type    | Easting     | Northing  | Ground Level (m) | Scale      |
| TP           | 448124.36   | 311635.51 | 208.00           | 1:25       |
| Project Name | Project No. |           | Start Date       | End Date   |
| Markfield    | 4467        |           | 2025-07-23       | 2025-07-23 |

|                |                   |                   |
|----------------|-------------------|-------------------|
| <b>Client</b>  | <b>Consultant</b> | <b>Contractor</b> |
| Burrows Graham | GL                | Pammenter         |

| Inst/<br>Backfill                                                                 | Water<br>Levels                                                                    | Samples and Tests      |              | Level   | Depth | Strata |                                                                                   |                                                                                                                                                                            |                                                                                                                                                                                                                                                                         |     |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------|--------------|---------|-------|--------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|                                                                                   |                                                                                    | Depth (m)              | Type/<br>Ref | Results | (m)   | (m)    | Legend                                                                            |                                                                                                                                                                            | Description                                                                                                                                                                                                                                                             |     |
|  |  | 0.10-0.15              | ES 1         |         |       | (0.25) |  | TOPSOIL: Greyish brown silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone and rare quartz. |                                                                                                                                                                                                                                                                         |     |
|                                                                                   |                                                                                    | 0.40-0.45              | ES 2         |         |       | 207.75 | 0.25                                                                              |                                                                                           | Yellowish brown clayey slightly sandy GRAVEL. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone, slate and rare quartz.<br>[HEAD]                                                                                         | 0.5 |
|                                                                                   |                                                                                    |                        |              |         |       | 207.50 | 0.50                                                                              |                                                                                                                                                                            |                                                                                                                                                                                                                                                                         |     |
|                                                                                   |                                                                                    |                        |              |         |       | (1.70) |                                                                                   |                                                                                                                                                                            |                                                                                                                                                                                                                                                                         |     |
|                                                                                   |                                                                                    |                        |              |         |       |        |                                                                                   |                                                                                                                                                                            |                                                                                                                                                                                                                                                                         |     |
|                                                                                   |                                                                                    | 2.30-2.50<br>2.30-2.50 | B 1<br>B 2   |         |       | 205.80 | 2.20                                                                              |                                                                                         | Soft reddish brown mottled grey and orange slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse mudstone sandstone and coal. Frequent sub-angular to sub-rounded cobbles of slate and sandstone.<br>[OADBY MEMBER] | 2.5 |
|                                                                                   |                                                                                    |                        |              |         |       | 205.40 | 2.60                                                                              |                                                                                                                                                                            |                                                                                                                                                                                                                                                                         |     |
|                                                                                   |                                                                                    | 3.00-3.20              | B 3          |         |       |        | (0.60)                                                                            |                                                                                         | Firm orange mottled grey slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to medium mudstone, slate and coal. Occasional sub-angular to sub-rounded slate and sandstone cobbles.<br>[OADBY MEMBER]                       | 3.0 |
|                                                                                   |                                                                                    |                        |              |         |       | 204.80 | 3.20                                                                              |                                                                                                                                                                            |                                                                                                                                                                                                                                                                         |     |
|                                                                                   |                                                                                    |                        |              |         |       |        |                                                                                   |                                                                                                                                                                            | <i>End of Trial Pit at 3.20m</i>                                                                                                                                                                                                                                        | 3.5 |
|                                                                                   |                                                                                    |                        |              |         |       |        |                                                                                   | 4.0                                                                                                                                                                        |                                                                                                                                                                                                                                                                         |     |
|                                                                                   |                                                                                    |                        |              |         |       |        |                                                                                   | 4.5                                                                                                                                                                        |                                                                                                                                                                                                                                                                         |     |
|                                                                                   |                                                                                    |                        |              |         |       |        |                                                                                   | 5.0                                                                                                                                                                        |                                                                                                                                                                                                                                                                         |     |

|                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Remarks</b></p> <p>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No offactory or visual evidence of contamination noted. 4. Groundwater seepage noted at base of trial pit at 3.20 m bgl. 5. Trial pit terminated at 3.20 m bgl due sufficient depth reached.</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Method, Plant, Stability, Dimensions

0.00 - 3.20m TP CAT 310

Stable

$L = 2.20\text{m}$

$W = 0.60\text{m}$

## Logger

EH&amp;EM

|                                  |                             |                              |                                   |                               |
|----------------------------------|-----------------------------|------------------------------|-----------------------------------|-------------------------------|
| <b>Hole Type</b><br>TP           | <b>Easting</b><br>448228.76 | <b>Northing</b><br>311667.98 | <b>Ground Level (m)</b><br>210.89 | <b>Scale</b><br>1:25          |
| <b>Project Name</b><br>Markfield |                             | <b>Project No.</b><br>4467   | <b>Start Date</b><br>2025-07-23   | <b>End Date</b><br>2025-07-23 |

|                |                   |                   |
|----------------|-------------------|-------------------|
| <b>Client</b>  | <b>Consultant</b> | <b>Contractor</b> |
| Burrows Graham | GL                | Pammenter         |

| Inst/<br>Backfill                                                                 | Water<br>Levels | Samples and Tests |              |         | Level<br>(m) | Depth<br>(thickness)<br>(m) | Strata                                                                              |                                                                                                                                                                                        |                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------|-----------------|-------------------|--------------|---------|--------------|-----------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                   |                 | Depth (m)         | Type/<br>Ref | Results |              |                             | Legend                                                                              | Description                                                                                                                                                                            |                                                                                                                                                                                                                                                          |
|  |                 | 0.10-0.15         | ES 1         |         |              | (0.30)                      |    | TOPSOIL: Greyish light brown slightly clayey gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone and granite. |                                                                                                                                                                                                                                                          |
|                                                                                   |                 | 0.40-0.45         | ES 2         |         |              | 210.59                      | 0.30                                                                                |                                                                                                       | Light yellowish brown slightly clayey gravelly SAND with rare roots. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone, granite and slate. [HEAD]                                                                    |
|                                                                                   |                 | 1.00-1.30         | B 1          |         |              | 210.19                      | 0.70                                                                                |                                                                                                       | Orangish brown slightly sandy clayey GRAVEL. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse slate, mudstone, sandstone and granite. Frequent sub-angular to sub-rounded sandstone cobbles. [HEAD]                           |
|                                                                                   |                 | 1.00-1.30         | B 2          |         |              |                             | (0.95)                                                                              |                                                                                                       |                                                                                                                                                                                                                                                          |
|                                                                                   |                 | 2.00-2.20         | B 3          |         |              | 209.24                      | 1.65                                                                                |                                                                                                       | Soft orangish reddish brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse quartz, slate, sandstone, mudstone and coal. Frequent sub-angular to sub-rounded sandstone cobbles. [OADBY MEMBER] |
|                                                                                   |                 |                   |              |         |              | (1.05)                      |    |                                                                                                                                                                                        |                                                                                                                                                                                                                                                          |
|                                                                                   |                 |                   |              |         |              |                             |    |                                                                                                                                                                                        |                                                                                                                                                                                                                                                          |
|                                                                                   |                 |                   |              |         |              |                             |   |                                                                                                                                                                                        |                                                                                                                                                                                                                                                          |
|                                                                                   |                 |                   |              |         |              |                             |  |                                                                                                                                                                                        |                                                                                                                                                                                                                                                          |
|                                                                                   |                 |                   |              |         |              |                             |  |                                                                                                                                                                                        |                                                                                                                                                                                                                                                          |
|                                                                                   |                 |                   |              |         | 208.19       | 2.70                        |                                                                                     | End of Trial Pit at 2.70m                                                                                                                                                              |                                                                                                                                                                                                                                                          |

|         |
|---------|
| Remarks |
|---------|

1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Dry until completion. 5. Trial pit terminated at 2.70 m bgl due sufficient depth reached.

## Method, Plant, Stability, Dimensions

0.00 - 2.70m TP CAT 310

0.00 - 2.70m  
Stable

$L = 1.50\text{m}$

$W = 0.60\text{m}$

|        |  |
|--------|--|
| Logger |  |
|--------|--|

EH&EM

Checked By: AT    Approved By: TH    Status: FINAL

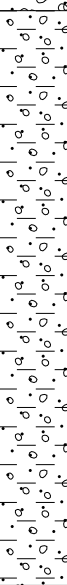
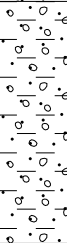


# Trial Pit

TP110  
Sheet 1 of 1

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>TP           | Easting<br>448256.04 | Northing<br>311612.63 | Ground Level (m)<br>208.31 | Scale<br>1:25          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-23   | End Date<br>2025-07-23 |

|                          |                  |                         |
|--------------------------|------------------|-------------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>Pammenter |
|--------------------------|------------------|-------------------------|

| Inst/<br>Backfill                                                                 | Water<br>Levels | Samples and Tests |              |         | Level  | Depth                             | Strata                                                                            |                                                                                                                                                                                                                 |                                                                                    |                                                                                                                                                                                                           |        |        |      |                                                                                     |                           |
|-----------------------------------------------------------------------------------|-----------------|-------------------|--------------|---------|--------|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|------|-------------------------------------------------------------------------------------|---------------------------|
|                                                                                   |                 | Depth (m)         | Type/<br>Ref | Results | (m)    | (m)<br><small>(thickness)</small> | Legend                                                                            | Description                                                                                                                                                                                                     |                                                                                    |                                                                                                                                                                                                           |        |        |      |                                                                                     |                           |
|  |                 | 0.05-0.10         | ES 1         |         | 208.17 | (0.14)                            |  | TOPSOIL: Greyish brown slightly clayey slightly silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone and granite.                           |                                                                                    |                                                                                                                                                                                                           |        |        |      |                                                                                     |                           |
|                                                                                   |                 | 0.20-0.25         | ES 2         |         |        | 0.14                              |  | Light yellowish brown gravelly SAND. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone, slate and granite. Frequent sub-angular to sub-rounded cobbles of sandstone. [HEAD] |                                                                                    |                                                                                                                                                                                                           |        |        |      |                                                                                     |                           |
|                                                                                   |                 | 0.30-0.60         | B 1          |         |        | (0.46)                            |  |                                                                                                                                                                                                                 |                                                                                    |                                                                                                                                                                                                           |        |        |      |                                                                                     |                           |
|                                                                                   |                 | 0.30-0.60         | B 2          |         | 207.71 |                                   |                                                                                   | 0.60                                                                                                                                                                                                            |  | Soft orangish reddish brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone, slate, mudstone with rare granite and coal pieces. [OADBY MEMBER] |        |        |      |                                                                                     |                           |
|                                                                                   |                 | 3.00-3.30         | B 3          |         | (1.90) | 205.81                            | 2.50                                                                              |                                                                                                                              |                                                                                    | Firm orangish yellish brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone, slate and coal. [OADBY MEMBER]                 |        |        |      |                                                                                     |                           |
|                                                                                   |                 |                   |              |         |        |                                   |                                                                                   |                                                                                                                                                                                                                 |                                                                                    |                                                                                                                                                                                                           | (0.80) |        |      |                                                                                     |                           |
|                                                                                   |                 |                   |              |         |        |                                   |                                                                                   |                                                                                                                                                                                                                 |                                                                                    |                                                                                                                                                                                                           |        | 205.01 | 3.30 |  | End of Trial Pit at 3.30m |
|                                                                                   |                 |                   |              |         |        |                                   |                                                                                   |                                                                                                                                                                                                                 |                                                                                    |                                                                                                                                                                                                           |        |        |      |                                                                                     |                           |
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|                                                                                   |                 |                   |              |         |        |                                   |                                                                                   |                                                                                                                                                                                                                 |                                                                                    |                                                                                                                                                                                                           |        |        |      |                                                                                     |                           |
|                                                                                   |                 |                   |              |         |        |                                   |                                                                                   |                                                                                                                                                                                                                 |                                                                                    |                                                                                                                                                                                                           |        |        |      |                                                                                     |                           |
|                                                                                   |                 |                   |              |         |        |                                   |                                                                                   |                                                                                                                                                                                                                 |                                                                                    |                                                                                                                                                                                                           |        |        |      |                                                                                     |                           |
|                                                                                   |                 |                   |              |         |        |                                   |                                                                                   |                                                                                                                                                                                                                 |                                                                                    |                                                                                                                                                                                                           |        |        |      |                                                                                     |                           |
|                                                                                   |                 |                   |              |         |        |                                   |                                                                                   |                                                                                                                                                                                                                 |                                                                                    |                                                                                                                                                                                                           |        |        |      |                                                                                     |                           |
|                                                                                   |                 |                   |              |         |        |                                   |                                                                                   |                                                                                                                                                                                                                 |                                                                                    |                                                                                                                                                                                                           |        |        |      |                                                                                     |                           |



# Trial Pit

TP111  
Sheet 1 of 1

|                           |                      |                          |                            |               |
|---------------------------|----------------------|--------------------------|----------------------------|---------------|
| Hole Type<br>TP           | Easting<br>448291.36 | Northing<br>311627.51    | Ground Level (m)<br>209.05 | Scale<br>1:25 |
| Project Name<br>Markfield | Project No.<br>4467  | Start Date<br>2025-07-23 | End Date<br>2025-07-23     |               |

|                          |                  |                         |
|--------------------------|------------------|-------------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>Pammenter |
|--------------------------|------------------|-------------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |                   |         | Level<br>(m) | Depth<br>(m)<br><small>(thickness)</small> | Strata |                                                                                                                                                                                                                                                                                                                   |
|-------------------|-----------------|-------------------|-------------------|---------|--------------|--------------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   |                 | Depth (m)         | Type/<br>Ref      | Results |              |                                            | Legend | Description                                                                                                                                                                                                                                                                                                       |
|                   |                 | 0.05-0.10         | ES 1              |         |              | (0.30)                                     |        | TOPSOIL: Greyish brown slightly clayey slightly silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone, slate and granite. Occasional sub-angular to sub-rounded cobbles of sandstone.                                                          |
|                   |                 | 0.60-0.65         | ES 2              |         | 208.75       | 0.30                                       |        | Yellowish brown slightly clayey gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone, slate and granite. Occasional sub-angular to sub-rounded cobbles of sandstone.<br>[HEAD]                                                                      |
|                   |                 |                   |                   |         | 208.45       | 0.60                                       |        |                                                                                                                                                                                                                                                                                                                   |
|                   |                 |                   |                   |         |              | (1.30)                                     |        |                                                                                                                                                                                                                                                                                                                   |
|                   |                 |                   |                   |         |              |                                            |        |                                                                                                                                                                                                                                                                                                                   |
|                   |                 | 2.50-3.00         | B 1<br>B 2<br>B 3 |         | 207.15       | 1.90                                       |        | Soft yellowish orangish brown sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone, mudstone and slate. Frequent sub-angular to sub-rounded cobbles of sandstone, mudstone and slate. Occasional sub-angular sandstone boulders.<br>[OADBY MEMBER] |
|                   |                 |                   |                   |         |              | (1.60)                                     |        |                                                                                                                                                                                                                                                                                                                   |
|                   |                 |                   |                   |         |              |                                            |        |                                                                                                                                                                                                                                                                                                                   |
|                   |                 |                   |                   |         |              |                                            |        |                                                                                                                                                                                                                                                                                                                   |
|                   |                 |                   |                   |         |              |                                            |        |                                                                                                                                                                                                                                                                                                                   |
|                   |                 | 2.50-3.00         |                   |         | 205.55       | 3.50                                       |        |                                                                                                                                                                                                                                                                                                                   |
|                   |                 |                   |                   |         |              |                                            |        | End of Trial Pit at 3.50m                                                                                                                                                                                                                                                                                         |
|                   |                 |                   |                   |         |              |                                            |        |                                                                                                                                                                                                                                                                                                                   |
|                   |                 |                   |                   |         |              |                                            |        |                                                                                                                                                                                                                                                                                                                   |

|                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                         |                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Dry until completion. 5. Trial pit terminated at 3.50 m bgl due sufficient depth reached. | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 3.50m TP CAT 310<br>Stable<br><div><div>L = 2.50m</div><div>W = 0.60m</div></div> | <b>Logger</b><br>EH&EM |
|                                                                                                                                                                                                                                                                                                                                    | Checked By: AT    Approved By: TH    Status: FINAL                                                                                      |                        |





|              |             |           |                  |            |
|--------------|-------------|-----------|------------------|------------|
| Hole Type    | Easting     | Northing  | Ground Level (m) | Scale      |
| TP           | 448159.19   | 311579.20 | 206.56           | 1:25       |
| Project Name | Project No. |           | Start Date       | End Date   |
| Markfield    | 4467        |           | 2025-07-23       | 2025-07-23 |

|                |                   |                   |
|----------------|-------------------|-------------------|
| <b>Client</b>  | <b>Consultant</b> | <b>Contractor</b> |
| Burrows Graham | GL                | Pammenter         |

| Inst/<br>Backfill                                                                 | Water<br>Levels                                                                    | Samples and Tests      |              |         | Level  | Depth<br>(thickness) | Strata                                                                             |                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------|--------------|---------|--------|----------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                   |                                                                                    | Depth (m)              | Type/<br>Ref | Results | (m)    | (m)                  | Legend                                                                             | Description                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                           |
|  |  | 0.10-0.15              | ES 1         |         | 206.26 | (0.30)               |   | TOPSOIL: Greyish light brown gravelly slightly silty slightly clayey SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone, granite, slate, quartzite and mudstone.                                     |                                                                                                                                                                                                                                           |
|                                                                                   |                                                                                    | 0.30-0.35              | ES 2         |         |        | 0.30                 |   | Yellowish light brown slightly clayey sandy GRAVEL with rare roots. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse mudstone, sandstone, granite and slate. [HEAD]                                                              |                                                                                                                                                                                                                                           |
|                                                                                   |                                                                                    | 0.40-0.50              | B 1          |         |        | (0.23)               |                                                                                    |                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                           |
|                                                                                   |                                                                                    |                        |              |         |        | 206.03               | 0.53                                                                               |                                                                                                                                                                            | Firm orangish brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse slate, quartzite and sandstone. Coccasional sub-angular to sub-rounded cobbles of sandstone. [OADBY MEMBER] |
|                                                                                   |                                                                                    |                        |              |         |        |                      | (0.67)                                                                             |                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                           |
|                                                                                   |                                                                                    |                        |              |         |        | 205.36               | 1.20                                                                               |                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                           |
|                                                                                   |                                                                                    |                        |              |         |        |                      |  | Orangish brown slightly sandy clayey GRAVEL. Sand is fine to coarse. Gravel is fine to sub-angular to sub-rounded fine to coarse granite, sandstone, slate and mudstone. Frequent sub-angular to sub-rounded cobbles of slate and sandstone. [OADBY MEMBER] |                                                                                                                                                                                                                                           |
|                                                                                   |                                                                                    |                        |              |         |        |                      |                                                                                    |                                                                                                                                                                                                                                                             | (1.80)                                                                                                                                                                                                                                    |
|                                                                                   |                                                                                    |                        |              |         |        |                      |                                                                                    |                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                           |
|                                                                                   |                                                                                    |                        |              |         |        |                      |                                                                                    |                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                           |
|                                                                                   |                                                                                    | 2.50-3.00<br>2.50-3.00 | B 2<br>B 3   |         | 203.56 | 3.00                 | End of Trial Pit at 3.00m                                                          |                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                           |

|         |
|---------|
| Remarks |
|---------|

1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Dry until completion. 5. Trial pit terminated at 3.00 m bgl due sufficient depth reached.

## Method, Plant, Stability, Dimensions

0.00 - 3.00m TP CAT 310

0.00 - 3.00m  
Stable


$$W = 0.60m$$

|        |  |
|--------|--|
| Logger |  |
|--------|--|

EH&EM

Checked By: AT    Approved By: TH    Status: FINAL



# Trial Pit

TP116  
Sheet 1 of 1

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>TP           | Easting<br>448409.99 | Northing<br>311539.73 | Ground Level (m)<br>205.35 | Scale<br>1:25          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-21   | End Date<br>2025-07-21 |

|                          |                  |                         |
|--------------------------|------------------|-------------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>Pammenter |
|--------------------------|------------------|-------------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |              |         | Level<br>(m) | Depth<br>(m)<br><small>(thickness)</small> | Strata |                                                                                                                                                                                                              |
|-------------------|-----------------|-------------------|--------------|---------|--------------|--------------------------------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   |                 | Depth (m)         | Type/<br>Ref | Results |              |                                            | Legend | Description                                                                                                                                                                                                  |
|                   |                 | 0.05              | ES           |         | 205.25       | (0.10)<br>0.10                             |        | TOPSOIL: Greyish light brown slightly clayey slightly silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to rounded fine to coarse sandstone, mudstone, granite and quartzite. |
|                   |                 | 0.40              | ES           |         |              | (0.50)                                     |        | Greyish brown slightly clayey sandy GRAVEL. Sand is fine to coarse. Gravel is angular to sub-angular fine to coarse sandstone, mudstone, granite and quartzite.                                              |
|                   |                 | 0.50              | B            |         | 204.75       | 0.60                                       |        | Firm brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to sub-rounded fine to coarse granite, mudstone and sandstone.<br>[OADBY MEMBER]                                          |
|                   |                 | 2.00-2.50         | B            |         |              | (2.90)                                     |        |                                                                                                                                                                                                              |
|                   |                 | 2.00-2.50         | B            |         |              |                                            |        |                                                                                                                                                                                                              |
|                   |                 |                   |              |         | 201.85       | 3.50                                       |        | End of Trial Pit at 3.50m                                                                                                                                                                                    |

|                                                                                                                                                                                                                                                                                                                                    |                                                                                                                              |                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Dry until completion. 5. Trial pit terminated at 3.50 m bgl due sufficient depth reached. | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 3.50m<br>Stable<br><div><div>L = 2.20m</div><div>W = 0.60m</div></div> | <b>Logger</b><br>GL |
|                                                                                                                                                                                                                                                                                                                                    | Checked By: AT    Approved By: TH    Status: FINAL                                                                           |                     |

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>TP           | Easting<br>448014.35 | Northing<br>311379.08 | Ground Level (m)<br>203.31 | Scale<br>1:25          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-21   | End Date<br>2025-07-21 |

|                |                   |                   |
|----------------|-------------------|-------------------|
| <b>Client</b>  | <b>Consultant</b> | <b>Contractor</b> |
| Burrows Graham | GL                | Pammenter         |

| Inst/<br>Backfill                                                                | Water<br>Levels | Samples and Tests |              |         | Level<br><br>(m) | Depth<br>(thickness)<br><br>(m) | Strata                                                                            |                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------|-----------------|-------------------|--------------|---------|------------------|---------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                  |                 | Depth (m)         | Type/<br>Ref | Results |                  |                                 | Legend                                                                            | Description                                                                                                                                                                                                  |
|  |                 | 0.10              | ES 1         |         | 203.11           | (0.20)                          |  | TOPSOIL: Greyish light brown slightly clayey slightly silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to rounded fine to coarse sandstone, mudstone, granite and quartzite. |
|                                                                                  |                 |                   |              |         |                  | 0.20                            |                                                                                   |                                                                                                                                                                                                              |
|                                                                                  |                 |                   |              |         |                  | (0.20)                          |                                                                                   |                                                                                                                                                                                                              |
|                                                                                  |                 |                   |              |         | 202.91           | 0.40                            |  | Greyish brown silty sandy cobbly GRAVEL. Gravel is angular to sub-angular fine to coarse sandstone, mudstone, granite and quartzite.<br>[HEAD]                                                               |
| <div>End of Trial Pit at 0.40m</div>                                             |                 |                   |              |         |                  |                                 |                                                                                   | -0.5                                                                                                                                                                                                         |
|                                                                                  |                 |                   |              |         |                  |                                 |                                                                                   | -1.0                                                                                                                                                                                                         |
|                                                                                  |                 |                   |              |         |                  |                                 |                                                                                   | -1.5                                                                                                                                                                                                         |
|                                                                                  |                 |                   |              |         |                  |                                 |                                                                                   | -2.0                                                                                                                                                                                                         |
|                                                                                  |                 |                   |              |         |                  |                                 |                                                                                   | -2.5                                                                                                                                                                                                         |
|                                                                                  |                 |                   |              |         |                  |                                 |                                                                                   | -3.0                                                                                                                                                                                                         |
|                                                                                  |                 |                   |              |         |                  |                                 |                                                                                   | -3.5                                                                                                                                                                                                         |
|                                                                                  |                 |                   |              |         |                  |                                 |                                                                                   | -4.0                                                                                                                                                                                                         |
|                                                                                  |                 |                   |              |         |                  |                                 |                                                                                   | -4.5                                                                                                                                                                                                         |
|                                                                                  |                 |                   |              |         |                  |                                 |                                                                                   | -5.0                                                                                                                                                                                                         |

**Remarks**  
1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Dry until completion. 5. Trial pit terminated shallow at 0.40 m bgl due to an obstruction encountered.

### Method, Plant, Stability, Dimensions

0.00 - 0.40m TP CAT 310

Stable  
 $L = 2.20 \times 10^{-4}$

$$L = 2.2011$$

## Logger

GL



# Trial Pit

TP118  
Sheet 1 of 1

|                           |                      |                       |                            |                        |
|---------------------------|----------------------|-----------------------|----------------------------|------------------------|
| Hole Type<br>TP           | Easting<br>448101.34 | Northing<br>311356.81 | Ground Level (m)<br>204.71 | Scale<br>1:25          |
| Project Name<br>Markfield | Project No.<br>4467  |                       | Start Date<br>2025-07-21   | End Date<br>2025-07-21 |

|                          |                  |                         |
|--------------------------|------------------|-------------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>Pammenter |
|--------------------------|------------------|-------------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |              |         | Level<br>(m)     | Depth<br>(m)           | Strata |                                                                                                                                                                                                              |
|-------------------|-----------------|-------------------|--------------|---------|------------------|------------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   |                 | Depth (m)         | Type/<br>Ref | Results |                  |                        | Legend | Description                                                                                                                                                                                                  |
|                   |                 | 0.15              | ES 1         |         | 204.51           | (0.20)                 |        | TOPSOIL: Greyish light brown slightly clayey slightly silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to rounded fine to coarse sandstone, mudstone, granite and quartzite. |
|                   |                 | 0.45<br>0.50-1.00 | ES 2<br>B 1  |         | 204.21           | (0.30)<br>0.50         |        | Greyish brown silty slightly sandy GRAVEL. Sand is fine to coarse. Gravel is angular to sub-angular fine to coarse sandstone, mudstone, granite and quartzite.<br>[HEAD]                                     |
|                   |                 |                   |              |         |                  | (1.35)                 |        | Firm brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to sub-rounded fine to coarse granite, mudstone and sandstone.<br>[OADBY MEMBER]                                          |
|                   |                 |                   |              |         | 202.86<br>202.81 | 1.85<br>(0.05)<br>1.90 |        | Dark grey VOLCANICLASTIC SILTSTONE.<br>[BRADGATE FORMATION]                                                                                                                                                  |
|                   |                 |                   |              |         |                  |                        |        | End of Trial Pit at 1.90m                                                                                                                                                                                    |

|                                                                                                                                                                                                                                                                                                                                  |                                                                                                     |              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------|
| Remarks<br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Dry until completion. 5. Trial pit terminated at 1.90 m bgl due suspected bedrock encountered. | Method, Plant, Stability, Dimensions<br>0.00 - 1.90m TP CAT 310<br>Stable<br>L = 2.20m<br>W = 0.60m | Logger<br>GL |
| Checked By: AT    Approved By: TH    Status: FINAL                                                                                                                                                                                                                                                                               |                                                                                                     |              |



# Trial Pit

TP119  
Sheet 1 of 1

|                           |                      |                          |                            |               |
|---------------------------|----------------------|--------------------------|----------------------------|---------------|
| Hole Type<br>TP           | Easting<br>448037.69 | Northing<br>311229.28    | Ground Level (m)<br>194.64 | Scale<br>1:25 |
| Project Name<br>Markfield | Project No.<br>4467  | Start Date<br>2025-07-23 | End Date<br>2025-07-23     |               |

|                          |                  |                         |
|--------------------------|------------------|-------------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>Pammerter |
|--------------------------|------------------|-------------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests      |              |         | Level<br>(m) | Depth<br>(m)<br><small>(thickness)</small> | Strata |                                                                                                                                                                                                                                  |     |
|-------------------|-----------------|------------------------|--------------|---------|--------------|--------------------------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|                   |                 | Depth (m)              | Type/<br>Ref | Results |              |                                            | Legend | Description                                                                                                                                                                                                                      |     |
|                   |                 | 0.05-0.10<br>0.10-0.17 | ES 1<br>B 1  |         | 194.47       | 0.17                                       |        | TOPSOIL: Greyish light brown slightly clayey slightly silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone, mudstone, granite and quartzite.                 |     |
|                   |                 | 0.60-0.65              | ES 2         |         |              | (1.13)                                     |        | Firm orangish brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone and rare quartzite.<br>[HEAD]                                                            | 0.5 |
|                   |                 | 1.30-1.50<br>1.30-1.50 | B 2<br>B 3   |         | 193.34       | 1.30                                       |        | Orangish brown slightly clayey gravelly SAND. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse sandstone, quartzite and coal. Rare sub-angular to sub-rounded cobbles of sandstone.<br>[OADBY MEMBER] | 1.5 |
|                   |                 |                        |              |         | 192.84       | 1.80                                       |        | Stiff reddish brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is sub-angular to sub-rounded fine to coarse quartzite, granite, sandstone and mudstone.<br>[OADBY MEMBER]                                               | 2.0 |
|                   |                 |                        |              |         |              | (1.20)                                     |        |                                                                                                                                                                                                                                  | 2.5 |
|                   |                 |                        |              |         | 191.64       | 3.00                                       |        | End of Trial Pit at 3.00m                                                                                                                                                                                                        | 3.0 |
|                   |                 |                        |              |         |              |                                            |        |                                                                                                                                                                                                                                  | 3.5 |
|                   |                 |                        |              |         |              |                                            |        |                                                                                                                                                                                                                                  | 4.0 |
|                   |                 |                        |              |         |              |                                            |        |                                                                                                                                                                                                                                  | 4.5 |
|                   |                 |                        |              |         |              |                                            |        |                                                                                                                                                                                                                                  | 5.0 |

|                                                                                                                                                                                                                                                                                                                                    |                                                                                                                              |                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Dry until completion. 5. Trial pit terminated at 3.00 m bgl due sufficient depth reached. | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 3.00m<br>Stable<br><div><div>L = 2.00m</div><div>W = 0.60m</div></div> | <b>Logger</b><br>EH&EM |
|                                                                                                                                                                                                                                                                                                                                    | Checked By: AT    Approved By: TH    Status: FINAL                                                                           |                        |







Trial Pit

|                           |                      |                          |                            |               |
|---------------------------|----------------------|--------------------------|----------------------------|---------------|
| Hole Type<br>TP           | Easting<br>448239.32 | Northing<br>311271.84    | Ground Level (m)<br>199.58 | Scale<br>1:25 |
| Project Name<br>Markfield | Project No.<br>4467  | Start Date<br>2025-07-21 | End Date<br>2025-07-21     |               |

|                          |                  |                         |
|--------------------------|------------------|-------------------------|
| Client<br>Burrows Graham | Consultant<br>GL | Contractor<br>Pammenter |
|--------------------------|------------------|-------------------------|

| Inst/<br>Backfill | Water<br>Levels | Samples and Tests |              |         | Level<br>(m) | Depth<br>(m)   | Strata |                                                                                                                                                                                                              |     |
|-------------------|-----------------|-------------------|--------------|---------|--------------|----------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|                   |                 | Depth (m)         | Type/<br>Ref | Results |              |                | Legend | Description                                                                                                                                                                                                  |     |
|                   |                 | 0.30-0.35         | ES 1         |         | 199.38       | (0.20)<br>0.20 |        | TOPSOIL: Greyish light brown slightly clayey slightly silty gravelly SAND with rootlets. Sand is fine to coarse. Gravel is sub-angular to rounded fine to coarse sandstone, mudstone, granite and quartzite. |     |
|                   |                 |                   |              |         |              |                |        | Orangish brown clayey slightly sandy slightly cobbly GRAVEL. Gravel is angular to sub-rounded fine to coarse sandstone, granite and mudstone. Cobbles are angular of sandstone. [HEAD]                       | 0.5 |
|                   |                 | 0.90-0.95         | ES 2         |         |              | (1.10)         |        |                                                                                                                                                                                                              | 1.0 |
|                   |                 | 1.00-1.30         | B 1          |         |              |                |        |                                                                                                                                                                                                              |     |
|                   |                 | 1.00-1.30         | B 2          |         |              |                |        |                                                                                                                                                                                                              |     |
|                   |                 | 1.00-1.30         | B 3          |         |              |                |        |                                                                                                                                                                                                              |     |
|                   |                 |                   |              |         | 198.28       | 1.30           |        | End of Trial Pit at 1.30m                                                                                                                                                                                    | 1.5 |
|                   |                 |                   |              |         |              |                |        |                                                                                                                                                                                                              | 2.0 |
|                   |                 |                   |              |         |              |                |        |                                                                                                                                                                                                              | 2.5 |
|                   |                 |                   |              |         |              |                |        |                                                                                                                                                                                                              | 3.0 |
|                   |                 |                   |              |         |              |                |        |                                                                                                                                                                                                              | 3.5 |
|                   |                 |                   |              |         |              |                |        |                                                                                                                                                                                                              | 4.0 |
|                   |                 |                   |              |         |              |                |        |                                                                                                                                                                                                              | 4.5 |
|                   |                 |                   |              |         |              |                |        |                                                                                                                                                                                                              | 5.0 |

|                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                         |                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <b>Remarks</b><br>1. Logged in general accordance with BS 5930:2015+A1:2020. 2. Area spot cleared for services prior to excavation by a specialist third-party contractor. 3. No olfactory or visual evidence of contamination noted. 4. Dry until completion. 5. Trial pit terminated at 1.30 m bgl due to a boulder obstruction encountered. | <b>Method, Plant, Stability, Dimensions</b><br>0.00 - 1.30m TP CAT 310<br>Stable<br><div><div>L = 2.20m</div><div>W = 0.60m</div></div> | <b>Logger</b><br>EM |
|                                                                                                                                                                                                                                                                                                                                                | Checked By: AT    Approved By: TH    Status: FINAL                                                                                      |                     |

Dynamic Sampling Uk Ltd  
Unit 8 Victory Park  
Victory Road  
Derby  
DE248ZF

## SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

SPT Hammer Ref: AR01  
Test Date: 09/05/2025  
Report Date: 09/05/2025  
File Name: AR01.spt  
Test Operator: B.HUNTER

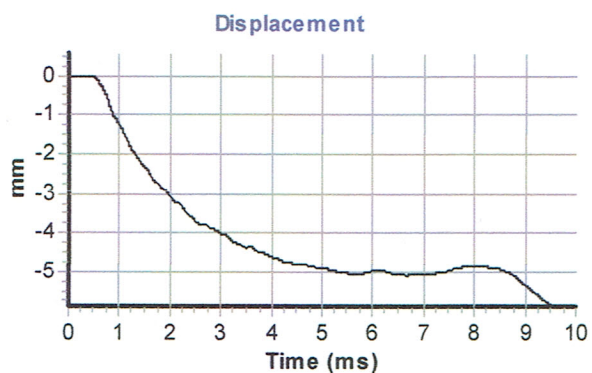
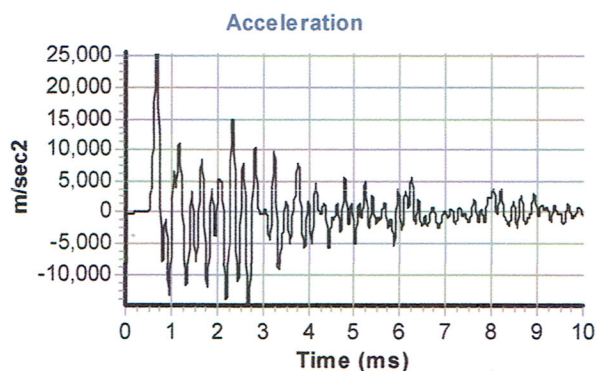
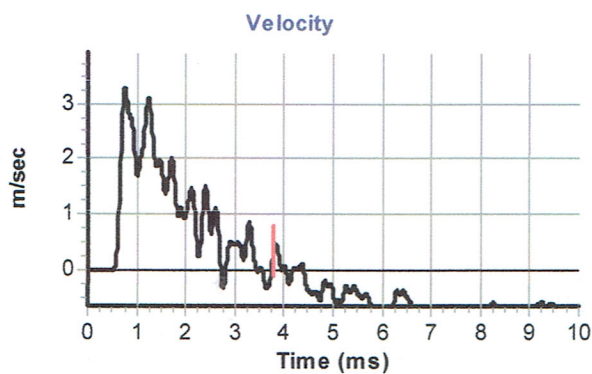
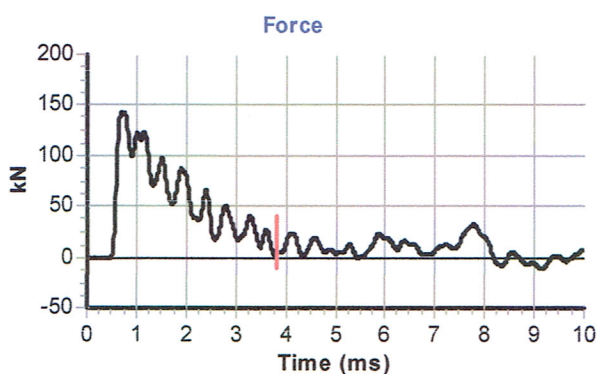
### Instrumented Rod Data

Diameter  $d_r$  (mm): 54  
Wall Thickness  $t_r$  (mm): 6.8  
Assumed Modulus  $E_a$  (GPa): 208  
Accelerometer No.1: 62901  
Accelerometer No.2: 69902

### SPT Hammer Information

Hammer Mass  $m$  (kg): 63.5  
Falling Height  $h$  (mm): 760  
SPT String Length  $L$  (m): 10.0

### Comments / Location



### Calculations

Area of Rod A ( $\text{mm}^2$ ): 1008  
Theoretical Energy  $E_{\text{theor}}$  (J): 473  
Measured Energy  $E_{\text{meas}}$  (J): 329

Energy Ratio  $E_r$  (%): **69**

Signed: B.Hunter  
Title: Operations Manager

Dynamic Sampling Uk Ltd  
Unit 8 Victory Park  
Victory Road  
Derby  
DE248ZF

## SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

SPT Hammer Ref: SH01

Test Date: 15/05/2025

Report Date: 15/05/2025

File Name: SH01.spt

Test Operator: B.HUNTER

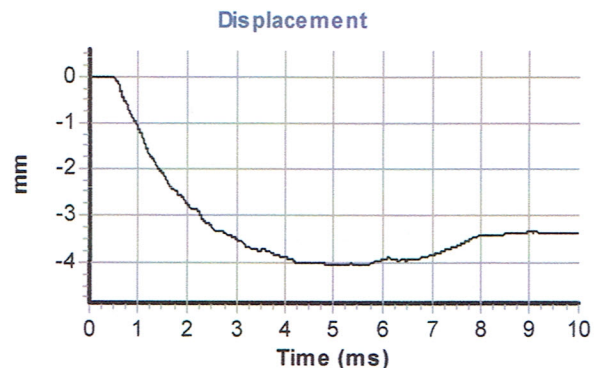
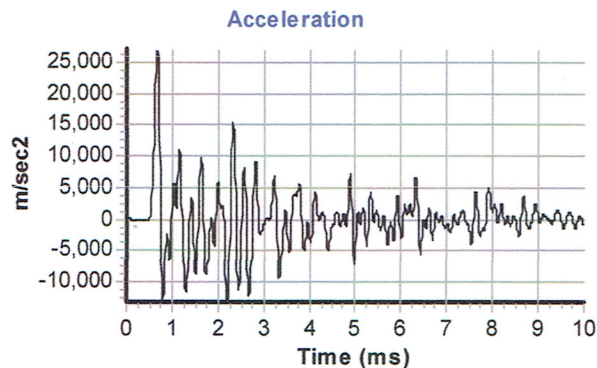
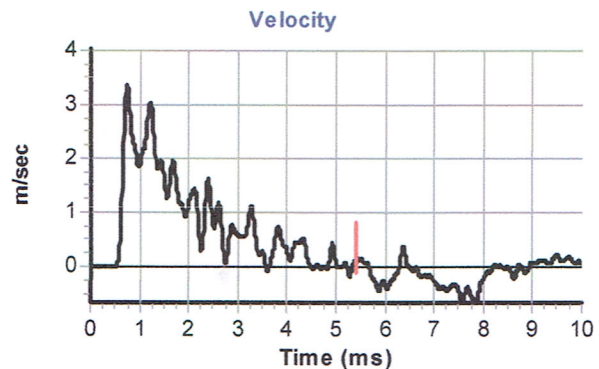
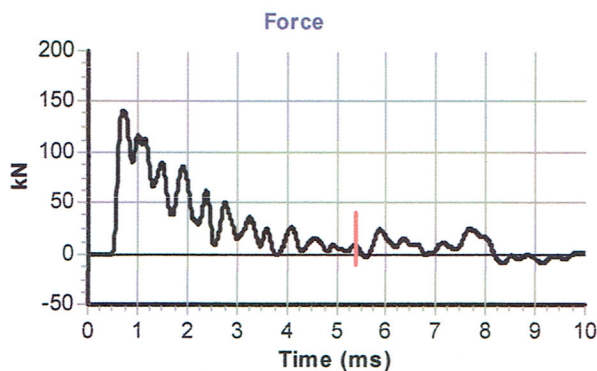
### Instrumented Rod Data

Diameter  $d_r$  (mm): 54  
Wall Thickness  $t_r$  (mm): 6.8  
Assumed Modulus  $E_a$  (GPa): 208  
Accelerometer No.1: 62901  
Accelerometer No.2: 69902

### SPT Hammer Information

Hammer Mass  $m$  (kg): 63.5  
Falling Height  $h$  (mm): 760  
SPT String Length  $L$  (m): 10.0

### Comments / Location



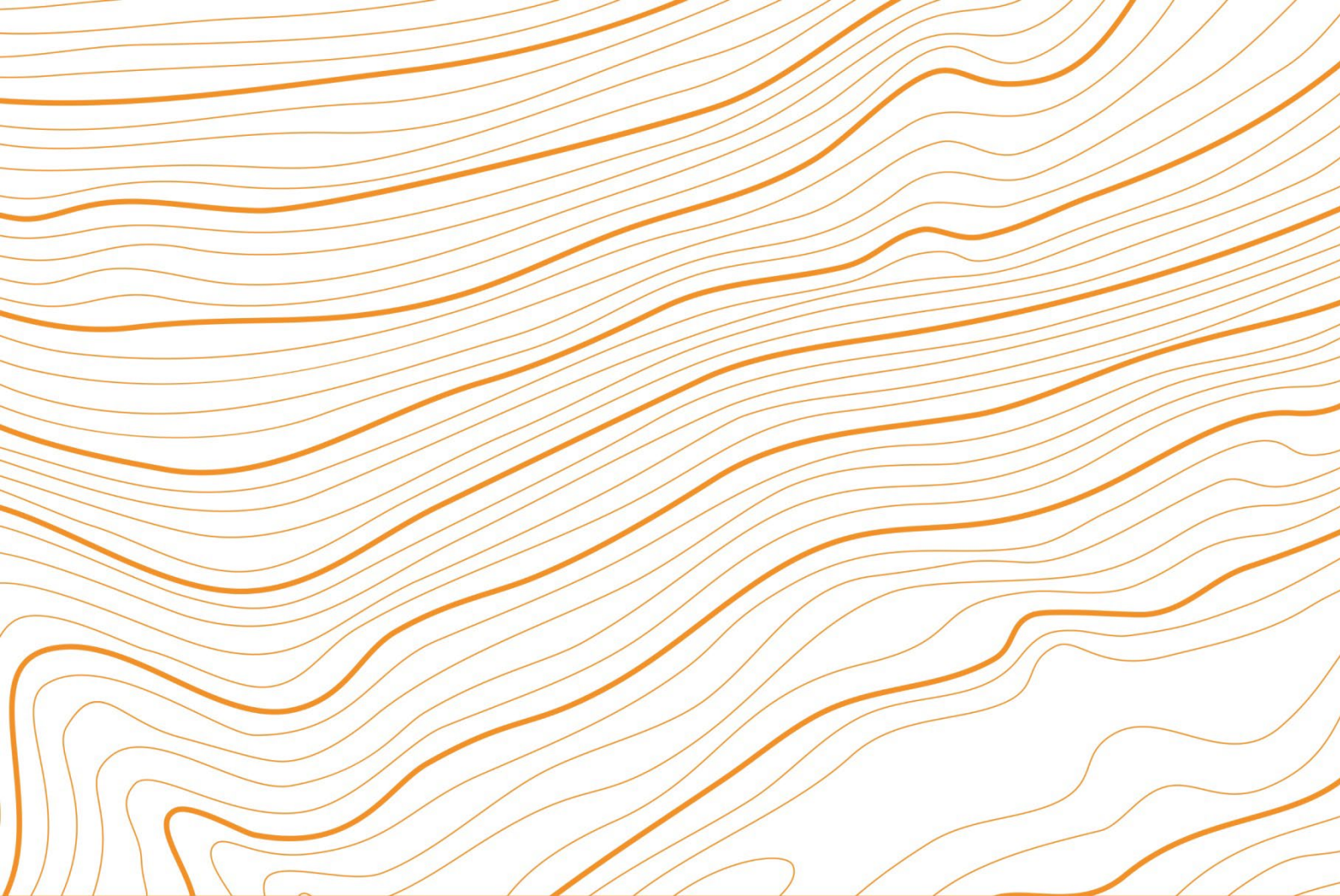
### Calculations

Area of Rod A ( $\text{mm}^2$ ): 1008  
Theoretical Energy  $E_{\text{theor}}$  (J): 473  
Measured Energy  $E_{\text{meas}}$  (J): 307

Energy Ratio  $E_r$  (%): **65**

Signed: B Hunter

Title: Operations Manager



## **Appendix C – Environmental Testing Results**

GEO2 Remediation Ltd  
Coniston House  
Louisa Street  
Idle  
BD10 8NE

i2 Analytical Ltd.  
7 Woodshots Meadow,  
Croxley Green  
Business Park,  
Watford,  
Herts,  
WD18 8YS

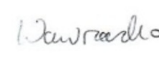
e: alex.tabb@geo2.co.uk  
George.Lount@geo2.co.uk

t: 01923 225404  
f: 01923 237404  
e: reception@i2analytical.com

## **Analytical Report Number : 25-039915**

Replaces Analytical Report Number: 25-039915, issue no. 1  
Additional analysis undertaken.  
Asbestos quantification added to sample 628314 as per client's request.

|                             |                 |                                                        |            |
|-----------------------------|-----------------|--------------------------------------------------------|------------|
| <b>Project / Site name:</b> | Markfield       | <b>Samples received on:</b>                            | 28/07/2025 |
| <b>Your job number:</b>     | 4467            | <b>Samples instructed on/<br/>Analysis started on:</b> | 28/07/2025 |
| <b>Your order number:</b>   | 4153            | <b>Analysis completed by:</b>                          | 21/08/2025 |
| <b>Report Issue Number:</b> | 2               | <b>Report issued on:</b>                               | 21/08/2025 |
| <b>Samples Analysed:</b>    | 20 soil samples |                                                        |            |

  
**Signed:** \_\_\_\_\_

Joanna Wawrzeczko  
Senior 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       |
| air       | - once the analysis is complete |

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.  
Some records may be kept for longer according to other legal/best practice requirements.

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: 25-039915

Project / Site name: Markfield

Your Order No: 4153

|                                         |               |                            |                              |               |               |
|-----------------------------------------|---------------|----------------------------|------------------------------|---------------|---------------|
| Lab Sample Number                       | 628309        | 628310                     | 628311                       | 628312        | 628313        |
| Sample Reference                        | TP109         | TP110                      | TP112                        | TP113         | TP115         |
| Sample Number                           | 1             | 1                          | 2                            | 2             | 1             |
| Water Matrix                            | N/A           | N/A                        | N/A                          | N/A           | N/A           |
| Depth (m)                               | 0.10-0.15     | 0.05-0.10                  | 0.40-0.45                    | 0.40-0.45     | 0.10-0.15     |
| Date Sampled                            | 23/07/2025    | 23/07/2025                 | 24/07/2025                   | 24/07/2025    | 23/07/2025    |
| Time Taken                              | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |               |               |

|                               |    |      |      |      |       |     |       |      |
|-------------------------------|----|------|------|------|-------|-----|-------|------|
| Stone Content                 | %  | 0.1  | NONE | 14.5 | < 0.1 | 41  | < 0.1 | 16.2 |
| Moisture Content              | %  | 0.01 | NONE | 5.5  | 5.4   | 6.7 | 10    | 6.5  |
| Total mass of sample received | kg | 0.1  | NONE | 0.7  | 0.6   | 0.7 | 0.6   | 0.7  |

#### Asbestos

|                                        |      |     |           |              |              |              |              |              |
|----------------------------------------|------|-----|-----------|--------------|--------------|--------------|--------------|--------------|
| Asbestos in Soil Detected/Not Detected | Type | N/A | ISO 17025 | Not-detected | Not-detected | Not-detected | Not-detected | Not-detected |
| Asbestos Analyst ID                    | N/A  | N/A | N/A       | MBI          | MBI          | MBI          | MBI          | MBI          |
| Analysis completed                     | N/A  | N/A | N/A       | 31/07/2025   | 31/07/2025   | 31/07/2025   | 31/07/2025   | 31/07/2025   |
| Actinolite detected                    | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Amosite detected                       | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Anthophyllite detected                 | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Chrysotile detected                    | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Crocidolite detected                   | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Tremolite detected                     | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |

|                                     |   |       |           |   |   |   |   |   |
|-------------------------------------|---|-------|-----------|---|---|---|---|---|
| Asbestos % by hand picking/weighing | % | 0.001 | ISO 17025 | - | - | - | - | - |
|-------------------------------------|---|-------|-----------|---|---|---|---|---|

|                                                   |      |     |           |   |   |   |   |   |
|---------------------------------------------------|------|-----|-----------|---|---|---|---|---|
| Asbestos Containing Material Types Detected (ACM) | Type | N/A | ISO 17025 | - | - | - | - | - |
|---------------------------------------------------|------|-----|-----------|---|---|---|---|---|

#### General Inorganics

|                                                                         |          |       |        |      |      |      |      |      |
|-------------------------------------------------------------------------|----------|-------|--------|------|------|------|------|------|
| pH (L099)                                                               | pH Units | N/A   | MCERTS | 6.9  | 6.5  | 8.6  | 6.7  | 7.7  |
| Total Sulphate as SO <sub>4</sub>                                       | %        | 0.005 | MCERTS | -    | -    | -    | -    | -    |
| Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)         | mg/kg    | 2.5   | MCERTS | 35   | 24   | 25   | 25   | 30   |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent) | mg/l     | 1.25  | MCERTS | 17.3 | -    | 12.3 | -    | 14.9 |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1)                     | mg/l     | 1.25  | MCERTS | -    | 11.8 | -    | 12.3 | -    |
| Total Sulphur                                                           | mg/kg    | 50    | MCERTS | -    | -    | -    | -    | -    |
| Total Sulphur                                                           | %        | 0.005 | MCERTS | -    | -    | -    | -    | -    |

Analytical Report Number: 25-039915  
Project / Site name: Markfield  
Your Order No: 4153

|                                         |               |                            |                              |               |               |
|-----------------------------------------|---------------|----------------------------|------------------------------|---------------|---------------|
| Lab Sample Number                       | 628309        | 628310                     | 628311                       | 628312        | 628313        |
| Sample Reference                        | TP109         | TP110                      | TP112                        | TP113         | TP115         |
| Sample Number                           | 1             | 1                          | 2                            | 2             | 1             |
| Water Matrix                            | N/A           | N/A                        | N/A                          | N/A           | N/A           |
| Depth (m)                               | 0.10-0.15     | 0.05-0.10                  | 0.40-0.45                    | 0.40-0.45     | 0.10-0.15     |
| Date Sampled                            | 23/07/2025    | 23/07/2025                 | 24/07/2025                   | 24/07/2025    | 23/07/2025    |
| Time Taken                              | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |               |               |

#### 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    | 0.06   | 0.07   | < 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 | < 0.05 | < 0.05 | < 0.05 |
| Benzo(k)fluoranthene   | mg/kg | 0.05 | ISO 17025 | < 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 | ISO 17025 | < 0.80 | < 0.80 | < 0.80 | < 0.80 | < 0.80 |
|-----------------------------|-------|-----|-----------|--------|--------|--------|--------|--------|

#### Heavy Metals / Metalloids

|                                   |       |     |        |       |       |       |       |       |
|-----------------------------------|-------|-----|--------|-------|-------|-------|-------|-------|
| Arsenic (aqua regia extractable)  | mg/kg | 1   | MCERTS | 8.6   | 7.5   | 8.2   | 9.2   | 7.1   |
| 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   | 21    | 16    | 20    | 27    | 18    |
| Chromium (aqua regia extractable) | mg/kg | 1   | MCERTS | 21    | 16    | 20    | 27    | 18    |
| Copper (aqua regia extractable)   | mg/kg | 1   | MCERTS | 16    | 14    | 17    | 15    | 11    |
| Lead (aqua regia extractable)     | mg/kg | 1   | MCERTS | 25    | 27    | 9.6   | 9.1   | 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 | 12    | 8.8   | 12    | 12    | 9.1   |
| Zinc (aqua regia extractable)     | mg/kg | 1   | MCERTS | 62    | 58    | 43    | 28    | 42    |

#### Petroleum Hydrocarbons

|                                                          |       |      |        |   |         |   |         |   |
|----------------------------------------------------------|-------|------|--------|---|---------|---|---------|---|
| TPHCWG - Aliphatic >EC5 - EC6 <sub>HS_1D_AL</sub>        | mg/kg | 0.01 | MCERTS | - | < 0.010 | - | < 0.010 | - |
| TPHCWG - Aliphatic >EC6 - EC8 <sub>HS_1D_AL</sub>        | mg/kg | 0.01 | MCERTS | - | < 0.010 | - | < 0.010 | - |
| TPHCWG - Aliphatic >EC8 - EC10 <sub>HS_1D_AL</sub>       | mg/kg | 0.01 | MCERTS | - | < 0.010 | - | < 0.010 | - |
| TPHCWG - Aliphatic >EC10 - EC12 <sub>EH_CU_1D_AL</sub>   | mg/kg | 1    | MCERTS | - | < 1.0   | - | < 1.0   | - |
| TPHCWG - Aliphatic >EC12 - EC16 <sub>EH_CU_1D_AL</sub>   | mg/kg | 2    | MCERTS | - | < 2.0   | - | < 2.0   | - |
| TPHCWG - Aliphatic >EC16 - EC21 <sub>EH_CU_1D_AL</sub>   | mg/kg | 8    | MCERTS | - | < 8.0   | - | < 8.0   | - |
| TPHCWG - Aliphatic >EC21 - EC35 <sub>EH_CU_1D_AL</sub>   | mg/kg | 8    | MCERTS | - | < 8.0   | - | < 8.0   | - |
| TPHCWG - Aliphatic >EC35 - EC40 <sub>EH_CU_1D_AL</sub>   | mg/kg | 10   | NONE   | - | < 10    | - | < 10    | - |
| TPHCWG - Aliphatic >EC5 - EC40 <sub>EH_CU+HS_1D_AL</sub> | mg/kg | 10   | NONE   | - | < 10    | - | < 10    | - |

Analytical Report Number: 25-039915

Project / Site name: Markfield

Your Order No: 4153

|                                         |               |                            |                              |               |               |
|-----------------------------------------|---------------|----------------------------|------------------------------|---------------|---------------|
| Lab Sample Number                       | 628309        | 628310                     | 628311                       | 628312        | 628313        |
| Sample Reference                        | TP109         | TP110                      | TP112                        | TP113         | TP115         |
| Sample Number                           | 1             | 1                          | 2                            | 2             | 1             |
| Water Matrix                            | N/A           | N/A                        | N/A                          | N/A           | N/A           |
| Depth (m)                               | 0.10-0.15     | 0.05-0.10                  | 0.40-0.45                    | 0.40-0.45     | 0.10-0.15     |
| Date Sampled                            | 23/07/2025    | 23/07/2025                 | 24/07/2025                   | 24/07/2025    | 23/07/2025    |
| Time Taken                              | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |               |               |

|                                              |       |      |        |   |         |   |         |   |
|----------------------------------------------|-------|------|--------|---|---------|---|---------|---|
| TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR        | mg/kg | 0.01 | MCERTS | - | < 0.010 | - | < 0.010 | - |
| TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR        | mg/kg | 0.01 | MCERTS | - | < 0.010 | - | < 0.010 | - |
| TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR       | mg/kg | 0.02 | MCERTS | - | < 0.020 | - | < 0.020 | - |
| TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR   | mg/kg | 1    | MCERTS | - | < 1.0   | - | < 1.0   | - |
| TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR   | mg/kg | 2    | MCERTS | - | < 2.0   | - | < 2.0   | - |
| TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR   | mg/kg | 10   | MCERTS | - | < 10    | - | < 10    | - |
| TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR   | mg/kg | 10   | MCERTS | - | < 10    | - | < 10    | - |
| TPHCWG - Aromatic >EC35 - EC40 EH_CU_1D_AR   | mg/kg | 10   | NONE   | - | < 10    | - | < 10    | - |
| TPHCWG - Aromatic >EC5 - EC40 EH_CU+HS_1D_AR | mg/kg | 10   | NONE   | - | < 10    | - | < 10    | - |

|                                         |       |    |      |   |      |   |      |   |
|-----------------------------------------|-------|----|------|---|------|---|------|---|
| TPH Total >EC5 - EC40 EH_CU+HS_1D_TOTAL | mg/kg | 10 | NONE | - | < 10 | - | < 10 | - |
|-----------------------------------------|-------|----|------|---|------|---|------|---|

|                                  |       |    |        |      |   |      |   |      |
|----------------------------------|-------|----|--------|------|---|------|---|------|
| TPH (EC10 - EC40) EH_CU_1D_TOTAL | mg/kg | 10 | MCERTS | < 10 | - | < 10 | - | < 10 |
|----------------------------------|-------|----|--------|------|---|------|---|------|

#### VOCs

|                                    |       |   |        |   |       |   |       |   |
|------------------------------------|-------|---|--------|---|-------|---|-------|---|
| MTBE (Methyl Tertiary Butyl Ether) | µg/kg | 5 | MCERTS | - | < 5.0 | - | < 5.0 | - |
| Benzene                            | µg/kg | 5 | MCERTS | - | < 5.0 | - | < 5.0 | - |
| Toluene                            | µg/kg | 5 | MCERTS | - | < 5.0 | - | < 5.0 | - |
| Ethylbenzene                       | µg/kg | 5 | MCERTS | - | < 5.0 | - | < 5.0 | - |
| p & m-Xylene                       | µg/kg | 8 | MCERTS | - | < 8.0 | - | < 8.0 | - |
| o-Xylene                           | µg/kg | 5 | MCERTS | - | < 5.0 | - | < 5.0 | - |

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 25-039915

Project / Site name: Markfield

Your Order No: 4153

|                                         |               |                            |                              |               |               |
|-----------------------------------------|---------------|----------------------------|------------------------------|---------------|---------------|
| Lab Sample Number                       | 628314        | 628315                     | 628316                       | 628317        | 628318        |
| Sample Reference                        | TP116         | TP119                      | TP119                        | TP120         | TP120         |
| Sample Number                           | 2             | 1                          | 2                            | 1             | 2             |
| Water Matrix                            | N/A           | N/A                        | N/A                          | N/A           | N/A           |
| Depth (m)                               | 0.40          | 0.05-0.10                  | 0.60-0.65                    | 0.30-0.35     | 0.80-0.85     |
| Date Sampled                            | 21/07/2025    | 23/07/2025                 | 23/07/2025                   | 21/07/2025    | 21/07/2025    |
| Time Taken                              | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |               |               |

|                               |    |      |      |       |       |       |       |      |
|-------------------------------|----|------|------|-------|-------|-------|-------|------|
| Stone Content                 | %  | 0.1  | NONE | < 0.1 | < 0.1 | < 0.1 | < 0.1 | 14.1 |
| Moisture Content              | %  | 0.01 | NONE | 6.7   | 9.4   | 15    | 6.4   | 4.5  |
| Total mass of sample received | kg | 0.1  | NONE | 0.6   | 1.1   | 1.2   | 0.6   | 0.8  |

#### Asbestos

|                                        |      |     |           |              |              |              |              |   |
|----------------------------------------|------|-----|-----------|--------------|--------------|--------------|--------------|---|
| Asbestos in Soil Detected/Not Detected | Type | N/A | ISO 17025 | Detected     | Not-detected | Not-detected | Not-detected | - |
| Asbestos Analyst ID                    | N/A  | N/A | N/A       | MBI          | MBI          | MBI          | MBI          | - |
| Analysis completed                     | N/A  | N/A | N/A       | 31/07/2025   | 31/07/2025   | 31/07/2025   | 31/07/2025   | - |
| Actinolite detected                    | Type | N/A | ISO 17025 | Not-detected | -            | -            | -            | - |
| Amosite detected                       | Type | N/A | ISO 17025 | Not-detected | -            | -            | -            | - |
| Anthophyllite detected                 | Type | N/A | ISO 17025 | Not-detected | -            | -            | -            | - |
| Chrysotile detected                    | Type | N/A | ISO 17025 | Detected     | -            | -            | -            | - |
| Crocidolite detected                   | Type | N/A | ISO 17025 | Detected     | -            | -            | -            | - |
| Tremolite detected                     | Type | N/A | ISO 17025 | Not-detected | -            | -            | -            | - |

|                                     |   |       |           |       |   |   |   |   |
|-------------------------------------|---|-------|-----------|-------|---|---|---|---|
| Asbestos % by hand picking/weighing | % | 0.001 | ISO 17025 | 0.009 | - | - | - | - |
|-------------------------------------|---|-------|-----------|-------|---|---|---|---|

|                                                   |      |     |           |                      |   |   |   |   |
|---------------------------------------------------|------|-----|-----------|----------------------|---|---|---|---|
| Asbestos Containing Material Types Detected (ACM) | Type | N/A | ISO 17025 | Loose Fibrous Debris | - | - | - | - |
|---------------------------------------------------|------|-----|-----------|----------------------|---|---|---|---|

#### General Inorganics

|                                                                         |          |       |        |      |      |      |     |       |
|-------------------------------------------------------------------------|----------|-------|--------|------|------|------|-----|-------|
| pH (L099)                                                               | pH Units | N/A   | MCERTS | 7    | 7    | 8.3  | 6.8 | 6.7   |
| Total Sulphate as SO <sub>4</sub>                                       | %        | 0.005 | MCERTS | -    | -    | -    | -   | 0.027 |
| Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)         | mg/kg    | 2.5   | MCERTS | 30   | 77   | 120  | 48  | 15    |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent) | mg/l     | 1.25  | MCERTS | -    | -    | 59.8 | 24  | 7.28  |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1)                     | mg/l     | 1.25  | MCERTS | 14.9 | 38.5 | -    | -   | -     |
| Total Sulphur                                                           | mg/kg    | 50    | MCERTS | -    | -    | -    | -   | 130   |
| Total Sulphur                                                           | %        | 0.005 | MCERTS | -    | -    | -    | -   | 0.013 |

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|                                         |               |                            |                              |               |               |
|-----------------------------------------|---------------|----------------------------|------------------------------|---------------|---------------|
| Lab Sample Number                       | 628314        | 628315                     | 628316                       | 628317        | 628318        |
| Sample Reference                        | TP116         | TP119                      | TP119                        | TP120         | TP120         |
| Sample Number                           | 2             | 1                          | 2                            | 1             | 2             |
| Water Matrix                            | N/A           | N/A                        | N/A                          | N/A           | N/A           |
| Depth (m)                               | 0.40          | 0.05-0.10                  | 0.60-0.65                    | 0.30-0.35     | 0.80-0.85     |
| Date Sampled                            | 21/07/2025    | 23/07/2025                 | 23/07/2025                   | 21/07/2025    | 21/07/2025    |
| Time Taken                              | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |               |               |

#### 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 | 0.15   | < 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 | 0.41   | < 0.05 | 0.07   | - |
| Pyrene                 | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.41   | < 0.05 | 0.06   | - |
| Benzo(a)anthracene     | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.22   | < 0.05 | < 0.05 | - |
| Chrysene               | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.24   | < 0.05 | < 0.05 | - |
| Benzo(b)fluoranthene   | mg/kg | 0.05 | ISO 17025 | < 0.05 | 0.32   | < 0.05 | < 0.05 | - |
| Benzo(k)fluoranthene   | mg/kg | 0.05 | ISO 17025 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | - |
| Benzo(a)pyrene         | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.31   | < 0.05 | < 0.05 | - |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.16   | < 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 | 0.18   | < 0.05 | < 0.05 | - |

#### Total PAH

|                             |       |     |           |        |      |        |        |   |
|-----------------------------|-------|-----|-----------|--------|------|--------|--------|---|
| Speciated Total EPA-16 PAHs | mg/kg | 0.8 | ISO 17025 | < 0.80 | 2.39 | < 0.80 | < 0.80 | - |
|-----------------------------|-------|-----|-----------|--------|------|--------|--------|---|

#### Heavy Metals / Metalloids

|                                   |       |     |        |       |       |       |       |   |
|-----------------------------------|-------|-----|--------|-------|-------|-------|-------|---|
| Arsenic (aqua regia extractable)  | mg/kg | 1   | MCERTS | 5.7   | 6.6   | 13    | 6.9   | - |
| Cadmium (aqua regia extractable)  | mg/kg | 0.2 | MCERTS | < 0.2 | 0.3   | < 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   | 18    | 18    | 38    | 18    | - |
| Chromium (aqua regia extractable) | mg/kg | 1   | MCERTS | 18    | 18    | 38    | 18    | - |
| Copper (aqua regia extractable)   | mg/kg | 1   | MCERTS | 15    | 22    | 25    | 23    | - |
| Lead (aqua regia extractable)     | mg/kg | 1   | MCERTS | 24    | 52    | 13    | 32    | - |
| 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 | 13    | 11    | 38    | 10    | - |
| Zinc (aqua regia extractable)     | mg/kg | 1   | MCERTS | 53    | 84    | 75    | 83    | - |

#### Petroleum Hydrocarbons

|                                                          |       |      |        |         |         |   |   |   |
|----------------------------------------------------------|-------|------|--------|---------|---------|---|---|---|
| TPHCWG - Aliphatic >EC5 - EC6 <sub>HS_1D_AL</sub>        | mg/kg | 0.01 | MCERTS | < 0.010 | < 0.010 | - | - | - |
| TPHCWG - Aliphatic >EC6 - EC8 <sub>HS_1D_AL</sub>        | mg/kg | 0.01 | MCERTS | < 0.010 | < 0.010 | - | - | - |
| TPHCWG - Aliphatic >EC8 - EC10 <sub>HS_1D_AL</sub>       | mg/kg | 0.01 | MCERTS | < 0.010 | < 0.010 | - | - | - |
| TPHCWG - Aliphatic >EC10 - EC12 <sub>EH_CU_1D_AL</sub>   | mg/kg | 1    | MCERTS | < 1.0   | < 1.0   | - | - | - |
| TPHCWG - Aliphatic >EC12 - EC16 <sub>EH_CU_1D_AL</sub>   | mg/kg | 2    | MCERTS | < 2.0   | < 2.0   | - | - | - |
| TPHCWG - Aliphatic >EC16 - EC21 <sub>EH_CU_1D_AL</sub>   | mg/kg | 8    | MCERTS | < 8.0   | < 8.0   | - | - | - |
| TPHCWG - Aliphatic >EC21 - EC35 <sub>EH_CU_1D_AL</sub>   | mg/kg | 8    | MCERTS | < 8.0   | 8.6     | - | - | - |
| TPHCWG - Aliphatic >EC35 - EC40 <sub>EH_CU_1D_AL</sub>   | mg/kg | 10   | NONE   | < 10    | < 10    | - | - | - |
| TPHCWG - Aliphatic >EC5 - EC40 <sub>EH_CU+HS_1D_AL</sub> | mg/kg | 10   | NONE   | < 10    | < 10    | - | - | - |

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|                                         |       |                            |                              |               |               |               |               |               |
|-----------------------------------------|-------|----------------------------|------------------------------|---------------|---------------|---------------|---------------|---------------|
| Lab Sample Number                       |       |                            |                              | 628314        | 628315        | 628316        | 628317        | 628318        |
| Sample Reference                        |       |                            |                              | TP116         | TP119         | TP119         | TP120         | TP120         |
| Sample Number                           |       |                            |                              | 2             | 1             | 2             | 1             | 2             |
| Water Matrix                            |       |                            |                              | N/A           | N/A           | N/A           | N/A           | N/A           |
| Depth (m)                               |       |                            |                              | 0.40          | 0.05-0.10     | 0.60-0.65     | 0.30-0.35     | 0.80-0.85     |
| Date Sampled                            |       |                            |                              | 21/07/2025    | 23/07/2025    | 23/07/2025    | 21/07/2025    | 21/07/2025    |
| Time Taken                              |       |                            |                              | None Supplied | None Supplied | None Supplied | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Test Limit of<br>detection | Test Accreditation<br>Status |               |               |               |               |               |
|                                         |       |                            |                              |               |               |               |               |               |

|                                              |       |      |        |         |         |   |   |   |
|----------------------------------------------|-------|------|--------|---------|---------|---|---|---|
| TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR        | mg/kg | 0.01 | MCERTS | < 0.010 | < 0.010 | - | - | - |
| TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR        | mg/kg | 0.01 | MCERTS | < 0.010 | < 0.010 | - | - | - |
| TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR       | mg/kg | 0.02 | MCERTS | < 0.020 | < 0.020 | - | - | - |
| TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR   | mg/kg | 1    | MCERTS | < 1.0   | < 1.0   | - | - | - |
| TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR   | mg/kg | 2    | MCERTS | < 2.0   | < 2.0   | - | - | - |
| TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR   | mg/kg | 10   | MCERTS | < 10    | < 10    | - | - | - |
| TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR   | mg/kg | 10   | MCERTS | < 10    | 25      | - | - | - |
| TPHCWG - Aromatic >EC35 - EC40 EH_CU_1D_AR   | mg/kg | 10   | NONE   | < 10    | < 10    | - | - | - |
| TPHCWG - Aromatic >EC5 - EC40 EH_CU+HS_1D_AR | mg/kg | 10   | NONE   | < 10    | 25      | - | - | - |

|                                         |       |    |      |      |    |   |   |   |
|-----------------------------------------|-------|----|------|------|----|---|---|---|
| TPH Total >EC5 - EC40 EH_CU+HS_1D_TOTAL | mg/kg | 10 | NONE | < 10 | 34 | - | - | - |
|-----------------------------------------|-------|----|------|------|----|---|---|---|

|                                  |       |    |        |   |   |      |    |   |
|----------------------------------|-------|----|--------|---|---|------|----|---|
| TPH (EC10 - EC40) EH_CU_1D_TOTAL | mg/kg | 10 | MCERTS | - | - | < 10 | 15 | - |
|----------------------------------|-------|----|--------|---|---|------|----|---|

#### VOCs

|                                    |       |   |        |       |       |   |   |   |
|------------------------------------|-------|---|--------|-------|-------|---|---|---|
| MTBE (Methyl Tertiary Butyl Ether) | µg/kg | 5 | MCERTS | < 5.0 | < 5.0 | - | - | - |
| Benzene                            | µg/kg | 5 | MCERTS | < 5.0 | < 5.0 | - | - | - |
| Toluene                            | µg/kg | 5 | MCERTS | < 5.0 | < 5.0 | - | - | - |
| Ethylbenzene                       | µg/kg | 5 | MCERTS | < 5.0 | < 5.0 | - | - | - |
| p & m-Xylene                       | µg/kg | 8 | MCERTS | < 8.0 | < 8.0 | - | - | - |
| o-Xylene                           | µg/kg | 5 | MCERTS | < 5.0 | < 5.0 | - | - | - |

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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|                                         |               |                            |                              |               |               |
|-----------------------------------------|---------------|----------------------------|------------------------------|---------------|---------------|
| Lab Sample Number                       | 628319        | 628320                     | 628321                       | 628397        | 628398        |
| Sample Reference                        | TP121         | TP122                      | TP122                        | TP101         | TP102         |
| Sample Number                           | 1             | 1                          | 2                            | 1             | 2             |
| Water Matrix                            | N/A           | N/A                        | N/A                          | N/A           | N/A           |
| Depth (m)                               | 0.05-0.10     | 0.30-0.35                  | 0.90-0.95                    | 0.10-0.15     | 0.30-0.35     |
| Date Sampled                            | 23/07/2025    | 21/07/2025                 | 21/07/2025                   | 25/07/2025    | 25/07/2025    |
| Time Taken                              | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |               |               |

|                               |    |      |      |       |       |       |       |      |
|-------------------------------|----|------|------|-------|-------|-------|-------|------|
| Stone Content                 | %  | 0.1  | NONE | < 0.1 | < 0.1 | < 0.1 | < 0.1 | 32.5 |
| Moisture Content              | %  | 0.01 | NONE | 11    | 7.4   | 7.7   | 9.8   | 8.5  |
| Total mass of sample received | kg | 0.1  | NONE | 0.6   | 0.8   | 0.5   | 0.6   | 0.7  |

#### Asbestos

|                                        |      |     |           |              |              |              |              |              |
|----------------------------------------|------|-----|-----------|--------------|--------------|--------------|--------------|--------------|
| Asbestos in Soil Detected/Not Detected | Type | N/A | ISO 17025 | Not-detected | Not-detected | Not-detected | Not-detected | Not-detected |
| Asbestos Analyst ID                    | N/A  | N/A | N/A       | MBI          | KKR          | KKR          | KKR          | KKR          |
| Analysis completed                     | N/A  | N/A | N/A       | 31/07/2025   | 31/07/2025   | 31/07/2025   | 31/07/2025   | 31/07/2025   |
| Actinolite detected                    | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Amosite detected                       | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Anthophyllite detected                 | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Chrysotile detected                    | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Crocidolite detected                   | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Tremolite detected                     | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |

|                                     |   |       |           |   |   |   |   |   |
|-------------------------------------|---|-------|-----------|---|---|---|---|---|
| Asbestos % by hand picking/weighing | % | 0.001 | ISO 17025 | - | - | - | - | - |
|-------------------------------------|---|-------|-----------|---|---|---|---|---|

|                                                   |      |     |           |   |   |   |   |   |
|---------------------------------------------------|------|-----|-----------|---|---|---|---|---|
| Asbestos Containing Material Types Detected (ACM) | Type | N/A | ISO 17025 | - | - | - | - | - |
|---------------------------------------------------|------|-----|-----------|---|---|---|---|---|

#### General Inorganics

|                                                                         |          |       |        |      |     |       |      |      |
|-------------------------------------------------------------------------|----------|-------|--------|------|-----|-------|------|------|
| pH (L099)                                                               | pH Units | N/A   | MCERTS | 6.9  | 6.2 | 6.8   | 6.8  | 7.5  |
| Total Sulphate as SO <sub>4</sub>                                       | %        | 0.005 | MCERTS | -    | -   | 0.025 | -    | -    |
| Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)         | mg/kg    | 2.5   | MCERTS | 31   | 22  | 29    | 47   | 22   |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent) | mg/l     | 1.25  | MCERTS | -    | 11  | 14.4  | -    | 11.1 |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1)                     | mg/l     | 1.25  | MCERTS | 15.6 | -   | 14.4  | 23.4 | -    |
| Total Sulphur                                                           | mg/kg    | 50    | MCERTS | -    | -   | 160   | -    | -    |
| Total Sulphur                                                           | %        | 0.005 | MCERTS | -    | -   | 0.016 | -    | -    |

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|                                         |               |                            |                              |               |               |
|-----------------------------------------|---------------|----------------------------|------------------------------|---------------|---------------|
| Lab Sample Number                       | 628319        | 628320                     | 628321                       | 628397        | 628398        |
| Sample Reference                        | TP121         | TP122                      | TP122                        | TP101         | TP102         |
| Sample Number                           | 1             | 1                          | 2                            | 1             | 2             |
| Water Matrix                            | N/A           | N/A                        | N/A                          | N/A           | N/A           |
| Depth (m)                               | 0.05-0.10     | 0.30-0.35                  | 0.90-0.95                    | 0.10-0.15     | 0.30-0.35     |
| Date Sampled                            | 23/07/2025    | 21/07/2025                 | 21/07/2025                   | 25/07/2025    | 25/07/2025    |
| Time Taken                              | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |               |               |

#### 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 | 0.18   | < 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    | 0.07   | 0.29   | < 0.05 | 0.07   | < 0.05 |
| Pyrene                 | mg/kg | 0.05 | MCERTS    | 0.06   | 0.24   | < 0.05 | 0.06   | < 0.05 |
| Benzo(a)anthracene     | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.11   | < 0.05 | < 0.05 | < 0.05 |
| Chrysene               | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.12   | < 0.05 | < 0.05 | < 0.05 |
| Benzo(b)fluoranthene   | mg/kg | 0.05 | ISO 17025 | < 0.05 | 0.15   | < 0.05 | < 0.05 | < 0.05 |
| Benzo(k)fluoranthene   | mg/kg | 0.05 | ISO 17025 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | < 0.05 |
| Benzo(a)pyrene         | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.14   | < 0.05 | < 0.05 | < 0.05 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.07   | < 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 | 0.07   | < 0.05 | < 0.05 | < 0.05 |

#### Total PAH

|                             |       |     |           |        |      |        |        |        |
|-----------------------------|-------|-----|-----------|--------|------|--------|--------|--------|
| Speciated Total EPA-16 PAHs | mg/kg | 0.8 | ISO 17025 | < 0.80 | 1.37 | < 0.80 | < 0.80 | < 0.80 |
|-----------------------------|-------|-----|-----------|--------|------|--------|--------|--------|

#### Heavy Metals / Metalloids

|                                   |       |     |        |       |       |       |       |       |
|-----------------------------------|-------|-----|--------|-------|-------|-------|-------|-------|
| Arsenic (aqua regia extractable)  | mg/kg | 1   | MCERTS | 6.7   | 6.7   | 6.7   | 6.1   | 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 | < 1.8 | < 1.8 | < 1.8 | < 1.8 | < 1.8 |
| Chromium (III)                    | mg/kg | 1   | NONE   | 20    | 16    | 20    | 20    | 29    |
| Chromium (aqua regia extractable) | mg/kg | 1   | MCERTS | 20    | 16    | 20    | 20    | 29    |
| Copper (aqua regia extractable)   | mg/kg | 1   | MCERTS | 17    | 23    | 20    | 17    | 13    |
| Lead (aqua regia extractable)     | mg/kg | 1   | MCERTS | 36    | 42    | 19    | 27    | 10    |
| 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 | 11    | 11    | 12    | 11    | 16    |
| Zinc (aqua regia extractable)     | mg/kg | 1   | MCERTS | 60    | 71    | 48    | 70    | 39    |

#### Petroleum Hydrocarbons

|                                                          |       |      |        |         |   |         |         |   |
|----------------------------------------------------------|-------|------|--------|---------|---|---------|---------|---|
| TPHCWG - Aliphatic >EC5 - EC6 <sub>HS_1D_AL</sub>        | mg/kg | 0.01 | MCERTS | < 0.010 | - | < 0.010 | < 0.010 | - |
| TPHCWG - Aliphatic >EC6 - EC8 <sub>HS_1D_AL</sub>        | mg/kg | 0.01 | MCERTS | < 0.010 | - | < 0.010 | < 0.010 | - |
| TPHCWG - Aliphatic >EC8 - EC10 <sub>HS_1D_AL</sub>       | mg/kg | 0.01 | MCERTS | < 0.010 | - | < 0.010 | < 0.010 | - |
| TPHCWG - Aliphatic >EC10 - EC12 <sub>EH_CU_1D_AL</sub>   | mg/kg | 1    | MCERTS | < 1.0   | - | < 1.0   | < 1.0   | - |
| TPHCWG - Aliphatic >EC12 - EC16 <sub>EH_CU_1D_AL</sub>   | mg/kg | 2    | MCERTS | < 2.0   | - | < 2.0   | < 2.0   | - |
| TPHCWG - Aliphatic >EC16 - EC21 <sub>EH_CU_1D_AL</sub>   | mg/kg | 8    | MCERTS | < 8.0   | - | < 8.0   | < 8.0   | - |
| TPHCWG - Aliphatic >EC21 - EC35 <sub>EH_CU_1D_AL</sub>   | mg/kg | 8    | MCERTS | 8.2     | - | < 8.0   | < 8.0   | - |
| TPHCWG - Aliphatic >EC35 - EC40 <sub>EH_CU_1D_AL</sub>   | mg/kg | 10   | NONE   | < 10    | - | < 10    | < 10    | - |
| TPHCWG - Aliphatic >EC5 - EC40 <sub>EH_CU+HS_1D_AL</sub> | mg/kg | 10   | NONE   | < 10    | - | < 10    | < 10    | - |

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|                                         |               |                            |                              |               |               |
|-----------------------------------------|---------------|----------------------------|------------------------------|---------------|---------------|
| Lab Sample Number                       | 628319        | 628320                     | 628321                       | 628397        | 628398        |
| Sample Reference                        | TP121         | TP122                      | TP122                        | TP101         | TP102         |
| Sample Number                           | 1             | 1                          | 2                            | 1             | 2             |
| Water Matrix                            | N/A           | N/A                        | N/A                          | N/A           | N/A           |
| Depth (m)                               | 0.05-0.10     | 0.30-0.35                  | 0.90-0.95                    | 0.10-0.15     | 0.30-0.35     |
| Date Sampled                            | 23/07/2025    | 21/07/2025                 | 21/07/2025                   | 25/07/2025    | 25/07/2025    |
| Time Taken                              | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |               |               |

|                                              |       |      |        |         |   |         |         |   |
|----------------------------------------------|-------|------|--------|---------|---|---------|---------|---|
| TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR        | mg/kg | 0.01 | MCERTS | < 0.010 | - | < 0.010 | < 0.010 | - |
| TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR        | mg/kg | 0.01 | MCERTS | < 0.010 | - | < 0.010 | < 0.010 | - |
| TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR       | mg/kg | 0.02 | MCERTS | < 0.020 | - | < 0.020 | < 0.020 | - |
| TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR   | mg/kg | 1    | MCERTS | < 1.0   | - | < 1.0   | < 1.0   | - |
| TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR   | mg/kg | 2    | MCERTS | < 2.0   | - | < 2.0   | < 2.0   | - |
| TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR   | mg/kg | 10   | MCERTS | < 10    | - | < 10    | < 10    | - |
| TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR   | mg/kg | 10   | MCERTS | 16      | - | < 10    | 11      | - |
| TPHCWG - Aromatic >EC35 - EC40 EH_CU_1D_AR   | mg/kg | 10   | NONE   | < 10    | - | < 10    | < 10    | - |
| TPHCWG - Aromatic >EC5 - EC40 EH_CU+HS_1D_AR | mg/kg | 10   | NONE   | 16      | - | < 10    | 11      | - |

|                                         |       |    |      |    |   |      |    |   |
|-----------------------------------------|-------|----|------|----|---|------|----|---|
| TPH Total >EC5 - EC40 EH_CU+HS_1D_TOTAL | mg/kg | 10 | NONE | 24 | - | < 10 | 11 | - |
|-----------------------------------------|-------|----|------|----|---|------|----|---|

|                                  |       |    |        |   |    |   |   |      |
|----------------------------------|-------|----|--------|---|----|---|---|------|
| TPH (EC10 - EC40) EH_CU_1D_TOTAL | mg/kg | 10 | MCERTS | - | 15 | - | - | < 10 |
|----------------------------------|-------|----|--------|---|----|---|---|------|

#### VOCs

|                                    |       |   |        |       |   |       |       |   |
|------------------------------------|-------|---|--------|-------|---|-------|-------|---|
| MTBE (Methyl Tertiary Butyl Ether) | 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 | 8 | MCERTS | < 8.0 | - | < 8.0 | < 8.0 | - |
| o-Xylene                           | µg/kg | 5 | MCERTS | < 5.0 | - | < 5.0 | < 5.0 | - |

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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|                                         |               |                            |                              |               |               |
|-----------------------------------------|---------------|----------------------------|------------------------------|---------------|---------------|
| Lab Sample Number                       | 628399        | 628400                     | 628401                       | 628402        | 628403        |
| Sample Reference                        | TP103         | TP104                      | TP105                        | TP106         | TP108         |
| Sample Number                           | 2             | 1                          | 1                            | 2             | 1             |
| Water Matrix                            | N/A           | N/A                        | N/A                          | N/A           | N/A           |
| Depth (m)                               | 0.30-0.35     | 0.10-0.15                  | 0.20-0.25                    | 0.30-0.35     | 0.10-0.15     |
| Date Sampled                            | 25/07/2025    | 24/07/2025                 | 24/07/2025                   | 24/07/2025    | 24/07/2025    |
| Time Taken                              | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |               |               |

|                               |    |      |      |      |     |       |       |       |
|-------------------------------|----|------|------|------|-----|-------|-------|-------|
| Stone Content                 | %  | 0.1  | NONE | 22.6 | 33  | < 0.1 | < 0.1 | < 0.1 |
| Moisture Content              | %  | 0.01 | NONE | 7.4  | 5.4 | 5.1   | 7.5   | 8.7   |
| Total mass of sample received | kg | 0.1  | NONE | 0.6  | 0.6 | 0.6   | 0.6   | 0.6   |

#### Asbestos

|                                        |      |     |           |              |              |              |              |              |
|----------------------------------------|------|-----|-----------|--------------|--------------|--------------|--------------|--------------|
| Asbestos in Soil Detected/Not Detected | Type | N/A | ISO 17025 | Not-detected | Not-detected | Not-detected | Not-detected | Not-detected |
| Asbestos Analyst ID                    | N/A  | N/A | N/A       | KKR          | KKR          | KKR          | KKR          | KKR          |
| Analysis completed                     | N/A  | N/A | N/A       | 31/07/2025   | 31/07/2025   | 31/07/2025   | 31/07/2025   | 31/07/2025   |
| Actinolite detected                    | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Amosite detected                       | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Anthophyllite detected                 | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Chrysotile detected                    | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Crocidolite detected                   | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |
| Tremolite detected                     | Type | N/A | ISO 17025 | -            | -            | -            | -            | -            |

|                                     |   |       |           |   |   |   |   |   |
|-------------------------------------|---|-------|-----------|---|---|---|---|---|
| Asbestos % by hand picking/weighing | % | 0.001 | ISO 17025 | - | - | - | - | - |
|-------------------------------------|---|-------|-----------|---|---|---|---|---|

|                                                   |      |     |           |   |   |   |   |   |
|---------------------------------------------------|------|-----|-----------|---|---|---|---|---|
| Asbestos Containing Material Types Detected (ACM) | Type | N/A | ISO 17025 | - | - | - | - | - |
|---------------------------------------------------|------|-----|-----------|---|---|---|---|---|

#### General Inorganics

|                                                                         |          |       |        |      |      |      |     |      |
|-------------------------------------------------------------------------|----------|-------|--------|------|------|------|-----|------|
| pH (L099)                                                               | pH Units | N/A   | MCERTS | 7.6  | 7.6  | 7.3  | 7.9 | 8.2  |
| Total Sulphate as SO <sub>4</sub>                                       | %        | 0.005 | MCERTS | -    | -    | -    | -   | -    |
| Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)         | mg/kg    | 2.5   | MCERTS | 18   | 25   | 22   | 20  | 15   |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent) | mg/l     | 1.25  | MCERTS | -    | -    | 10.8 | 9.8 | 7.41 |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1)                     | mg/l     | 1.25  | MCERTS | 9.16 | 12.5 | -    | -   | -    |
| Total Sulphur                                                           | mg/kg    | 50    | MCERTS | -    | -    | -    | -   | -    |
| Total Sulphur                                                           | %        | 0.005 | MCERTS | -    | -    | -    | -   | -    |

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|                                         |               |                            |                              |               |               |
|-----------------------------------------|---------------|----------------------------|------------------------------|---------------|---------------|
| Lab Sample Number                       | 628399        | 628400                     | 628401                       | 628402        | 628403        |
| Sample Reference                        | TP103         | TP104                      | TP105                        | TP106         | TP108         |
| Sample Number                           | 2             | 1                          | 1                            | 2             | 1             |
| Water Matrix                            | N/A           | N/A                        | N/A                          | N/A           | N/A           |
| Depth (m)                               | 0.30-0.35     | 0.10-0.15                  | 0.20-0.25                    | 0.30-0.35     | 0.10-0.15     |
| Date Sampled                            | 25/07/2025    | 24/07/2025                 | 24/07/2025                   | 24/07/2025    | 24/07/2025    |
| Time Taken                              | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |               |               |

#### 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 | < 0.05 | < 0.05 | < 0.05 |
| Benzo(k)fluoranthene   | mg/kg | 0.05 | ISO 17025 | < 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 | ISO 17025 | < 0.80 | < 0.80 | < 0.80 | < 0.80 | < 0.80 |
|-----------------------------|-------|-----|-----------|--------|--------|--------|--------|--------|

#### Heavy Metals / Metalloids

|                                   |       |     |        |       |       |       |       |       |
|-----------------------------------|-------|-----|--------|-------|-------|-------|-------|-------|
| Arsenic (aqua regia extractable)  | mg/kg | 1   | MCERTS | 5.7   | 8.4   | 7.9   | 8.9   | 9.5   |
| Cadmium (aqua regia extractable)  | mg/kg | 0.2 | MCERTS | < 0.2 | < 0.2 | 0.3   | < 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   | 25    | 18    | 21    | 25    | 26    |
| Chromium (aqua regia extractable) | mg/kg | 1   | MCERTS | 25    | 18    | 21    | 25    | 26    |
| Copper (aqua regia extractable)   | mg/kg | 1   | MCERTS | 12    | 12    | 15    | 12    | 14    |
| Lead (aqua regia extractable)     | mg/kg | 1   | MCERTS | 13    | 24    | 37    | 13    | 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 | 14    | 9.5   | 10    | 13    | 11    |
| Zinc (aqua regia extractable)     | mg/kg | 1   | MCERTS | 40    | 49    | 93    | 33    | 32    |

#### Petroleum Hydrocarbons

|                                                          |       |      |        |         |         |   |   |   |
|----------------------------------------------------------|-------|------|--------|---------|---------|---|---|---|
| TPHCWG - Aliphatic >EC5 - EC6 <sub>HS_1D_AL</sub>        | mg/kg | 0.01 | MCERTS | < 0.010 | < 0.010 | - | - | - |
| TPHCWG - Aliphatic >EC6 - EC8 <sub>HS_1D_AL</sub>        | mg/kg | 0.01 | MCERTS | < 0.010 | < 0.010 | - | - | - |
| TPHCWG - Aliphatic >EC8 - EC10 <sub>HS_1D_AL</sub>       | mg/kg | 0.01 | MCERTS | < 0.010 | < 0.010 | - | - | - |
| TPHCWG - Aliphatic >EC10 - EC12 <sub>EH_CU_1D_AL</sub>   | mg/kg | 1    | MCERTS | < 1.0   | < 1.0   | - | - | - |
| TPHCWG - Aliphatic >EC12 - EC16 <sub>EH_CU_1D_AL</sub>   | mg/kg | 2    | MCERTS | < 2.0   | < 2.0   | - | - | - |
| TPHCWG - Aliphatic >EC16 - EC21 <sub>EH_CU_1D_AL</sub>   | mg/kg | 8    | MCERTS | < 8.0   | < 8.0   | - | - | - |
| TPHCWG - Aliphatic >EC21 - EC35 <sub>EH_CU_1D_AL</sub>   | mg/kg | 8    | MCERTS | < 8.0   | < 8.0   | - | - | - |
| TPHCWG - Aliphatic >EC35 - EC40 <sub>EH_CU_1D_AL</sub>   | mg/kg | 10   | NONE   | < 10    | < 10    | - | - | - |
| TPHCWG - Aliphatic >EC5 - EC40 <sub>EH_CU+HS_1D_AL</sub> | mg/kg | 10   | NONE   | < 10    | < 10    | - | - | - |

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|                                         |  |  |  |               |                            |                              |               |               |
|-----------------------------------------|--|--|--|---------------|----------------------------|------------------------------|---------------|---------------|
| Lab Sample Number                       |  |  |  | 628399        | 628400                     | 628401                       | 628402        | 628403        |
| Sample Reference                        |  |  |  | TP103         | TP104                      | TP105                        | TP106         | TP108         |
| Sample Number                           |  |  |  | 2             | 1                          | 1                            | 2             | 1             |
| Water Matrix                            |  |  |  | N/A           | N/A                        | N/A                          | N/A           | N/A           |
| Depth (m)                               |  |  |  | 0.30-0.35     | 0.10-0.15                  | 0.20-0.25                    | 0.30-0.35     | 0.10-0.15     |
| Date Sampled                            |  |  |  | 25/07/2025    | 24/07/2025                 | 24/07/2025                   | 24/07/2025    | 24/07/2025    |
| Time Taken                              |  |  |  | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) |  |  |  | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |               |               |

|                                              |       |      |        |         |         |   |   |   |
|----------------------------------------------|-------|------|--------|---------|---------|---|---|---|
| TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR        | mg/kg | 0.01 | MCERTS | < 0.010 | < 0.010 | - | - | - |
| TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR        | mg/kg | 0.01 | MCERTS | < 0.010 | < 0.010 | - | - | - |
| TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR       | mg/kg | 0.02 | MCERTS | < 0.020 | < 0.020 | - | - | - |
| TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR   | mg/kg | 1    | MCERTS | < 1.0   | < 1.0   | - | - | - |
| TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR   | mg/kg | 2    | MCERTS | < 2.0   | < 2.0   | - | - | - |
| TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR   | mg/kg | 10   | MCERTS | < 10    | < 10    | - | - | - |
| TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR   | mg/kg | 10   | MCERTS | < 10    | < 10    | - | - | - |
| TPHCWG - Aromatic >EC35 - EC40 EH_CU_1D_AR   | mg/kg | 10   | NONE   | < 10    | < 10    | - | - | - |
| TPHCWG - Aromatic >EC5 - EC40 EH_CU+HS_1D_AR | mg/kg | 10   | NONE   | < 10    | < 10    | - | - | - |

|                                         |       |    |      |      |      |   |   |   |
|-----------------------------------------|-------|----|------|------|------|---|---|---|
| TPH Total >EC5 - EC40 EH_CU+HS_1D_TOTAL | mg/kg | 10 | NONE | < 10 | < 10 | - | - | - |
|-----------------------------------------|-------|----|------|------|------|---|---|---|

|                                  |       |    |        |   |   |    |      |      |
|----------------------------------|-------|----|--------|---|---|----|------|------|
| TPH (EC10 - EC40) EH_CU_1D_TOTAL | mg/kg | 10 | MCERTS | - | - | 15 | < 10 | < 10 |
|----------------------------------|-------|----|--------|---|---|----|------|------|

#### VOCs

|                                    |       |   |        |       |       |   |   |   |
|------------------------------------|-------|---|--------|-------|-------|---|---|---|
| MTBE (Methyl Tertiary Butyl Ether) | µg/kg | 5 | MCERTS | < 5.0 | < 5.0 | - | - | - |
| Benzene                            | µg/kg | 5 | MCERTS | < 5.0 | < 5.0 | - | - | - |
| Toluene                            | µg/kg | 5 | MCERTS | < 5.0 | < 5.0 | - | - | - |
| Ethylbenzene                       | µg/kg | 5 | MCERTS | < 5.0 | < 5.0 | - | - | - |
| p & m-Xylene                       | µg/kg | 8 | MCERTS | < 8.0 | < 8.0 | - | - | - |
| o-Xylene                           | µg/kg | 5 | MCERTS | < 5.0 | < 5.0 | - | - | - |

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



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## Certificate of Analysis - Asbestos Quantification

### Methods:

#### Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

#### Quantitative Analysis

The analysis was carried out using our documented in-house method A006 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

| Sample Number | Sample ID | Sample Depth (m) | Sample Weight (g) | Asbestos Containing Material Types Detected (ACM) | PLM Results              | Asbestos by hand picking/weighing (%) | Total % Asbestos in Sample | Analysis completed | Analyst ID |
|---------------|-----------|------------------|-------------------|---------------------------------------------------|--------------------------|---------------------------------------|----------------------------|--------------------|------------|
| 628314        | TP116     | 0.40-            | 138               | Loose Fibrous Debris                              | Chrysotile & Crocidolite | 0.009                                 | 0.009                      | 21/08/2025         | SSZ        |

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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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 *                                 |
|-------------------|------------------|---------------|-----------|------------------------------------------------------|
| 628309            | TP109            | 1             | 0.10-0.15 | Brown sandy loam with gravel and vegetation          |
| 628310            | TP110            | 1             | 0.05-0.10 | Brown clay and loam with gravel and vegetation       |
| 628311            | TP112            | 2             | 0.40-0.45 | Brown clay and loam with gravel and vegetation       |
| 628312            | TP113            | 2             | 0.40-0.45 | Brown clay and loam with gravel and vegetation       |
| 628313            | TP115            | 1             | 0.10-0.15 | Brown sandy loam with gravel and vegetation          |
| 628314            | TP116            | 2             | 0.4       | Brown sandy loam with gravel and vegetation          |
| 628315            | TP119            | 1             | 0.05-0.10 | Brown sandy loam with gravel and vegetation          |
| 628316            | TP119            | 2             | 0.60-0.65 | Brown clay and sand with gravel and vegetation       |
| 628317            | TP120            | 1             | 0.30-0.35 | Brown sandy loam with gravel and vegetation          |
| 628318            | TP120            | 2             | 0.80-0.85 | Light brown sand with gravel and vegetation          |
| 628319            | TP121            | 1             | 0.05-0.10 | Brown clay and loam with gravel and vegetation       |
| 628320            | TP122            | 1             | 0.30-0.35 | Brown clay and loam with gravel and vegetation       |
| 628321            | TP122            | 2             | 0.90-0.95 | Brown sandy loam with gravel and vegetation          |
| 628397            | TP101            | 1             | 0.10-0.15 | Brown loam with gravel and vegetation                |
| 628398            | TP102            | 2             | 0.30-0.35 | Brown clay and sand with gravel and vegetation       |
| 628399            | TP103            | 2             | 0.30-0.35 | Brown clay and loam with gravel and vegetation       |
| 628400            | TP104            | 1             | 0.10-0.15 | Brown sandy loam with gravel and vegetation          |
| 628401            | TP105            | 1             | 0.20-0.25 | Brown sandy loam with gravel and vegetation          |
| 628402            | TP106            | 2             | 0.30-0.35 | Light brown clay and loam with gravel and vegetation |
| 628403            | TP108            | 1             | 0.10-0.15 | Light brown clay and loam with gravel and vegetation |

**Analytical Report Number : 25-039915**

**Project / Site name: Markfield**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)**

**Final Sewage Effluent (FSE) Landfill Leachate (LL)**

| Analytical Test Name                                                                       | Analytical Method Description                                                                                                          | Analytical Method Reference                                                         | Method number | Wet / Dry Analysis | Accreditation Status |
|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------|--------------------|----------------------|
| 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, 2021                                              | A001B         | D                  | ISO 17025            |
| Moisture Content                                                                           | Moisture content, determined gravimetrically (up to 30°C)                                                                              | In-house method                                                                     | L019B         | 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.          | L019B         | D                  | 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 | L038B         | D                  | MCERTS               |
| Sulphate, water soluble, in soil (16hr extraction)                                         | Sulphate, water soluble, in soil (16hr extraction)                                                                                     | In-house method                                                                     | L038B         | D                  | MCERTS               |
| Speciated PAHs and/or Semi-volatile organic compounds in soil                              | Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS | In-house method based on USEPA 8270                                                 | L064B         | D                  | MCERTS               |
| TPH Chromatogram in soil                                                                   | TPH Chromatogram in soil                                                                                                               | In-house method                                                                     | L064B         | D                  | NONE                 |
| Total petroleum hydrocarbons by GC-FID in soil                                             | Determination of total petroleum hydrocarbons in soil by GC-FID                                                                        | In-house method                                                                     | L076B         | D                  | MCERTS               |
| Chromium III in soil                                                                       | In-house method by calculation from total Cr and Cr VI                                                                                 | In-house method by calculation                                                      | L080-PL/L130B | W                  | NONE                 |
| 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               |
| 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               |
| Soil Descriptions                                                                          | Textural classification                                                                                                                | In-house method                                                                     | L019B         | W                  | NONE                 |
| BTEX and/or Volatile organic compounds in soil                                             | Determination of volatile organic compounds in soil by headspace GC-MS                                                                 | In-house method based on USEPA 8260                                                 | L073B         | W                  | MCERTS               |
| Total petroleum hydrocarbons with carbon banding by GC-FID in soil                         | Determination of total petroleum hydrocarbons in soil by GC-FID with carbon banding aliphatic and aromatic                             | In-house method                                                                     | L076B         | D                  | MCERTS               |
| Total petroleum hydrocarbons with carbon banding by HS-GC/MS in soil                       | Determination of total petroleum hydrocarbons in soil by HS-GC/MS with carbon banding aliphatic and aromatic                           | In-house method                                                                     | L088-PL       | W                  | MCERTS               |
| Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil (Summed Bands) | Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic (Summed Bands).    | Calculation                                                                         | L076B/L088-PL | D/W                | NONE                 |

**Analytical Report Number : 25-039915**

**Project / Site name: Markfield**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)**

**Final Sewage Effluent (FSE) Landfill Leachate (LL)**

| Analytical Test Name                        | Analytical Method Description                                                                                       | Analytical Method Reference                                                    | Method number | Wet / Dry Analysis | Accreditation Status |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------|--------------------|----------------------|
| Asbestos Quantification - Gravimetric       | Asbestos quantification by gravimetric method - in house method based on references                                 | HSE Report No: 83/1996, HSG 248 (2021), HSG 264 (2012) & SCA Blue Book (draft) | A006B         | D                  | ISO 17025            |
| Total sulphate (as SO <sub>4</sub> in soil) | Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES                              | In-house method                                                                | L038B         | D                  | MCERTS               |
| 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                                                                | L038B         | 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.**

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution

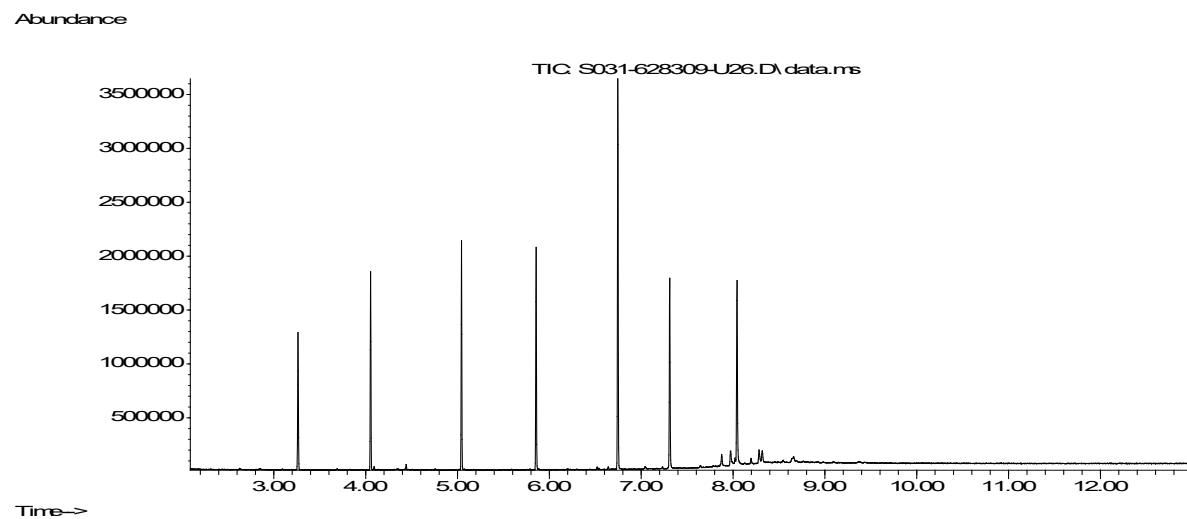
**Analytical Report Number : 25-039915**

**Project / Site name: Markfield**

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.

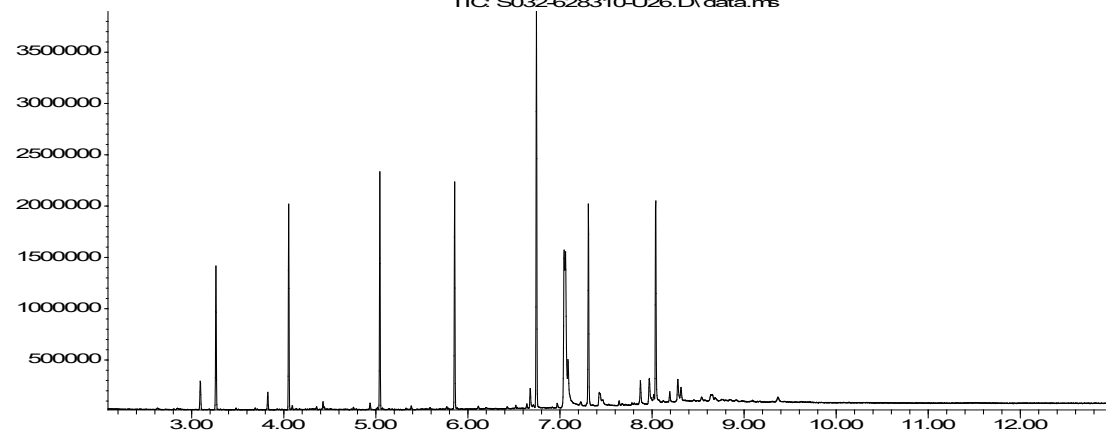
Key: a - No sampling date b - Incorrect container/Insufficient material provided c - Holding time d - Headspace e - Temperature

| Sample ID | Other ID | Sample Type | Lab Sample Number | Sample Deviation | Test Name                                      | Test Ref | Test Deviation |
|-----------|----------|-------------|-------------------|------------------|------------------------------------------------|----------|----------------|
| TP116     | 2        | S           | 628314            | b                | Asbestos Quantification - Gravimetric          | A006B    | b              |
| TP116     | 2        | S           | 628314            | b                | Asbestos identification in Soil                | A001B    | b              |
| TP122     | 2        | S           | 628321            | b                | BTEX and/or Volatile organic compounds in soil | L073B    | b              |

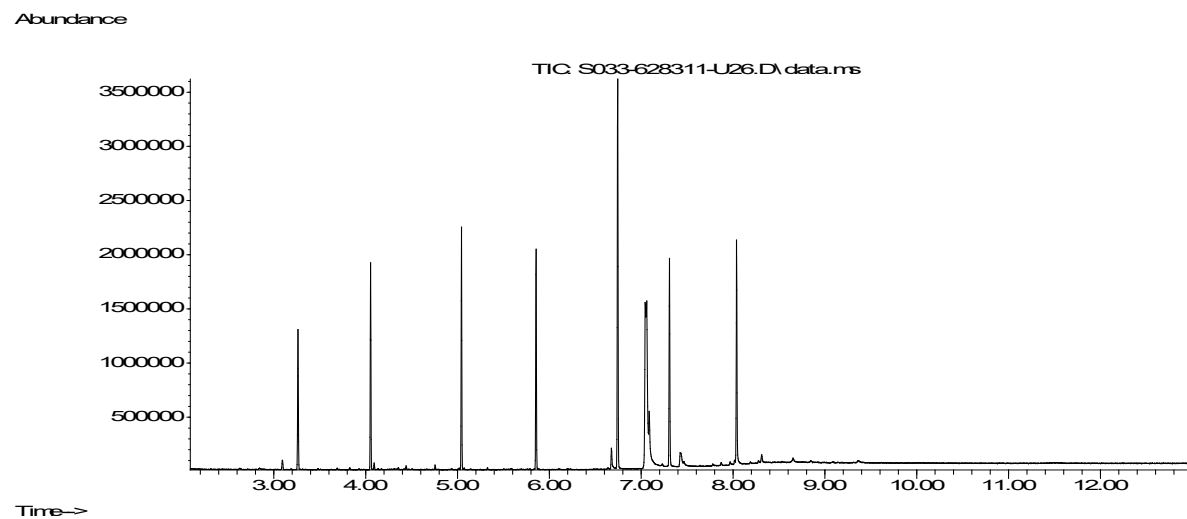


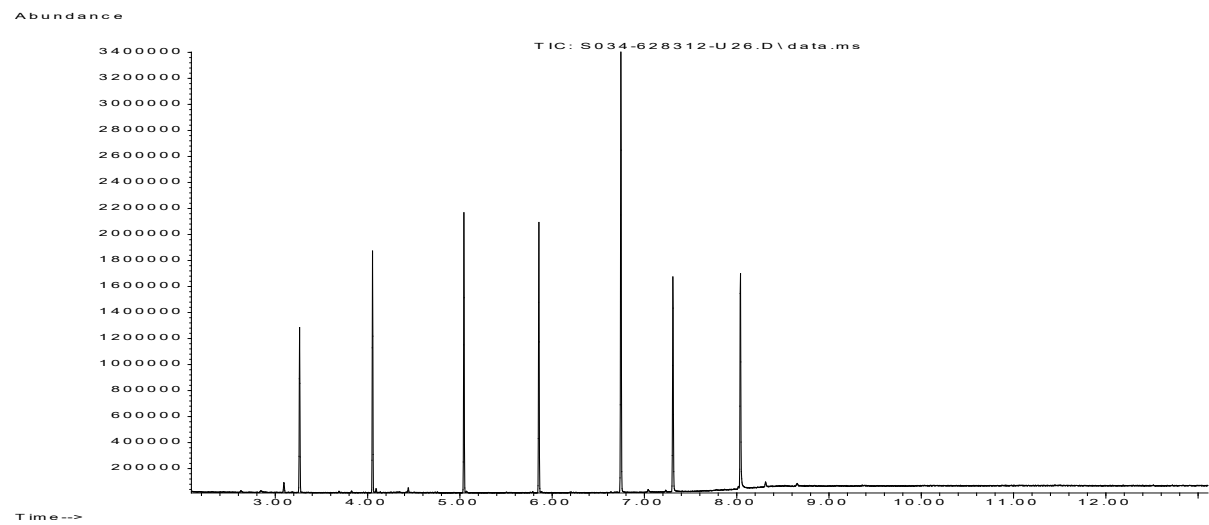
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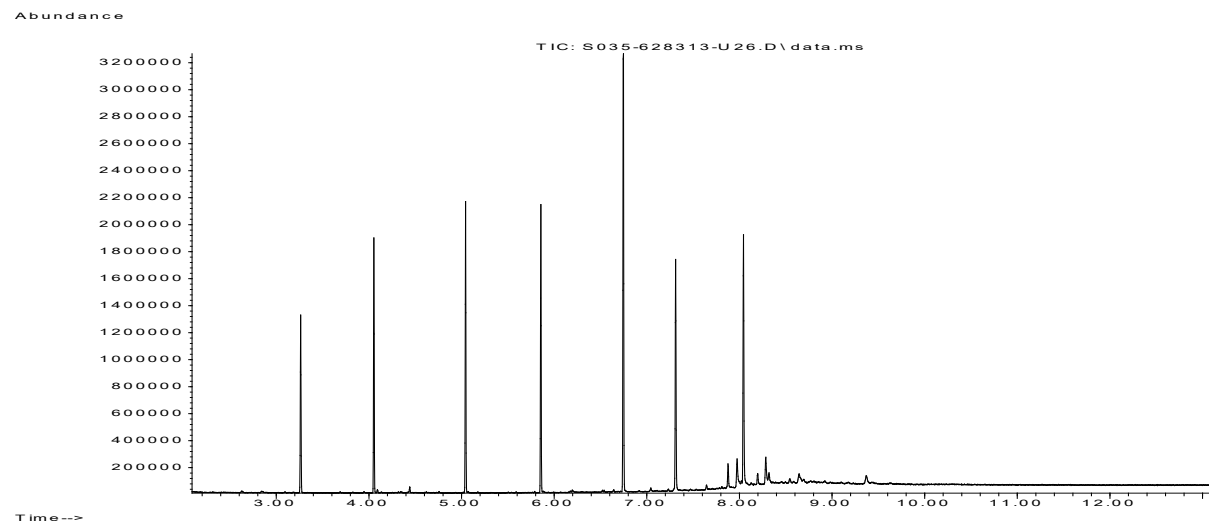
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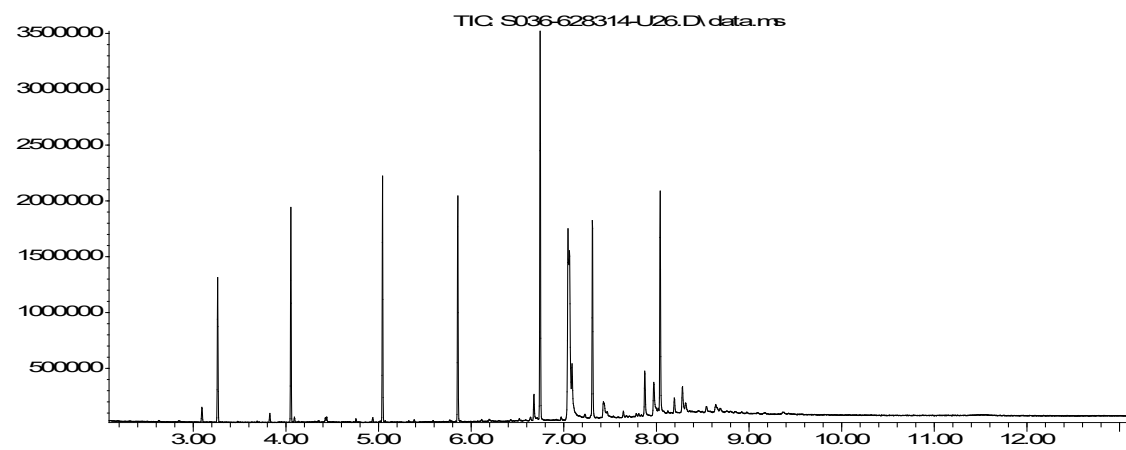
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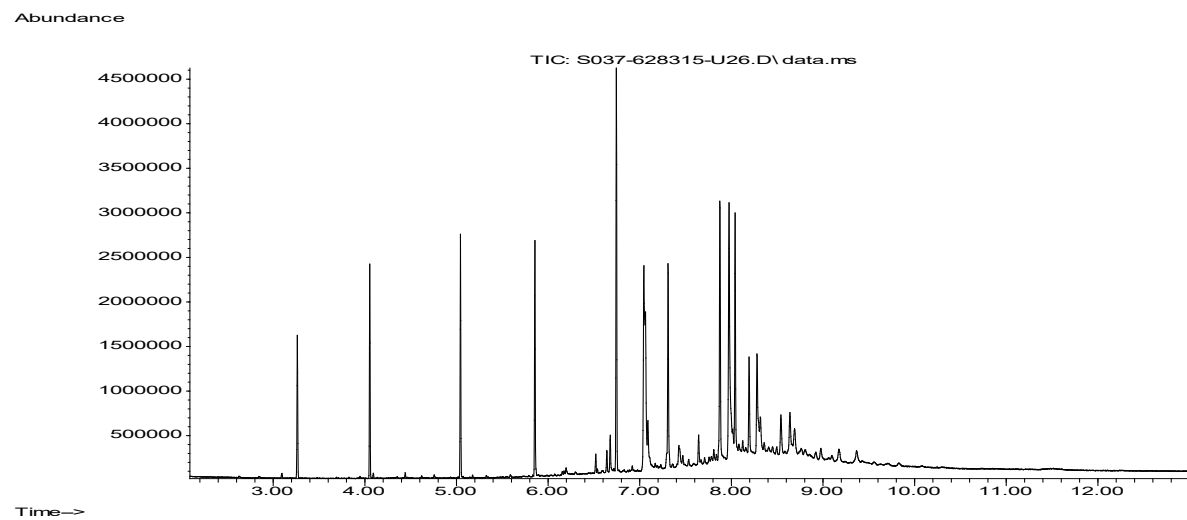


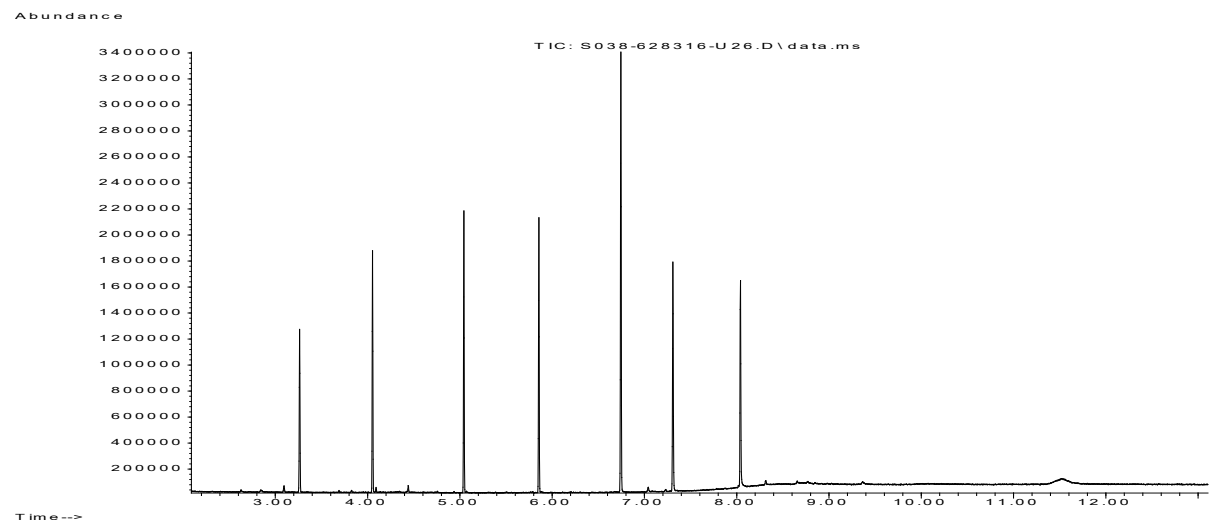


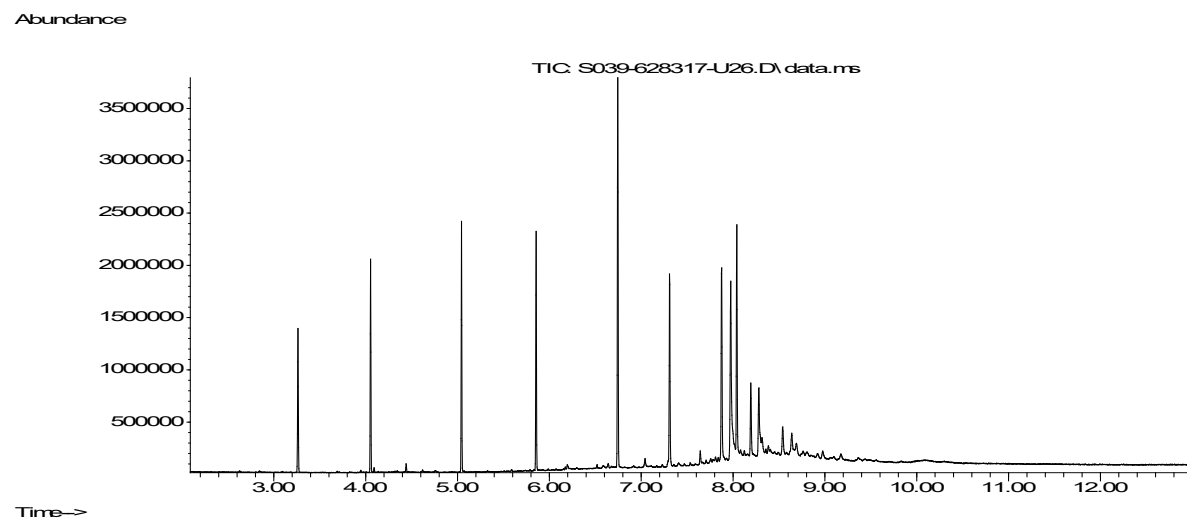


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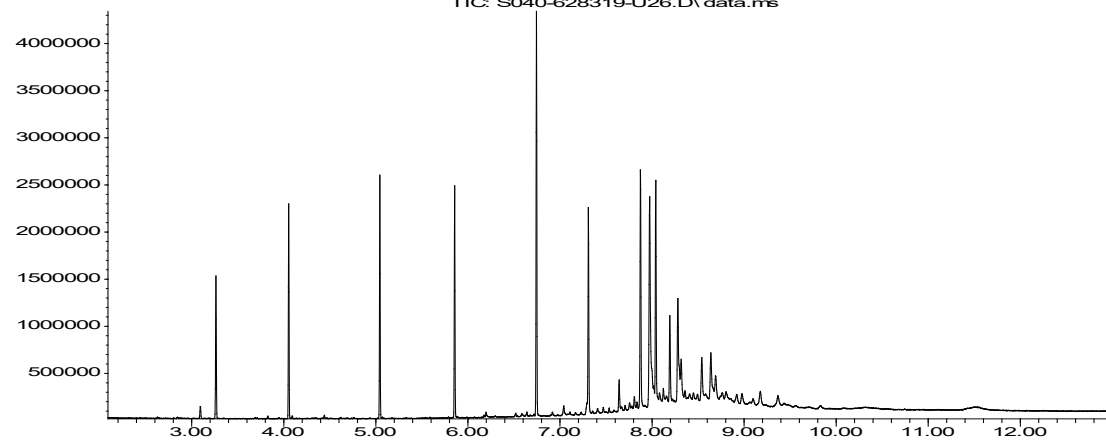




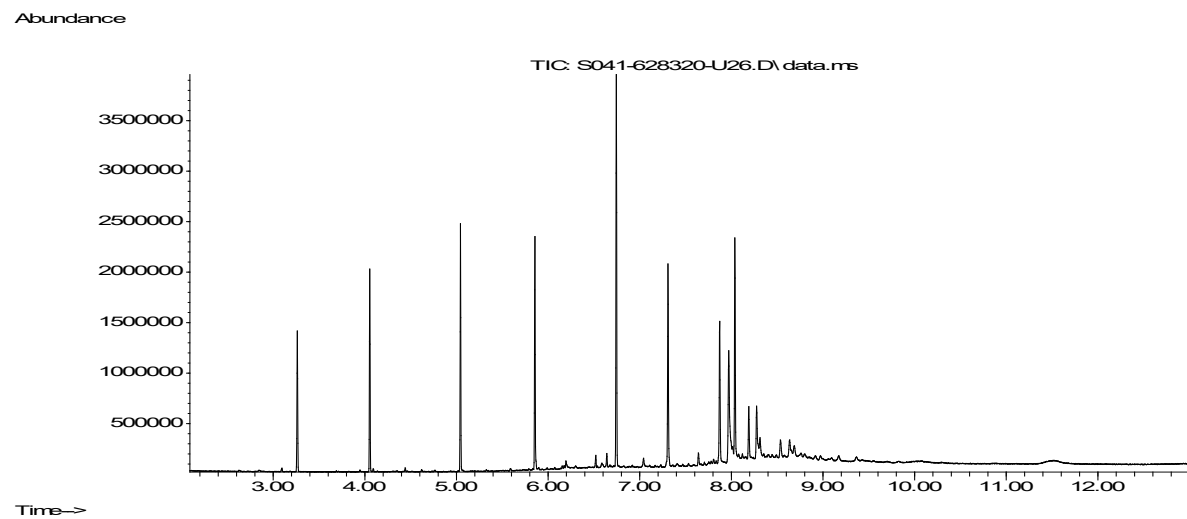


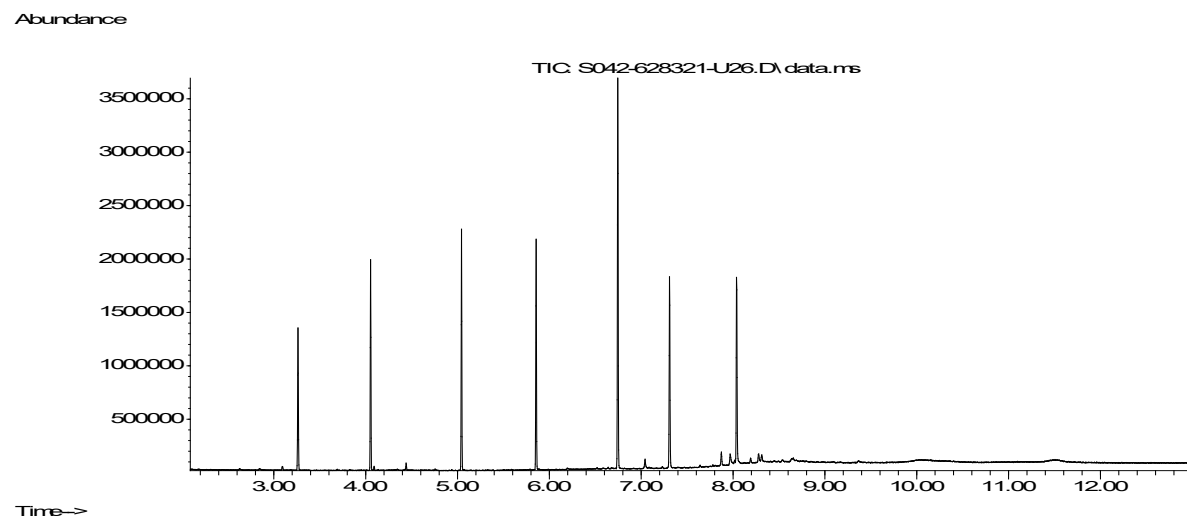
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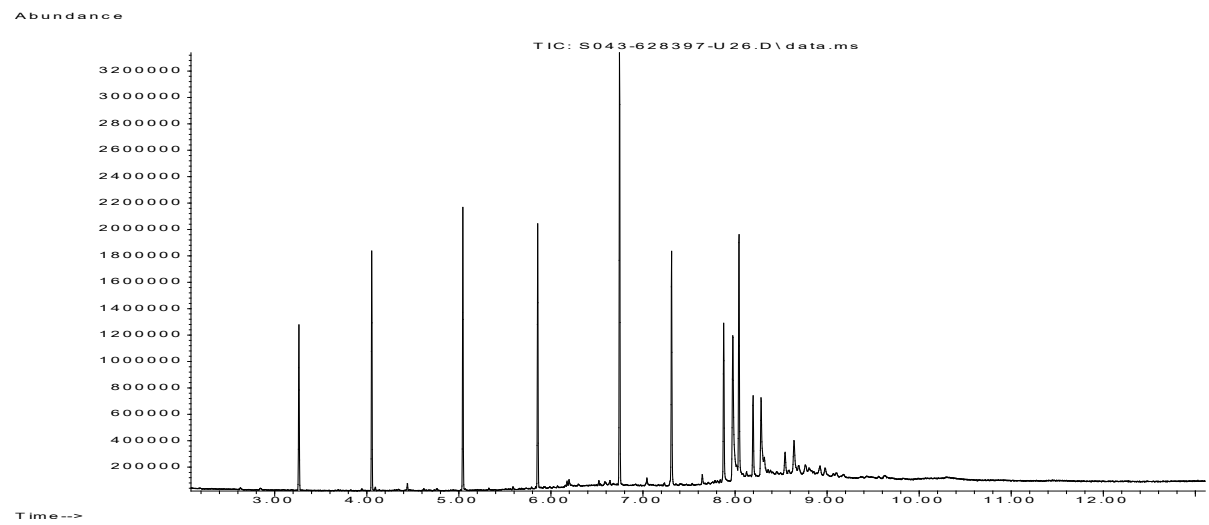
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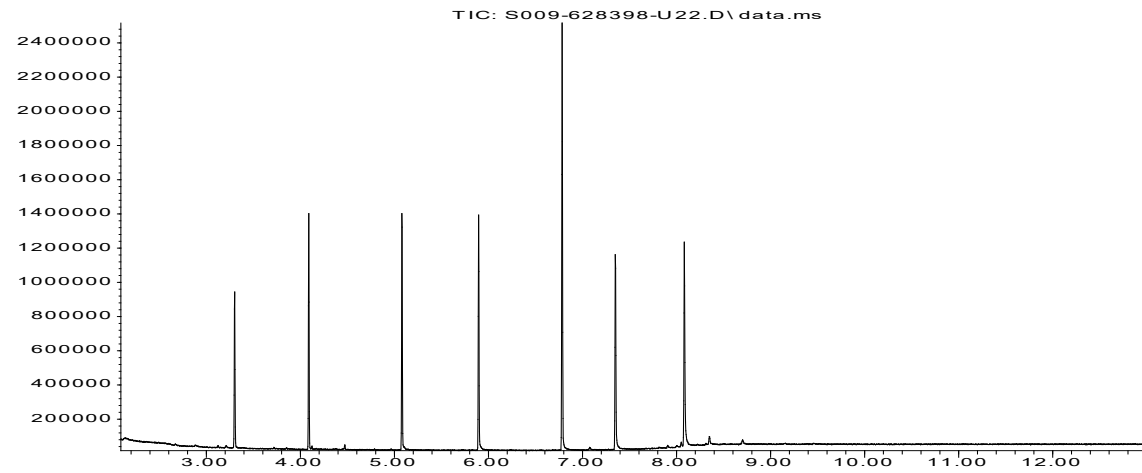
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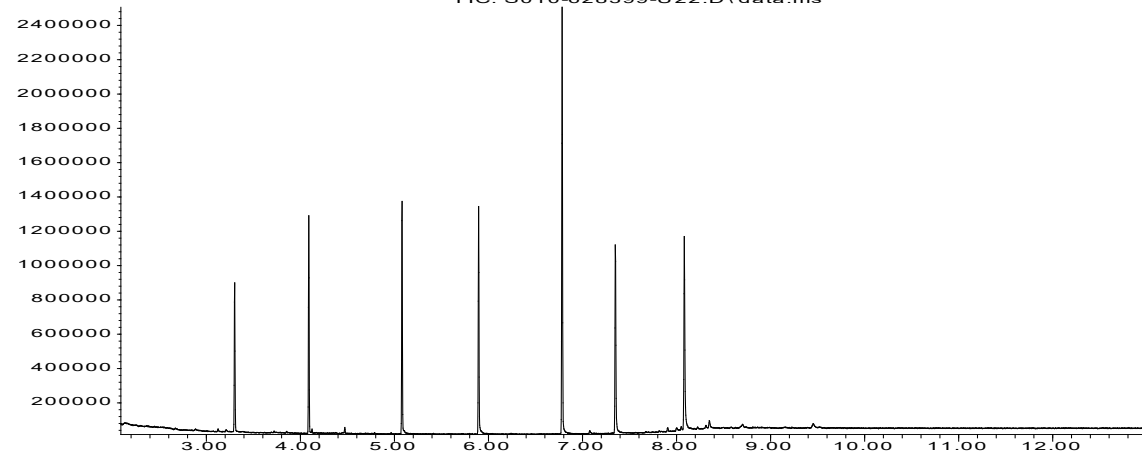
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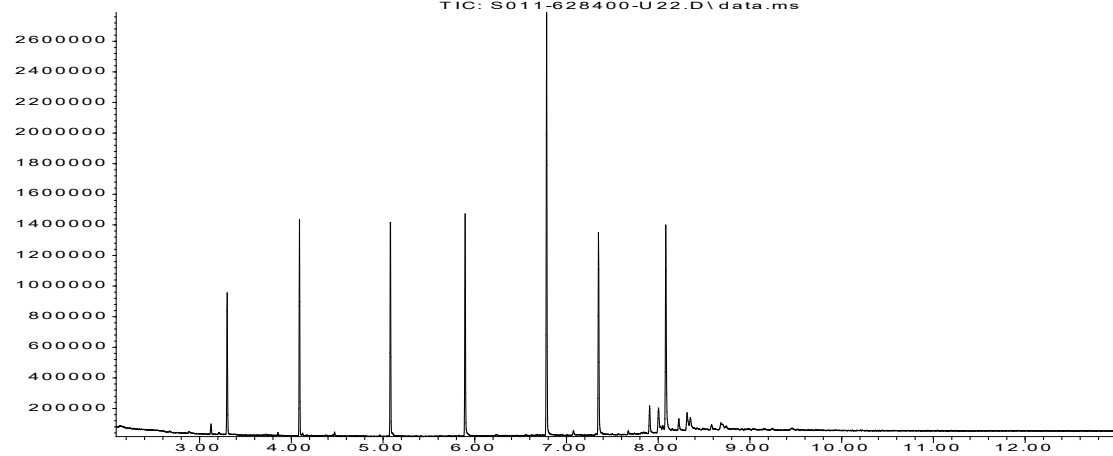
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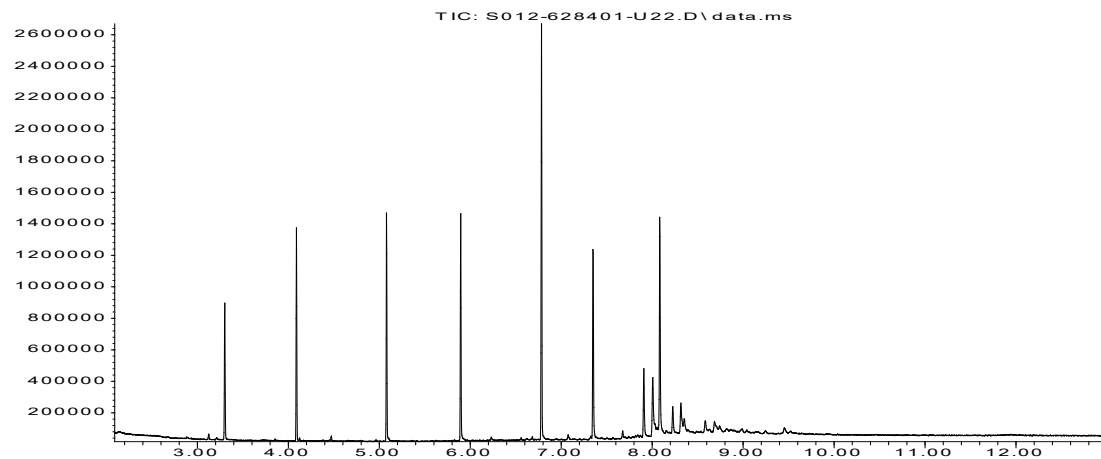
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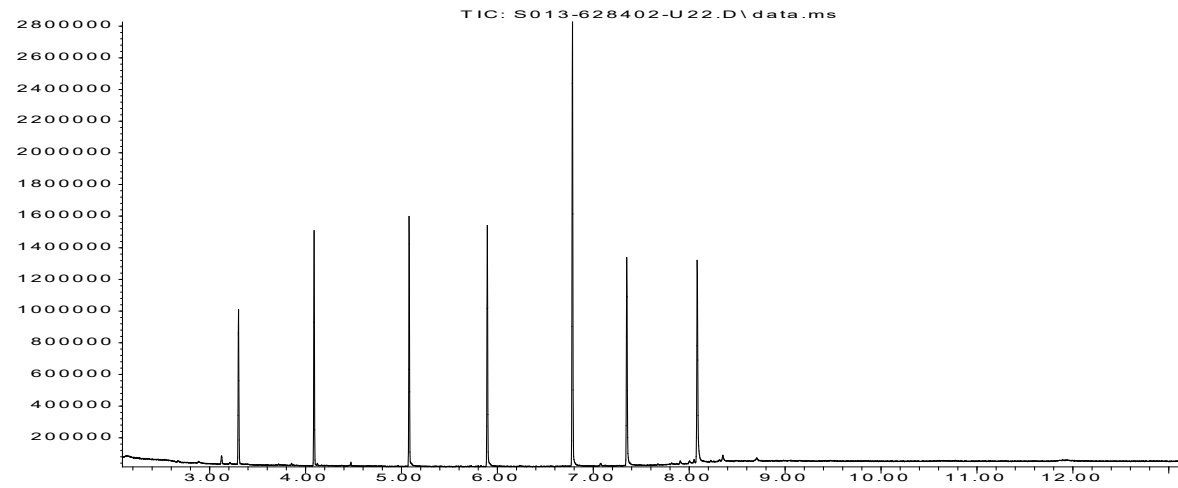
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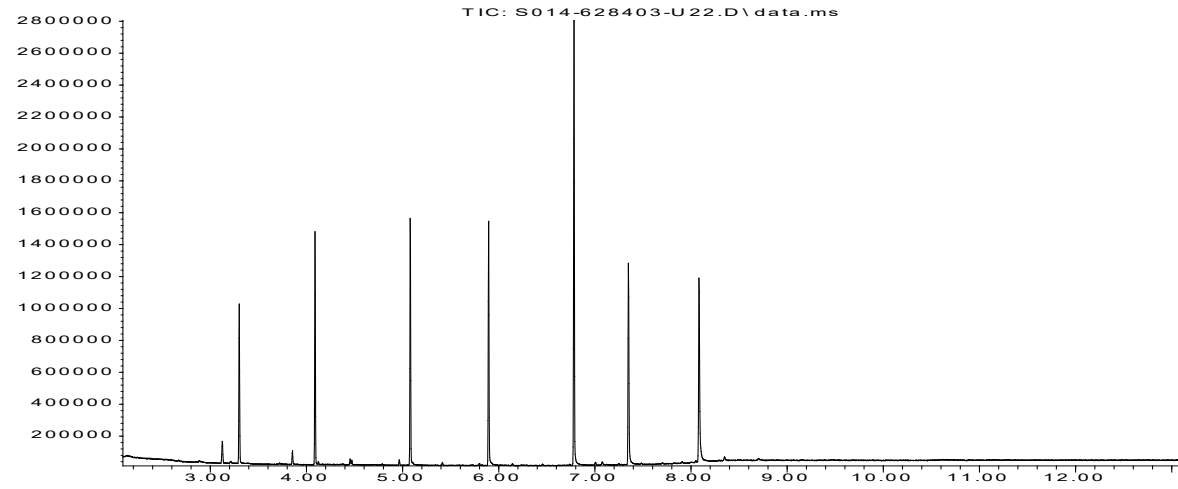
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Abundance



Time-->

Abundance



Time-->

GEO2 Remediation Ltd  
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7 Woodshots Meadow,  
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Business Park,  
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Herts,  
WD18 8YS

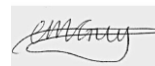
t: 01923 225404  
f: 01923 237404  
e: reception@i2analytical.com

e: George.Lount@geo2.co.uk  
alex.tabb@geo2.co.uk

## **Analytical Report Number : 25-040106**

Replaces Analytical Report Number: 25-040106, issue no. 1  
Client references/information amended.  
Sample depth amended for samples 629473 and 629474 by laboratory.

|                             |                |                                                        |            |
|-----------------------------|----------------|--------------------------------------------------------|------------|
| <b>Project / Site name:</b> | Markfield      | <b>Samples received on:</b>                            | 29/07/2025 |
| <b>Your job number:</b>     | 4467           | <b>Samples instructed on/<br/>Analysis started on:</b> | 29/07/2025 |
| <b>Your order number:</b>   | 4153           | <b>Analysis completed by:</b>                          | 04/08/2025 |
| <b>Report Issue Number:</b> | 2              | <b>Report issued on:</b>                               | 01/09/2025 |
| <b>Samples Analysed:</b>    | 3 soil samples |                                                        |            |



**Signed:**

Elaine Guy  
Customer Services Advisor  
**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  
air - once the analysis is complete

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.  
Some records may be kept for longer according to other legal/best practice requirements.

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: 25-040106  
Project / Site name: Markfield  
Your Order No: 4153

|                                         |               |                            |                              |
|-----------------------------------------|---------------|----------------------------|------------------------------|
| Lab Sample Number                       | 629472        | 629473                     | 629474                       |
| Sample Reference                        | TP107         | TP117                      | TP118                        |
| Sample Number                           | ES2           | ES1                        | ES2                          |
| Water Matrix                            | N/A           | N/A                        | N/A                          |
| Depth (m)                               | 0.60-0.65     | 0.10                       | 0.45                         |
| Date Sampled                            | 21/07/2025    | 21/07/2025                 | 21/07/2025                   |
| Time Taken                              | None Supplied | None Supplied              | None Supplied                |
| Analytical Parameter<br>(Soil Analysis) | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |

|                               |    |      |      |       |      |       |
|-------------------------------|----|------|------|-------|------|-------|
| Stone Content                 | %  | 0.1  | NONE | < 0.1 | 34.7 | < 0.1 |
| Moisture Content              | %  | 0.01 | NONE | 9.4   | 6.1  | 14    |
| Total mass of sample received | kg | 0.1  | NONE | 0.8   | 0.9  | 0.8   |

#### Asbestos

|                                        |      |     |           |              |              |              |
|----------------------------------------|------|-----|-----------|--------------|--------------|--------------|
| Asbestos in Soil Detected/Not Detected | Type | N/A | ISO 17025 | Not-detected | Not-detected | Not-detected |
| Asbestos Analyst ID                    | N/A  | N/A | N/A       | KJK          | KJK          | KJK          |
| Analysis completed                     | N/A  | N/A | N/A       | 01/08/2025   | 01/08/2025   | 01/08/2025   |

#### General Inorganics

|                                                                         |          |      |        |      |      |      |
|-------------------------------------------------------------------------|----------|------|--------|------|------|------|
| pH (L099)                                                               | pH Units | N/A  | MCERTS | 7.9  | 6.6  | 8.3  |
| Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)         | mg/kg    | 2.5  | MCERTS | 95   | 27   | 20   |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent) | mg/l     | 1.25 | MCERTS | -    | 13.7 | -    |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1)                     | mg/l     | 1.25 | MCERTS | 47.7 | -    | 9.73 |

#### 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 | 0.17   | < 0.05 |
| Fluorene               | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.11   | < 0.05 |
| Phenanthrene           | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.99   | < 0.05 |
| Anthracene             | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.28   | < 0.05 |
| Fluoranthene           | mg/kg | 0.05 | MCERTS    | < 0.05 | 1.3    | < 0.05 |
| Pyrene                 | mg/kg | 0.05 | MCERTS    | < 0.05 | 1.2    | < 0.05 |
| Benzo(a)anthracene     | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.57   | < 0.05 |
| Chrysene               | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.52   | < 0.05 |
| Benzo(b)fluoranthene   | mg/kg | 0.05 | ISO 17025 | < 0.05 | 0.67   | < 0.05 |
| Benzo(k)fluoranthene   | mg/kg | 0.05 | ISO 17025 | < 0.05 | 0.26   | < 0.05 |
| Benzo(a)pyrene         | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.6    | < 0.05 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.05 | MCERTS    | < 0.05 | 0.23   | < 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 | 0.25   | < 0.05 |

#### Total PAH

|                             |       |     |           |        |      |        |
|-----------------------------|-------|-----|-----------|--------|------|--------|
| Speciated Total EPA-16 PAHs | mg/kg | 0.8 | ISO 17025 | < 0.80 | 7.14 | < 0.80 |
|-----------------------------|-------|-----|-----------|--------|------|--------|

#### Heavy Metals / Metalloids

|                                   |       |     |        |       |       |       |
|-----------------------------------|-------|-----|--------|-------|-------|-------|
| Arsenic (aqua regia extractable)  | mg/kg | 1   | MCERTS | 8.1   | 7.6   | 6.4   |
| 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   | 34    | 21    | 34    |
| Chromium (aqua regia extractable) | mg/kg | 1   | MCERTS | 34    | 21    | 34    |
| Copper (aqua regia extractable)   | mg/kg | 1   | MCERTS | 29    | 17    | 22    |
| Lead (aqua regia extractable)     | mg/kg | 1   | MCERTS | 13    | 25    | 10    |
| Mercury (aqua regia extractable)  | mg/kg | 0.3 | MCERTS | < 0.3 | < 0.3 | < 0.3 |
| Nickel (aqua regia extractable)   | mg/kg | 1   | MCERTS | 28    | 15    | 31    |
| Zinc (aqua regia extractable)     | mg/kg | 1   | MCERTS | 59    | 62    | 53    |

Analytical Report Number: 25-040106  
Project / Site name: Markfield  
Your Order No: 4153

|                                         |               |                            |                              |
|-----------------------------------------|---------------|----------------------------|------------------------------|
| Lab Sample Number                       | 629472        | 629473                     | 629474                       |
| Sample Reference                        | TP107         | TP117                      | TP118                        |
| Sample Number                           | ES2           | ES1                        | ES2                          |
| Water Matrix                            | N/A           | N/A                        | N/A                          |
| Depth (m)                               | 0.60-0.65     | 0.10                       | 0.45                         |
| Date Sampled                            | 21/07/2025    | 21/07/2025                 | 21/07/2025                   |
| Time Taken                              | None Supplied | None Supplied              | None Supplied                |
| Analytical Parameter<br>(Soil Analysis) | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |

#### Petroleum Hydrocarbons

|                                                          |       |      |        |         |   |         |
|----------------------------------------------------------|-------|------|--------|---------|---|---------|
| TPHCWG - Aliphatic >EC5 - EC6 <sub>HS_1D_AL</sub>        | mg/kg | 0.01 | MCERTS | < 0.010 | - | < 0.010 |
| TPHCWG - Aliphatic >EC6 - EC8 <sub>HS_1D_AL</sub>        | mg/kg | 0.01 | MCERTS | < 0.010 | - | < 0.010 |
| TPHCWG - Aliphatic >EC8 - EC10 <sub>HS_1D_AL</sub>       | mg/kg | 0.01 | MCERTS | < 0.010 | - | < 0.010 |
| TPHCWG - Aliphatic >EC10 - EC12 <sub>EH_CU_1D_AL</sub>   | mg/kg | 1    | MCERTS | < 1.0   | - | < 1.0   |
| TPHCWG - Aliphatic >EC12 - EC16 <sub>EH_CU_1D_AL</sub>   | mg/kg | 2    | MCERTS | < 2.0   | - | < 2.0   |
| TPHCWG - Aliphatic >EC16 - EC21 <sub>EH_CU_1D_AL</sub>   | mg/kg | 8    | MCERTS | < 8.0   | - | < 8.0   |
| TPHCWG - Aliphatic >EC21 - EC35 <sub>EH_CU_1D_AL</sub>   | mg/kg | 8    | MCERTS | < 8.0   | - | < 8.0   |
| TPHCWG - Aliphatic >EC35 - EC40 <sub>EH_CU_1D_AL</sub>   | mg/kg | 10   | NONE   | < 10    | - | < 10    |
| TPHCWG - Aliphatic >EC5 - EC40 <sub>EH_CU+HS_1D_AL</sub> | mg/kg | 10   | NONE   | < 10    | - | < 10    |

|                                                         |       |      |        |         |   |         |
|---------------------------------------------------------|-------|------|--------|---------|---|---------|
| TPHCWG - Aromatic >EC5 - EC7 <sub>HS_1D_AR</sub>        | mg/kg | 0.01 | MCERTS | < 0.010 | - | < 0.010 |
| TPHCWG - Aromatic >EC7 - EC8 <sub>HS_1D_AR</sub>        | mg/kg | 0.01 | MCERTS | < 0.010 | - | < 0.010 |
| TPHCWG - Aromatic >EC8 - EC10 <sub>HS_1D_AR</sub>       | mg/kg | 0.02 | MCERTS | < 0.020 | - | < 0.020 |
| TPHCWG - Aromatic >EC10 - EC12 <sub>EH_CU_1D_AR</sub>   | mg/kg | 1    | MCERTS | < 1.0   | - | < 1.0   |
| TPHCWG - Aromatic >EC12 - EC16 <sub>EH_CU_1D_AR</sub>   | mg/kg | 2    | MCERTS | < 2.0   | - | < 2.0   |
| TPHCWG - Aromatic >EC16 - EC21 <sub>EH_CU_1D_AR</sub>   | mg/kg | 10   | MCERTS | < 10    | - | < 10    |
| TPHCWG - Aromatic >EC21 - EC35 <sub>EH_CU_1D_AR</sub>   | mg/kg | 10   | MCERTS | < 10    | - | < 10    |
| TPHCWG - Aromatic >EC35 - EC40 <sub>EH_CU_1D_AR</sub>   | mg/kg | 10   | NONE   | < 10    | - | < 10    |
| TPHCWG - Aromatic >EC5 - EC40 <sub>EH_CU+HS_1D_AR</sub> | mg/kg | 10   | NONE   | < 10    | - | < 10    |

|                                                    |       |    |      |      |   |      |
|----------------------------------------------------|-------|----|------|------|---|------|
| TPH Total >EC5 - EC40 <sub>EH_CU+HS_1D_TOTAL</sub> | mg/kg | 10 | NONE | < 10 | - | < 10 |
|----------------------------------------------------|-------|----|------|------|---|------|

|                                             |       |    |        |   |    |   |
|---------------------------------------------|-------|----|--------|---|----|---|
| TPH (EC10 - EC40) <sub>EH_CU_1D_TOTAL</sub> | mg/kg | 10 | MCERTS | - | 12 | - |
|---------------------------------------------|-------|----|--------|---|----|---|

#### VOCs

|                                    |       |   |        |       |   |       |
|------------------------------------|-------|---|--------|-------|---|-------|
| MTBE (Methyl Tertiary Butyl Ether) | µg/kg | 5 | MCERTS | < 5.0 | - | < 5.0 |
| Benzene                            | µg/kg | 5 | MCERTS | < 5.0 | - | < 5.0 |
| Toluene                            | µg/kg | 5 | MCERTS | < 5.0 | - | < 5.0 |
| Ethylbenzene                       | µg/kg | 5 | MCERTS | < 5.0 | - | < 5.0 |
| p & m-Xylene                       | µg/kg | 8 | MCERTS | < 8.0 | - | < 8.0 |
| o-Xylene                           | µg/kg | 5 | MCERTS | < 5.0 | - | < 5.0 |

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

**Analytical Report Number : 25-040106**

**Project / Site name: Markfield**

\* 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 *                           |
|-------------------|------------------|---------------|-----------|------------------------------------------------|
| 629472            | TP107            | ES2           | 0.60-0.65 | Brown clay and loam with gravel and vegetation |
| 629473            | TP117            | ES1           | 0.1       | Brown loam and clay with stones and vegetation |
| 629474            | TP118            | ES2           | 0.45      | Brown clay with gravel and vegetation          |

**Analytical Report Number : 25-040106**

**Project / Site name: Markfield**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)**

**Final Sewage Effluent (FSE) Landfill Leachate (LL)**

| Analytical Test Name                                                                       | Analytical Method Description                                                                                                          | Analytical Method Reference                                                         | Method number | Wet / Dry Analysis | Accreditation Status |
|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------|--------------------|----------------------|
| 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, 2021                                              | A001B         | D                  | ISO 17025            |
| Moisture Content                                                                           | Moisture content, determined gravimetrically (up to 30°C)                                                                              | In-house method                                                                     | L019B         | 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.          | L019B         | D                  | 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 | L038B         | D                  | MCERTS               |
| Sulphate, water soluble, in soil (16hr extraction)                                         | Sulphate, water soluble, in soil (16hr extraction)                                                                                     | In-house method                                                                     | L038B         | D                  | MCERTS               |
| Speciated PAHs and/or Semi-volatile organic compounds in soil                              | Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS | In-house method based on USEPA 8270                                                 | L064B         | D                  | MCERTS               |
| TPH Chromatogram in soil                                                                   | TPH Chromatogram in soil                                                                                                               | In-house method                                                                     | L064B         | D                  | NONE                 |
| BTEX and/or Volatile organic compounds in soil                                             | Determination of volatile organic compounds in soil by headspace GC-MS                                                                 | In-house method based on USEPA 8260                                                 | L073B         | W                  | MCERTS               |
| Total petroleum hydrocarbons with carbon banding by GC-FID in soil                         | Determination of total petroleum hydrocarbons in soil by GC-FID with carbon banding aliphatic and aromatic                             | In-house method                                                                     | L076B         | D                  | MCERTS               |
| Chromium III in soil                                                                       | In-house method by calculation from total Cr and Cr VI                                                                                 | In-house method by calculation                                                      | L080-PL/L130B | W                  | NONE                 |
| 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               |
| Total petroleum hydrocarbons with carbon banding by HS-GC/MS in soil                       | Determination of total petroleum hydrocarbons in soil by HS-GC/MS with carbon banding aliphatic and aromatic                           | In-house method                                                                     | L088-PL       | W                  | 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               |
| Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil (Summed Bands) | Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic (Summed Bands).    | Calculation                                                                         | L076B/L088-PL | D/W                | NONE                 |
| Soil Descriptions                                                                          | Textural classification                                                                                                                | In-house method                                                                     | L019B         | W                  | NONE                 |

**Analytical Report Number : 25-040106**  
**Project / Site name: Markfield**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)**

**Final Sewage Effluent (FSE) Landfill Leachate (LL)**

| Analytical Test Name                           | Analytical Method Description                                   | Analytical Method Reference | Method number | Wet / Dry Analysis | Accreditation Status |
|------------------------------------------------|-----------------------------------------------------------------|-----------------------------|---------------|--------------------|----------------------|
| Total petroleum hydrocarbons by GC-FID in soil | Determination of total petroleum hydrocarbons in soil by GC-FID | In-house method             | L0768         | 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).**

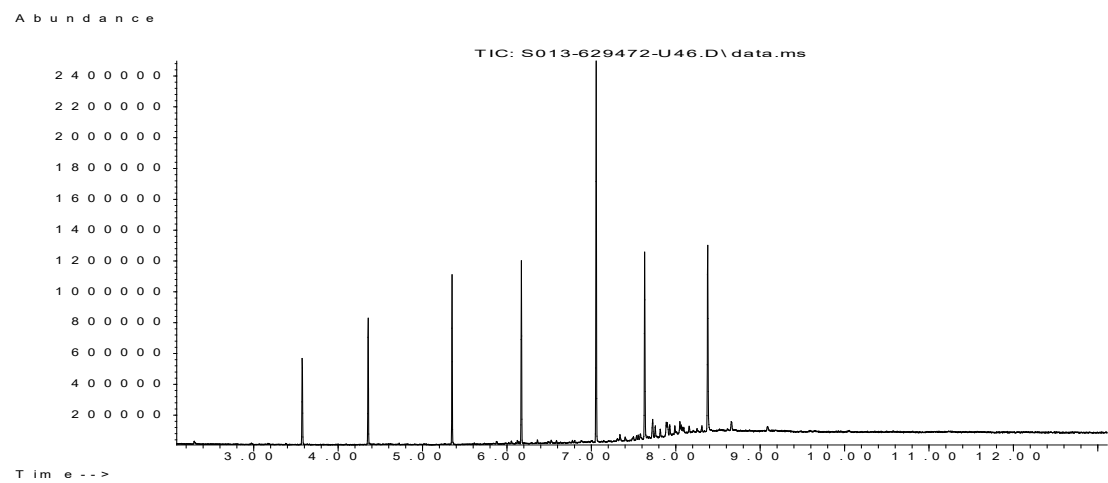
**For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.**

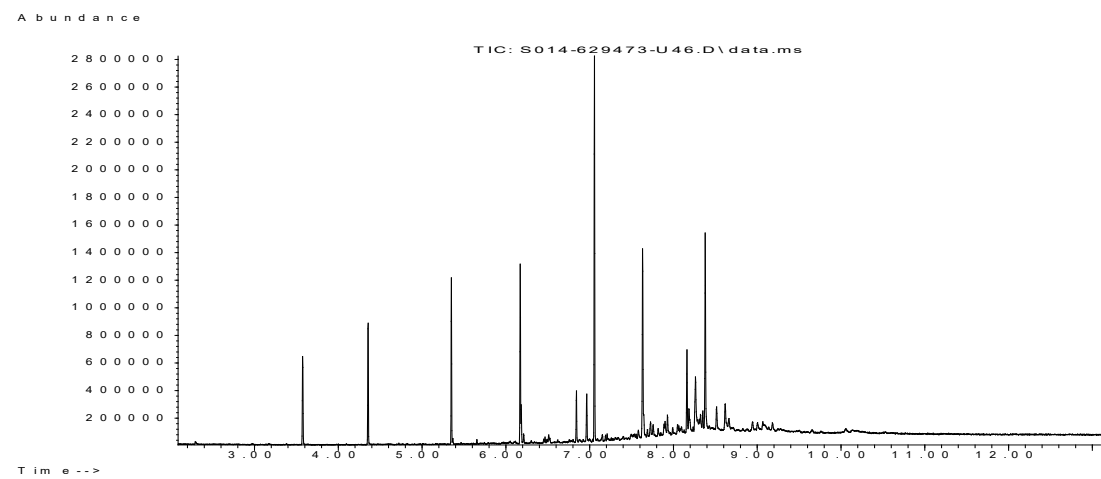
**Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.**

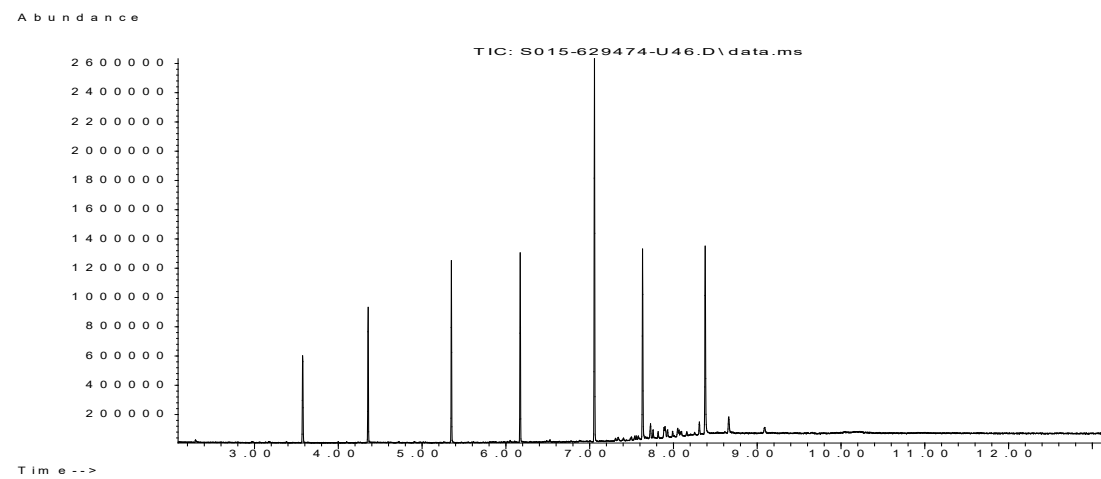
**Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.**

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution







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## **Analytical Report Number : 25-040395**

|                             |               |                                                        |            |
|-----------------------------|---------------|--------------------------------------------------------|------------|
| <b>Project / Site name:</b> | Markfield     | <b>Samples received on:</b>                            | 30/07/2025 |
| <b>Your job number:</b>     | 4467          | <b>Samples instructed on/<br/>Analysis started on:</b> | 30/07/2025 |
| <b>Your order number:</b>   | 4153          | <b>Analysis completed by:</b>                          | 05/08/2025 |
| <b>Report Issue Number:</b> | 1             | <b>Report issued on:</b>                               | 05/08/2025 |
| <b>Samples Analysed:</b>    | 1 soil sample |                                                        |            |

**Signed:**



Dominika Liana  
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       |
| air       | - once the analysis is complete |

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.  
Some records may be kept for longer according to other legal/best practice requirements.

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: 25-040395

Project / Site name: Markfield

Your Order No: 4153

|                                         |       |                            |                              |               |
|-----------------------------------------|-------|----------------------------|------------------------------|---------------|
| Lab Sample Number                       |       |                            |                              | 631096        |
| Sample Reference                        |       |                            |                              | TP111         |
| Sample Number                           |       |                            |                              | None Supplied |
| Water Matrix                            |       |                            |                              | N/A           |
| Depth (m)                               |       |                            |                              | 0.60-0.65     |
| Date Sampled                            |       |                            |                              | 23/07/2025    |
| Time Taken                              |       |                            |                              | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Test Limit of<br>detection | Test Accreditation<br>Status |               |

|                               |    |      |      |       |
|-------------------------------|----|------|------|-------|
| Stone Content                 | %  | 0.1  | NONE | < 0.1 |
| Moisture Content              | %  | 0.01 | NONE | 8     |
| Total mass of sample received | kg | 0.1  | NONE | 0.6   |

#### Asbestos

|                                        |      |     |           |              |
|----------------------------------------|------|-----|-----------|--------------|
| Asbestos in Soil Detected/Not Detected | Type | N/A | ISO 17025 | Not-detected |
| Asbestos Analyst ID                    | N/A  | N/A | N/A       | MUA          |
| Analysis completed                     | N/A  | N/A | N/A       | 04/08/2025   |

#### General Inorganics

|                                                                         |          |       |        |       |
|-------------------------------------------------------------------------|----------|-------|--------|-------|
| pH (L099)                                                               | pH Units | N/A   | MCERTS | 8.6   |
| Total Sulphate as SO <sub>4</sub>                                       | %        | 0.005 | MCERTS | 0.018 |
| Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)         | mg/kg    | 2.5   | MCERTS | 120   |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent) | mg/l     | 1.25  | MCERTS | 60.6  |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1)                     | mg/l     | 1.25  | MCERTS | 60.6  |
| Total Sulphur                                                           | mg/kg    | 50    | MCERTS | 110   |
| Total Sulphur                                                           | %        | 0.005 | MCERTS | 0.011 |

#### 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    | < 0.05 |
| Anthracene             | mg/kg | 0.05 | MCERTS    | < 0.05 |
| Fluoranthene           | mg/kg | 0.05 | MCERTS    | < 0.05 |
| Pyrene                 | mg/kg | 0.05 | MCERTS    | < 0.05 |
| 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 | ISO 17025 | < 0.05 |
| Benzo(k)fluoranthene   | mg/kg | 0.05 | ISO 17025 | < 0.05 |
| 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 |

#### Total PAH

|                             |       |     |           |        |
|-----------------------------|-------|-----|-----------|--------|
| Speciated Total EPA-16 PAHs | mg/kg | 0.8 | ISO 17025 | < 0.80 |
|-----------------------------|-------|-----|-----------|--------|

Analytical Report Number: 25-040395

Project / Site name: Markfield

Your Order No: 4153

|                                         |       |                            |                              |               |
|-----------------------------------------|-------|----------------------------|------------------------------|---------------|
| Lab Sample Number                       |       |                            |                              | 631096        |
| Sample Reference                        |       |                            |                              | TP111         |
| Sample Number                           |       |                            |                              | None Supplied |
| Water Matrix                            |       |                            |                              | N/A           |
| Depth (m)                               |       |                            |                              | 0.60-0.65     |
| Date Sampled                            |       |                            |                              | 23/07/2025    |
| Time Taken                              |       |                            |                              | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Test Limit of<br>detection | Test Accreditation<br>Status |               |

#### Heavy Metals / Metalloids

|                                   |       |     |        |       |
|-----------------------------------|-------|-----|--------|-------|
| Arsenic (aqua regia extractable)  | mg/kg | 1   | MCERTS | 8.2   |
| Cadmium (aqua regia extractable)  | mg/kg | 0.2 | MCERTS | 1.6   |
| Chromium (hexavalent)             | mg/kg | 1.8 | MCERTS | < 1.8 |
| Chromium (III)                    | mg/kg | 1   | NONE   | 21    |
| Chromium (aqua regia extractable) | mg/kg | 1   | MCERTS | 21    |
| Copper (aqua regia extractable)   | mg/kg | 1   | MCERTS | 16    |
| Lead (aqua regia extractable)     | mg/kg | 1   | MCERTS | 13    |
| Mercury (aqua regia extractable)  | mg/kg | 0.3 | MCERTS | < 0.3 |
| Nickel (aqua regia extractable)   | mg/kg | 1   | MCERTS | 14    |
| Zinc (aqua regia extractable)     | mg/kg | 1   | MCERTS | 38    |

#### Petroleum Hydrocarbons

|                                               |       |      |        |         |
|-----------------------------------------------|-------|------|--------|---------|
| TPHCWG - Aliphatic >EC5 - EC6 HS_1D_AL        | mg/kg | 0.01 | MCERTS | < 0.010 |
| TPHCWG - Aliphatic >EC6 - EC8 HS_1D_AL        | mg/kg | 0.01 | MCERTS | < 0.010 |
| TPHCWG - Aliphatic >EC8 - EC10 HS_1D_AL       | mg/kg | 0.01 | MCERTS | < 0.010 |
| TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL   | mg/kg | 1    | MCERTS | < 1.0   |
| TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL   | mg/kg | 2    | MCERTS | < 2.0   |
| TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL   | mg/kg | 8    | MCERTS | < 8.0   |
| TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL   | mg/kg | 8    | MCERTS | < 8.0   |
| TPHCWG - Aliphatic >EC35 - EC40 EH_CU_1D_AL   | mg/kg | 10   | NONE   | < 10    |
| TPHCWG - Aliphatic >EC5 - EC40 EH_CU+HS_1D_AL | mg/kg | 10   | NONE   | < 10    |

|                                              |       |      |        |         |
|----------------------------------------------|-------|------|--------|---------|
| TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR        | mg/kg | 0.01 | MCERTS | < 0.010 |
| TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR        | mg/kg | 0.01 | MCERTS | < 0.010 |
| TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR       | mg/kg | 0.02 | MCERTS | < 0.020 |
| TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR   | mg/kg | 1    | MCERTS | < 1.0   |
| TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR   | mg/kg | 2    | MCERTS | < 2.0   |
| TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR   | mg/kg | 10   | MCERTS | < 10    |
| TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR   | mg/kg | 10   | MCERTS | < 10    |
| TPHCWG - Aromatic >EC35 - EC40 EH_CU_1D_AR   | mg/kg | 10   | NONE   | < 10    |
| TPHCWG - Aromatic >EC5 - EC40 EH_CU+HS_1D_AR | mg/kg | 10   | NONE   | < 10    |

|                                         |       |    |      |      |
|-----------------------------------------|-------|----|------|------|
| TPH Total >EC5 - EC40 EH_CU+HS_1D_TOTAL | mg/kg | 10 | NONE | < 10 |
|-----------------------------------------|-------|----|------|------|

#### VOCs

|                                    |       |   |        |       |
|------------------------------------|-------|---|--------|-------|
| MTBE (Methyl Tertiary Butyl Ether) | µg/kg | 5 | MCERTS | < 5.0 |
| 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 | 8 | MCERTS | < 8.0 |
| o-Xylene                           | µg/kg | 5 | MCERTS | < 5.0 |

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

**Analytical Report Number : 25-040395**

**Project / Site name: Markfield**

\* 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 *            |
|-------------------|------------------|---------------|-----------|---------------------------------|
| 631096            | TP111            | None Supplied | 0.60-0.65 | Brown clay and sand with gravel |

**Analytical Report Number : 25-040395**

**Project / Site name: Markfield**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)**

**Final Sewage Effluent (FSE) Landfill Leachate (LL)**

| Analytical Test Name                                                 | Analytical Method Description                                                                                                          | Analytical Method Reference                                                         | Method number | Wet / Dry Analysis | Accreditation Status |
|----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------|--------------------|----------------------|
| 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, 2021                                              | A001B         | D                  | ISO 17025            |
| Moisture Content                                                     | Moisture content, determined gravimetrically (up to 30°C)                                                                              | In-house method                                                                     | L019B         | 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.          | L019B         | D                  | 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 | L038B         | D                  | MCERTS               |
| Total sulphate (as SO <sub>4</sub> in soil)                          | Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES                                                 | In-house method                                                                     | L038B         | D                  | MCERTS               |
| Sulphate, water soluble, in soil (16hr extraction)                   | Sulphate, water soluble, in soil (16hr extraction)                                                                                     | In-house method                                                                     | L038B         | D                  | MCERTS               |
| 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                                                                     | L038B         | D                  | MCERTS               |
| Speciated PAHs and/or Semi-volatile organic compounds in soil        | Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS | In-house method based on USEPA 8270                                                 | L064B         | D                  | MCERTS               |
| TPH Chromatogram in soil                                             | TPH Chromatogram in soil                                                                                                               | In-house method                                                                     | L064B         | D                  | NONE                 |
| BTEX and/or Volatile organic compounds in soil                       | Determination of volatile organic compounds in soil by headspace GC-MS                                                                 | In-house method based on USEPA 8260                                                 | L073B         | W                  | MCERTS               |
| Total petroleum hydrocarbons with carbon banding by GC-FID in soil   | Determination of total petroleum hydrocarbons in soil by GC-FID with carbon banding aliphatic and aromatic                             | In-house method                                                                     | L076B         | D                  | MCERTS               |
| Chromium III in soil                                                 | In-house method by calculation from total Cr and Cr VI                                                                                 | In-house method by calculation                                                      | L080-PL/L130B | W                  | NONE                 |
| Hexavalent chromium in soil                                          | Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazine followed by colorimetry       | In-house method                                                                     | L080-PL       | W                  | MCERTS               |
| Total petroleum hydrocarbons with carbon banding by HS-GC/MS in soil | Determination of total petroleum hydrocarbons in soil by HS GC/MS with carbon banding aliphatic and aromatic                           | In-house method                                                                     | L088-PL       | W                  | 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               |

**Analytical Report Number : 25-040395**

**Project / Site name: Markfield**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)**

**Final Sewage Effluent (FSE) Landfill Leachate (LL)**

| Analytical Test Name                                                                       | Analytical Method Description                                                                                                       | Analytical Method Reference | Method number | Wet / Dry Analysis | Accreditation Status |
|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------|--------------------|----------------------|
| Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil (Summed Bands) | Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic (Summed Bands). | Calculation                 | L076B/L088-PL | D/W                | NONE                 |
| Soil Descriptions                                                                          | Textural classification                                                                                                             | In-house method             | L019B         | W                  | NONE                 |

**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).**

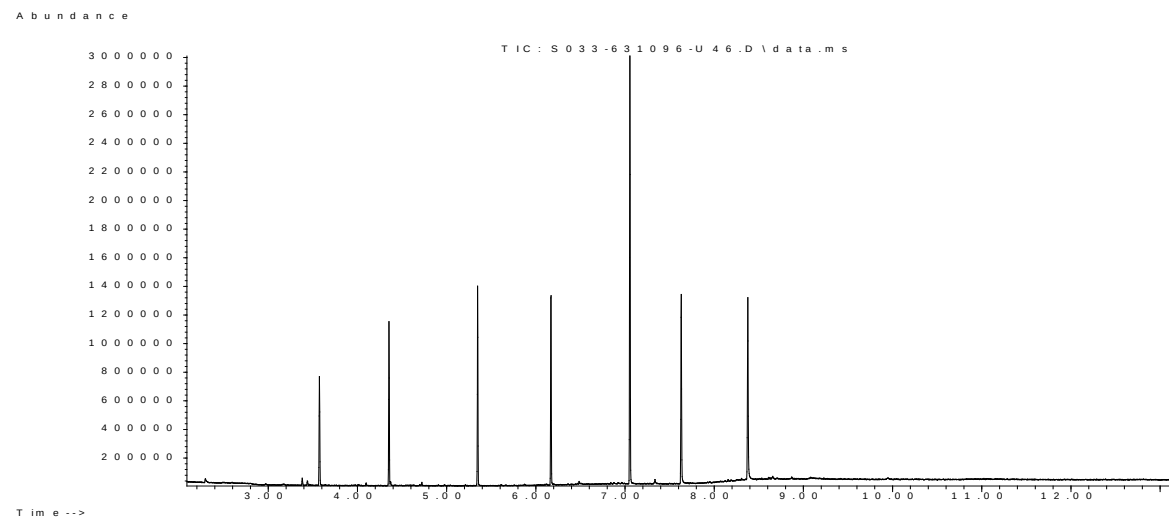
**For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.**

**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.**

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution



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## **Analytical Report Number : 25-041825**

|                             |                 |                                                        |            |
|-----------------------------|-----------------|--------------------------------------------------------|------------|
| <b>Project / Site name:</b> | Markfield       | <b>Samples received on:</b>                            | 31/07/2025 |
| <b>Your job number:</b>     | 4467            | <b>Samples instructed on/<br/>Analysis started on:</b> | 07/08/2025 |
| <b>Your order number:</b>   | 4162            | <b>Analysis completed by:</b>                          | 14/08/2025 |
| <b>Report Issue Number:</b> | 1               | <b>Report issued on:</b>                               | 15/08/2025 |
| <b>Samples Analysed:</b>    | 14 soil samples |                                                        |            |

**Signed:**



Dominika Liana  
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       |
| air       | - once the analysis is complete |

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.  
Some records may be kept for longer according to other legal/best practice requirements.

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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Project / Site name: Markfield

Your Order No: 4162

|                                         |  |  |  |               |                            |                              |               |               |
|-----------------------------------------|--|--|--|---------------|----------------------------|------------------------------|---------------|---------------|
| Lab Sample Number                       |  |  |  | 639724        | 639725                     | 639726                       | 639727        | 639728        |
| Sample Reference                        |  |  |  | TP107         | TP116                      | RH101                        | RH102         | RH103         |
| Sample Number                           |  |  |  | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Water Matrix                            |  |  |  | N/A           | N/A                        | N/A                          | N/A           | N/A           |
| Depth (m)                               |  |  |  | 3.00-3.50     | 2.00-2.50                  | 6.00-7.00                    | 3.00-4.00     | 5.50-6.00     |
| Date Sampled                            |  |  |  | 24/07/2025    | 23/07/2025                 | 25/07/2025                   | 25/07/2025    | 25/07/2025    |
| Time Taken                              |  |  |  | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) |  |  |  | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |               |               |

|                               |    |      |      |       |       |       |       |       |
|-------------------------------|----|------|------|-------|-------|-------|-------|-------|
| Stone Content                 | %  | 0.1  | NONE | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Moisture Content              | %  | 0.01 | NONE | 15    | 9.8   | 14    | 14    | 14    |
| Total mass of sample received | kg | 0.1  | NONE | 0.5   | 0.6   | 0.5   | 0.5   | 0.6   |

#### General Inorganics

|                                                                         |          |       |        |     |     |         |         |         |
|-------------------------------------------------------------------------|----------|-------|--------|-----|-----|---------|---------|---------|
| pH (L099)                                                               | pH Units | N/A   | MCERTS | -   | -   | 8.2     | 7.8     | 8.4     |
| Total Sulphate as SO <sub>4</sub>                                       | %        | 0.005 | MCERTS | -   | -   | 0.015   | 0.006   | 0.023   |
| Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)         | mg/kg    | 2.5   | MCERTS | -   | -   | 8.5     | 13      | 17      |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent) | mg/l     | 1.25  | MCERTS | -   | -   | 4.24    | 6.33    | 8.43    |
| Total Sulphur                                                           | mg/kg    | 50    | MCERTS | -   | -   | < 50    | < 50    | < 50    |
| Total Sulphur                                                           | %        | 0.005 | MCERTS | -   | -   | < 0.005 | < 0.005 | < 0.005 |
| Total Organic Carbon (TOC) - Automated                                  | %        | 0.1   | MCERTS | 0.1 | 0.2 | -       | -       | -       |

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 25-041825

Project / Site name: Markfield

Your Order No: 4162

|                                         |  |  |  |               |                            |                              |               |               |
|-----------------------------------------|--|--|--|---------------|----------------------------|------------------------------|---------------|---------------|
| Lab Sample Number                       |  |  |  | 639729        | 639730                     | 639731                       | 639732        | 639733        |
| Sample Reference                        |  |  |  | RH104         | RH105                      | RH106                        | RH107         | RH108         |
| Sample Number                           |  |  |  | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Water Matrix                            |  |  |  | N/A           | N/A                        | N/A                          | N/A           | N/A           |
| Depth (m)                               |  |  |  | 3.00-4.00     | 4.00-5.00                  | 3.50-4.00                    | 9.00-10.00    | 4.00-6.00     |
| Date Sampled                            |  |  |  | 25/07/2025    | 25/07/2025                 | 25/07/2025                   | 25/07/2025    | 25/07/2025    |
| Time Taken                              |  |  |  | None Supplied | None Supplied              | None Supplied                | None Supplied | None Supplied |
| Analytical Parameter<br>(Soil Analysis) |  |  |  | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |               |               |

|                               |    |      |      |       |      |       |       |       |
|-------------------------------|----|------|------|-------|------|-------|-------|-------|
| Stone Content                 | %  | 0.1  | NONE | < 0.1 | 10.2 | < 0.1 | < 0.1 | < 0.1 |
| Moisture Content              | %  | 0.01 | NONE | 13    | 8.4  | 9.2   | 9.6   | 12    |
| Total mass of sample received | kg | 0.1  | NONE | 0.6   | 0.5  | 0.6   | 0.5   | 0.3   |

#### General Inorganics

|                                                                         |          |       |        |       |       |         |       |         |
|-------------------------------------------------------------------------|----------|-------|--------|-------|-------|---------|-------|---------|
| pH (L099)                                                               | pH Units | N/A   | MCERTS | 7.7   | 7.2   | 7.4     | 7.9   | 6.5     |
| Total Sulphate as SO <sub>4</sub>                                       | %        | 0.005 | MCERTS | 0.016 | 0.015 | 0.014   | 0.022 | 0.015   |
| Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)         | mg/kg    | 2.5   | MCERTS | 45    | 40    | 42      | 18    | 21      |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent) | mg/l     | 1.25  | MCERTS | 22.3  | 20    | 21.1    | 9.08  | 10.4    |
| Total Sulphur                                                           | mg/kg    | 50    | MCERTS | 60    | 62    | < 50    | 78    | < 50    |
| Total Sulphur                                                           | %        | 0.005 | MCERTS | 0.006 | 0.006 | < 0.005 | 0.008 | < 0.005 |
| Total Organic Carbon (TOC) - Automated                                  | %        | 0.1   | MCERTS | -     | -     | -       | -     | -       |

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Project / Site name: Markfield

Your Order No: 4162

|                                         |  |  |  |               |                            |                              |               |
|-----------------------------------------|--|--|--|---------------|----------------------------|------------------------------|---------------|
| Lab Sample Number                       |  |  |  | 639734        | 639735                     | 639736                       | 639737        |
| Sample Reference                        |  |  |  | RH109         | RH109                      | RH110                        | RH110         |
| Sample Number                           |  |  |  | None Supplied | None Supplied              | None Supplied                | None Supplied |
| Water Matrix                            |  |  |  | N/A           | N/A                        | N/A                          | N/A           |
| Depth (m)                               |  |  |  | 5.00-6.00     | 8.00-9.00                  | 7.50-8.00                    | 9.00-10.00    |
| Date Sampled                            |  |  |  | 25/07/2025    | 25/07/2025                 | 25/07/2025                   | 25/07/2025    |
| Time Taken                              |  |  |  | None Supplied | None Supplied              | None Supplied                | None Supplied |
| Analytical Parameter<br>(Soil Analysis) |  |  |  | Units         | Test Limit of<br>detection | Test Accreditation<br>Status |               |

|                               |    |      |      |       |       |       |       |
|-------------------------------|----|------|------|-------|-------|-------|-------|
| Stone Content                 | %  | 0.1  | NONE | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Moisture Content              | %  | 0.01 | NONE | 11    | 4.8   | 9.7   | 13    |
| Total mass of sample received | kg | 0.1  | NONE | 0.4   | 0.4   | 0.4   | 0.3   |

#### General Inorganics

|                                                                         |          |       |        |         |       |       |       |
|-------------------------------------------------------------------------|----------|-------|--------|---------|-------|-------|-------|
| pH (L099)                                                               | pH Units | N/A   | MCERTS | 7       | 8     | 7.9   | 8.1   |
| Total Sulphate as SO <sub>4</sub>                                       | %        | 0.005 | MCERTS | 0.01    | 0.031 | 0.053 | 0.205 |
| Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1)         | mg/kg    | 2.5   | MCERTS | 18      | 15    | 24    | 330   |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1 Leachate Equivalent) | mg/l     | 1.25  | MCERTS | 9.14    | 7.58  | 11.8  | 164   |
| Total Sulphur                                                           | mg/kg    | 50    | MCERTS | < 50    | 100   | 180   | 4100  |
| Total Sulphur                                                           | %        | 0.005 | MCERTS | < 0.005 | 0.01  | 0.018 | 0.408 |
| Total Organic Carbon (TOC) - Automated                                  | %        | 0.1   | MCERTS | -       | -     | -     | -     |

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

**Analytical Report Number : 25-041825**
**Project / Site name: Markfield**

\* 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 *            |
|-------------------|------------------|---------------|------------|---------------------------------|
| 639724            | TP107            | None Supplied | 3.00-3.50  | Brown clay and sand with gravel |
| 639725            | TP116            | None Supplied | 2.00-2.50  | Brown clay and sand with gravel |
| 639726            | RH101            | None Supplied | 6.00-7.00  | Brown clay and sand with gravel |
| 639727            | RH102            | None Supplied | 3.00-4.00  | Brown clay and sand with gravel |
| 639728            | RH103            | None Supplied | 5.50-6.00  | Brown clay and sand             |
| 639729            | RH104            | None Supplied | 3.00-4.00  | Brown clay and sand with gravel |
| 639730            | RH105            | None Supplied | 4.00-5.00  | Brown clay and sand with stones |
| 639731            | RH106            | None Supplied | 3.50-4.00  | Brown clay and sand with gravel |
| 639732            | RH107            | None Supplied | 9.00-10.00 | Brown clay and sand with gravel |
| 639733            | RH108            | None Supplied | 4.00-6.00  | Brown clay and sand             |
| 639734            | RH109            | None Supplied | 5.00-6.00  | Brown clay and sand             |
| 639735            | RH109            | None Supplied | 8.00-9.00  | Brown clay and sand             |
| 639736            | RH110            | None Supplied | 7.50-8.00  | Brown clay and sand with gravel |
| 639737            | RH110            | None Supplied | 9.00-10.00 | Brown clay                      |

**Analytical Report Number : 25-041825**

**Project / Site name: Markfield**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)**

**Final Sewage Effluent (FSE) Landfill Leachate (LL)**

| Analytical Test Name                               | Analytical Method Description                                                                                                                       | Analytical Method Reference                                                | Method number | Wet / Dry Analysis | Accreditation Status |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------|--------------------|----------------------|
| Total organic carbon (Automated) in soil           | Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method) | In-house method                                                            | L009B         | D                  | MCERTS               |
| Moisture Content                                   | Moisture content, determined gravimetrically (up to 30°C)                                                                                           | In-house method                                                            | L019B         | 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. | L019B         | D                  | NONE                 |
| Soil Descriptions                                  | Textural classification                                                                                                                             | In-house method                                                            | L019B         | W                  | NONE                 |
| Total sulphate (as SO <sub>4</sub> in soil)        | Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES                                                              | In-house method                                                            | L038B         | D                  | MCERTS               |
| Sulphate, water soluble, in soil (16hr extraction) | Sulphate, water soluble, in soil (16hr extraction)                                                                                                  | In-house method                                                            | L038B         | D                  | MCERTS               |
| 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                                                            | L038B         | 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               |

**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 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.**

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution

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## **Analytical Report Number : 25-044286**

|                             |               |                                                        |            |
|-----------------------------|---------------|--------------------------------------------------------|------------|
| <b>Project / Site name:</b> | Markfield     | <b>Samples received on:</b>                            | 19/08/2025 |
| <b>Your job number:</b>     | 4467          | <b>Samples instructed on/<br/>Analysis started on:</b> | 20/08/2025 |
| <b>Your order number:</b>   | 4153          | <b>Analysis completed by:</b>                          | 27/08/2025 |
| <b>Report Issue Number:</b> | 1             | <b>Report issued on:</b>                               | 27/08/2025 |
| <b>Samples Analysed:</b>    | 1 soil sample |                                                        |            |

**Signed:** \_\_\_\_\_

Joanna Wawrzeczko  
Senior 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       |
| air       | - once the analysis is complete |

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.  
Some records may be kept for longer according to other legal/best practice requirements.

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: 25-044286

Project / Site name: Markfield

Your Order No: 4153

|                                         |       |                            |                              |               |
|-----------------------------------------|-------|----------------------------|------------------------------|---------------|
| Lab Sample Number                       |       |                            |                              | 653701        |
| Sample Reference                        |       |                            |                              | RH110         |
| Sample Number                           |       |                            |                              | 1             |
| Water Matrix                            |       |                            |                              | N/A           |
| Depth (m)                               |       |                            |                              | 0.30          |
| Date Sampled                            |       |                            |                              | 15/08/2025    |
| Time Taken                              |       |                            |                              | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Test Limit of<br>detection | Test Accreditation<br>Status |               |
|                                         |       |                            |                              |               |
|                                         |       |                            |                              |               |
|                                         |       |                            |                              |               |
|                                         |       |                            |                              |               |

|                               |    |      |      |       |
|-------------------------------|----|------|------|-------|
| Stone Content                 | %  | 0.1  | NONE | < 0.1 |
| Moisture Content              | %  | 0.01 | NONE | 13    |
| Total mass of sample received | kg | 0.1  | NONE | 1     |

#### Asbestos

|                                        |      |     |           |              |
|----------------------------------------|------|-----|-----------|--------------|
| Asbestos in Soil Detected/Not Detected | Type | N/A | ISO 17025 | Not-detected |
| Asbestos Analyst ID                    | N/A  | N/A | N/A       | DSO          |
| Analysis completed                     | N/A  | N/A | N/A       | 25/08/2025   |

#### General Inorganics

|                                                                 |          |      |        |     |
|-----------------------------------------------------------------|----------|------|--------|-----|
| pH (L099)                                                       | pH Units | N/A  | MCERTS | 7.9 |
| Water Soluble Sulphate as SO <sub>4</sub> 16hr extraction (2:1) | mg/kg    | 2.5  | MCERTS | 230 |
| Water Soluble SO <sub>4</sub> 16hr extraction (2:1)             | mg/l     | 1.25 | MCERTS | 112 |

#### 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    | < 0.05 |
| Anthracene             | mg/kg | 0.05 | MCERTS    | < 0.05 |
| Fluoranthene           | mg/kg | 0.05 | MCERTS    | < 0.05 |
| Pyrene                 | mg/kg | 0.05 | MCERTS    | < 0.05 |
| 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 | ISO 17025 | < 0.05 |
| Benzo(k)fluoranthene   | mg/kg | 0.05 | ISO 17025 | < 0.05 |
| 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 |

#### Total PAH

|                             |       |     |           |        |
|-----------------------------|-------|-----|-----------|--------|
| Speciated Total EPA-16 PAHs | mg/kg | 0.8 | ISO 17025 | < 0.80 |
|-----------------------------|-------|-----|-----------|--------|

#### Heavy Metals / Metalloids

|                                   |       |     |        |       |
|-----------------------------------|-------|-----|--------|-------|
| Arsenic (aqua regia extractable)  | mg/kg | 1   | MCERTS | 6.4   |
| 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   | 24    |
| Chromium (aqua regia extractable) | mg/kg | 1   | MCERTS | 24    |
| Copper (aqua regia extractable)   | mg/kg | 1   | MCERTS | 35    |
| Lead (aqua regia extractable)     | mg/kg | 1   | MCERTS | 16    |
| Mercury (aqua regia extractable)  | mg/kg | 0.3 | MCERTS | < 0.3 |
| Nickel (aqua regia extractable)   | mg/kg | 1   | MCERTS | 21    |
| Zinc (aqua regia extractable)     | mg/kg | 1   | MCERTS | 54    |

Analytical Report Number: 25-044286

Project / Site name: Markfield

Your Order No: 4153

|                                         |       |                            |                              |               |
|-----------------------------------------|-------|----------------------------|------------------------------|---------------|
| Lab Sample Number                       |       |                            |                              | 653701        |
| Sample Reference                        |       |                            |                              | RH110         |
| Sample Number                           |       |                            |                              | 1             |
| Water Matrix                            |       |                            |                              | N/A           |
| Depth (m)                               |       |                            |                              | 0.30          |
| Date Sampled                            |       |                            |                              | 15/08/2025    |
| Time Taken                              |       |                            |                              | None Supplied |
| Analytical Parameter<br>(Soil Analysis) | Units | Test Limit of<br>detection | Test Accreditation<br>Status |               |

#### Petroleum Hydrocarbons

|                                                          |       |      |        |         |
|----------------------------------------------------------|-------|------|--------|---------|
| TPHCWG - Aliphatic >EC5 - EC6 <sub>HS_1D_AL</sub>        | mg/kg | 0.01 | MCERTS | < 0.010 |
| TPHCWG - Aliphatic >EC6 - EC8 <sub>HS_1D_AL</sub>        | mg/kg | 0.01 | MCERTS | < 0.010 |
| TPHCWG - Aliphatic >EC8 - EC10 <sub>HS_1D_AL</sub>       | mg/kg | 0.01 | MCERTS | < 0.010 |
| TPHCWG - Aliphatic >EC10 - EC12 <sub>EH_CU_1D_AL</sub>   | mg/kg | 1    | MCERTS | < 1.0   |
| TPHCWG - Aliphatic >EC12 - EC16 <sub>EH_CU_1D_AL</sub>   | mg/kg | 2    | MCERTS | < 2.0   |
| TPHCWG - Aliphatic >EC16 - EC21 <sub>EH_CU_1D_AL</sub>   | mg/kg | 8    | MCERTS | < 8.0   |
| TPHCWG - Aliphatic >EC21 - EC35 <sub>EH_CU_1D_AL</sub>   | mg/kg | 8    | MCERTS | 11      |
| TPHCWG - Aliphatic >EC35 - EC40 <sub>EH_CU_1D_AL</sub>   | mg/kg | 10   | NONE   | < 10    |
| TPHCWG - Aliphatic >EC5 - EC40 <sub>EH_CU+HS_1D_AL</sub> | mg/kg | 10   | NONE   | 11      |

|                                                         |       |      |        |         |
|---------------------------------------------------------|-------|------|--------|---------|
| TPHCWG - Aromatic >EC5 - EC7 <sub>HS_1D_AR</sub>        | mg/kg | 0.01 | MCERTS | < 0.010 |
| TPHCWG - Aromatic >EC7 - EC8 <sub>HS_1D_AR</sub>        | mg/kg | 0.01 | MCERTS | < 0.010 |
| TPHCWG - Aromatic >EC8 - EC10 <sub>HS_1D_AR</sub>       | mg/kg | 0.02 | MCERTS | < 0.020 |
| TPHCWG - Aromatic >EC10 - EC12 <sub>EH_CU_1D_AR</sub>   | mg/kg | 1    | MCERTS | < 1.0   |
| TPHCWG - Aromatic >EC12 - EC16 <sub>EH_CU_1D_AR</sub>   | mg/kg | 2    | MCERTS | < 2.0   |
| TPHCWG - Aromatic >EC16 - EC21 <sub>EH_CU_1D_AR</sub>   | mg/kg | 10   | MCERTS | < 10    |
| TPHCWG - Aromatic >EC21 - EC35 <sub>EH_CU_1D_AR</sub>   | mg/kg | 10   | MCERTS | < 10    |
| TPHCWG - Aromatic >EC35 - EC40 <sub>EH_CU_1D_AR</sub>   | mg/kg | 10   | NONE   | < 10    |
| TPHCWG - Aromatic >EC5 - EC40 <sub>EH_CU+HS_1D_AR</sub> | mg/kg | 10   | NONE   | < 10    |

|                                                    |       |    |      |    |
|----------------------------------------------------|-------|----|------|----|
| TPH Total >EC5 - EC40 <sub>EH_CU+HS_1D_TOTAL</sub> | mg/kg | 10 | NONE | 11 |
|----------------------------------------------------|-------|----|------|----|

#### VOCs

|                                    |       |   |        |       |
|------------------------------------|-------|---|--------|-------|
| MTBE (Methyl Tertiary Butyl Ether) | µg/kg | 5 | MCERTS | < 5.0 |
| 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 | 8 | MCERTS | < 8.0 |
| o-Xylene                           | µg/kg | 5 | MCERTS | < 5.0 |

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

**Analytical Report Number : 25-044286**

**Project / Site name: Markfield**

\* 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 *                           |
|-------------------|------------------|---------------|-----------|------------------------------------------------|
| 653701            | RH110            | 1             | 0.3       | Brown loam and sand with gravel and vegetation |

**Analytical Report Number : 25-044286**

**Project / Site name: Markfield**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)**

**Final Sewage Effluent (FSE) Landfill Leachate (LL)**

| Analytical Test Name                                                                       | Analytical Method Description                                                                                                          | Analytical Method Reference                                                         | Method number | Wet / Dry Analysis | Accreditation Status |
|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------|--------------------|----------------------|
| 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, 2021                                              | A001B         | D                  | ISO 17025            |
| Moisture Content                                                                           | Moisture content, determined gravimetrically (up to 30°C)                                                                              | In-house method                                                                     | L019B         | 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.          | L019B         | D                  | 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 | L038B         | D                  | MCERTS               |
| Sulphate, water soluble, in soil (16hr extraction)                                         | Sulphate, water soluble, in soil (16hr extraction)                                                                                     | In-house method                                                                     | L038B         | D                  | MCERTS               |
| Speciated PAHs and/or Semi-volatile organic compounds in soil                              | Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS | In-house method based on USEPA 8270                                                 | L064B         | D                  | MCERTS               |
| TPH Chromatogram in soil                                                                   | TPH Chromatogram in soil                                                                                                               | In-house method                                                                     | L064B         | D                  | NONE                 |
| BTEX and/or Volatile organic compounds in soil                                             | Determination of volatile organic compounds in soil by headspace GC-MS                                                                 | In-house method based on USEPA 8260                                                 | L073B         | W                  | MCERTS               |
| Total petroleum hydrocarbons with carbon banding by GC-FID in soil                         | Determination of total petroleum hydrocarbons in soil by GC-FID with carbon banding aliphatic and aromatic                             | In-house method                                                                     | L076B         | D                  | MCERTS               |
| Chromium III in soil                                                                       | In-house method by calculation from total Cr and Cr VI                                                                                 | In-house method by calculation                                                      | L080-PL/L130B | W                  | NONE                 |
| Hexavalent chromium in soil                                                                | Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 dphenylcarbazide followed by colorimetry        | In-house method                                                                     | L080-PL       | W                  | MCERTS               |
| Total petroleum hydrocarbons with carbon banding by HS-GC/MS in soil                       | Determination of total petroleum hydrocarbons in soil by HS-GC/MS with carbon banding aliphatic and aromatic                           | In-house method                                                                     | L088-PL       | W                  | 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               |
| Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil (Summed Bands) | Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic (Summed Bands).    | Calculation                                                                         | L076B/L088-PL | D/W                | NONE                 |

**Analytical Report Number : 25-044286**

**Project / Site name: Markfield**

**Water matrix abbreviations:**

**Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)**

**Final Sewage Effluent (FSE) Landfill Leachate (LL)**

| Analytical Test Name | Analytical Method Description | Analytical Method Reference | Method number | Wet / Dry Analysis | Accreditation Status |
|----------------------|-------------------------------|-----------------------------|---------------|--------------------|----------------------|
| Soil Descriptions    | Textural classification       | In-house method             | L019B         | W                  | NONE                 |

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.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution



## Sample Deviation Report



**Analytical Report Number : 25-044286**

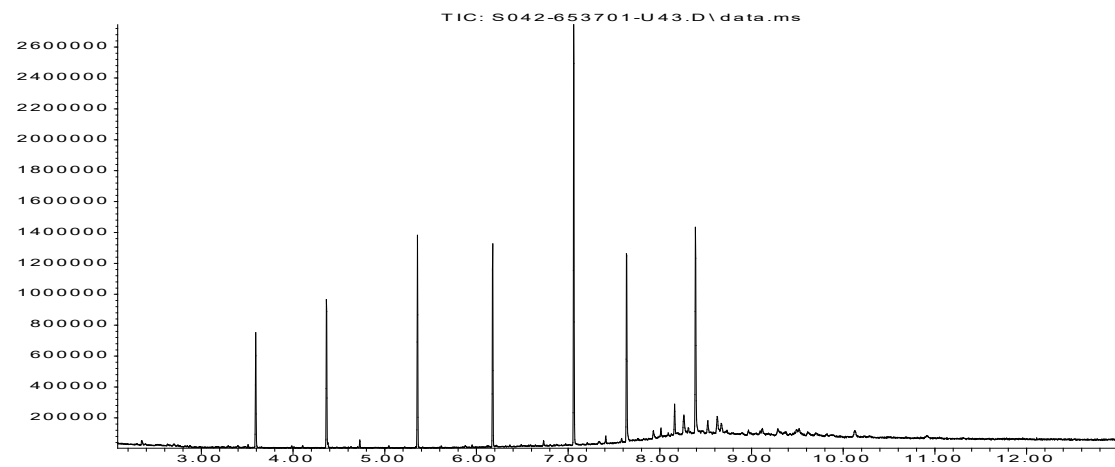
**Project / Site name: Markfield**

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.

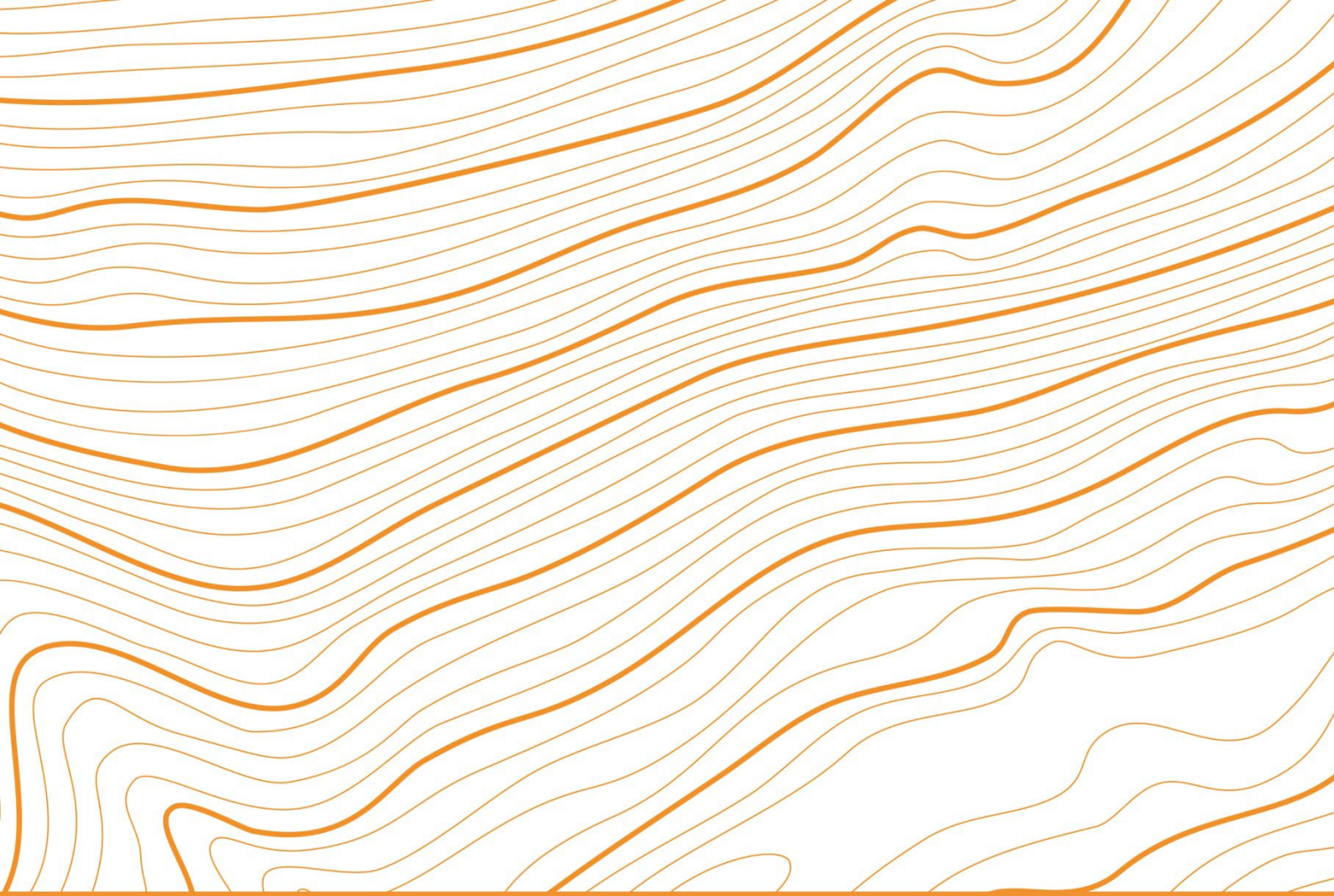
Key: a - No sampling date b - Incorrect container/Insufficient material provided c - Holding time d - Headspace e - Temperature

| Sample ID | Other ID | Sample Type | Lab Sample Number | Sample Deviation | Test Name                       | Test Ref | Test Deviation |
|-----------|----------|-------------|-------------------|------------------|---------------------------------|----------|----------------|
| RH110     | 1        | S           | 653701            | b                | Asbestos identification in Soil | A001B    | b              |

Abundance



Time-->



## **Appendix D – Geotechnical Results**



# TEST CERTIFICATE

## DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022,  
cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022,  
cl 5.2 and 6

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

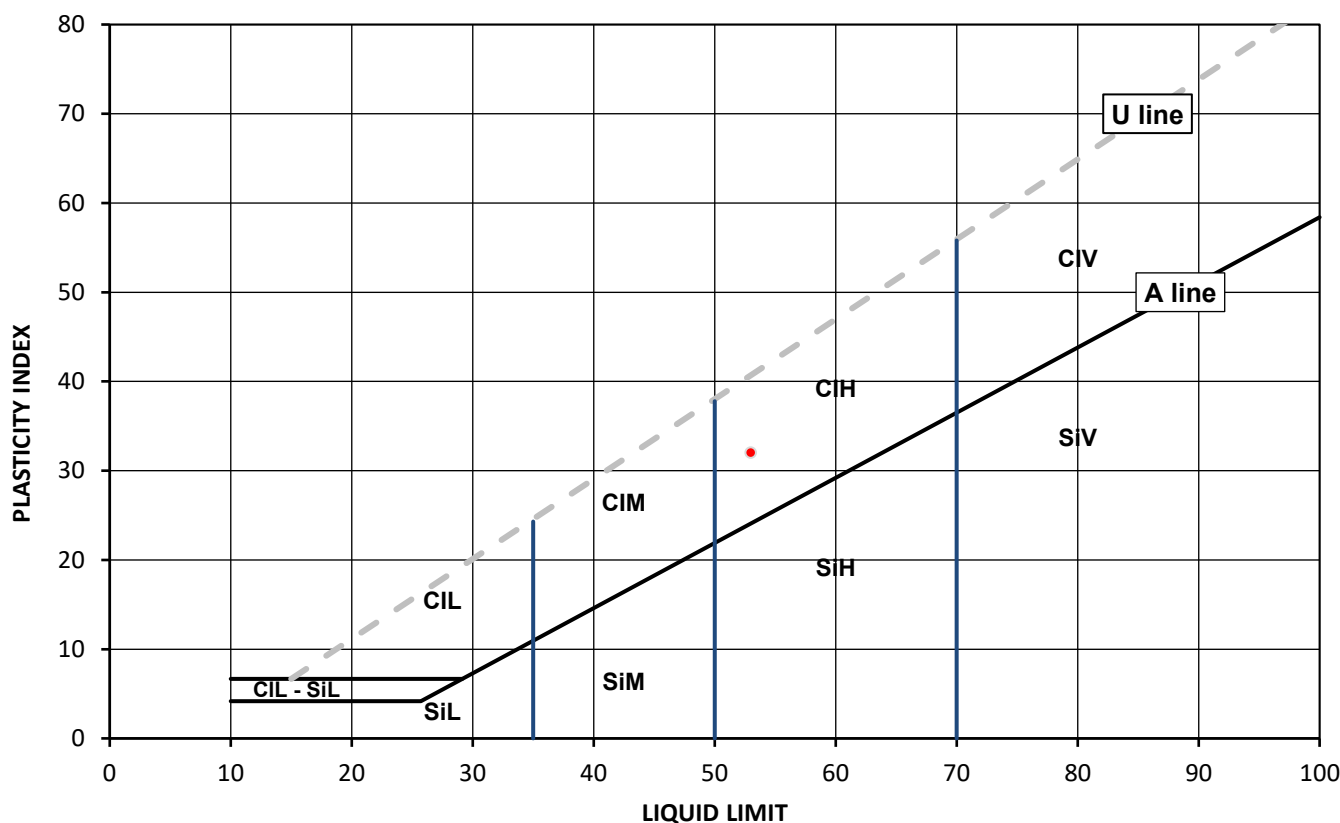
### Test Results:

Laboratory Reference: 639675  
Hole No.: TP101  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 2.00  
Depth Base [m]: 2.50  
Sample Type: B

Sample Preparation: Tested after >0.425mm removed by hand; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 19.1                            | 53                  | 21                   | 32                      | -0.06                    | 1.06                       | 84                            |



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 EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

Remarks:

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
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 EN ISO 17892-12:2018+A2:2022,  
cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022,  
cl 5.2 and 6

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Site Address: Markfield

Client Reference: 4467  
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Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

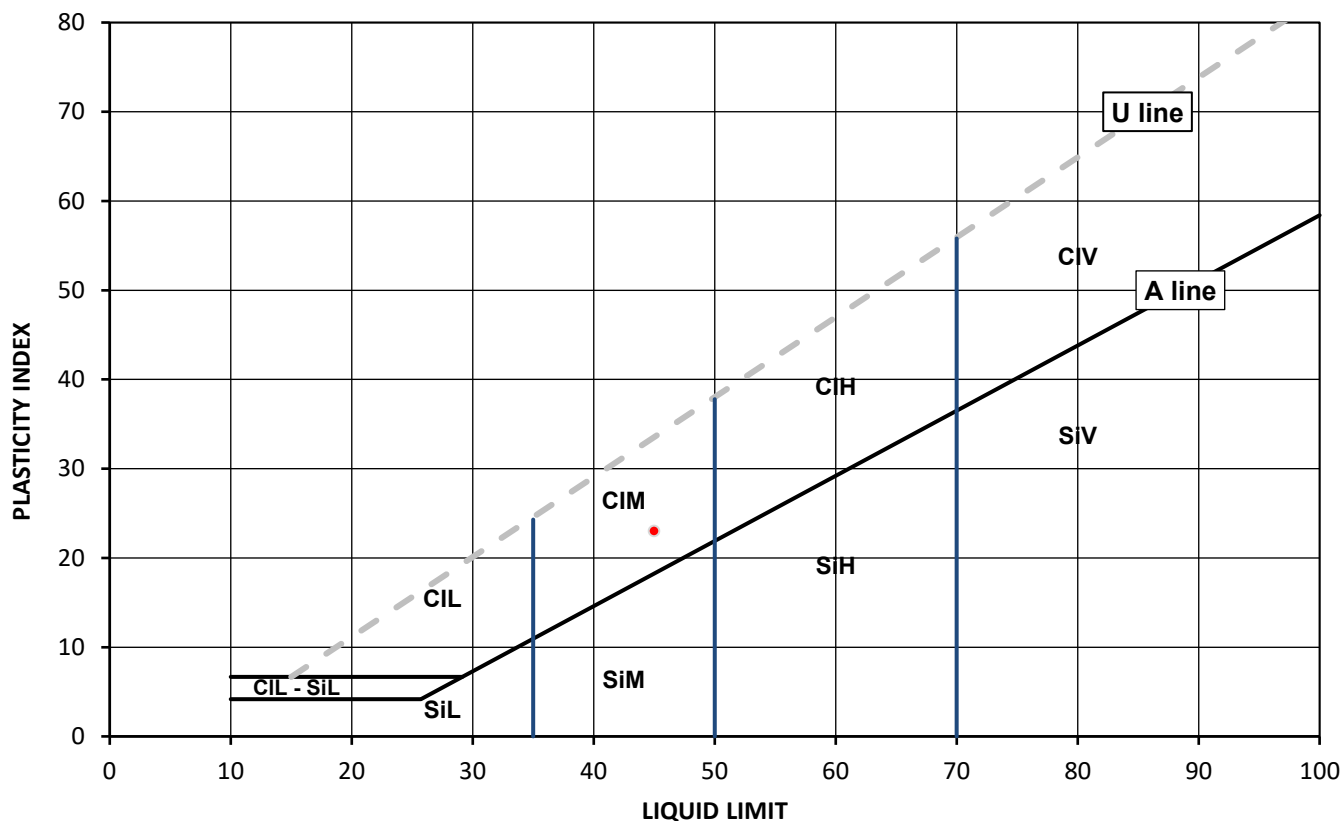
### Test Results:

Laboratory Reference: 639678  
Hole No.: TP103  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 2.50  
Depth Base [m]: 3.00  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 23.1                            | 45                  | 22                   | 23                      | 0.04                     | 0.96                       | 89                            |



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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

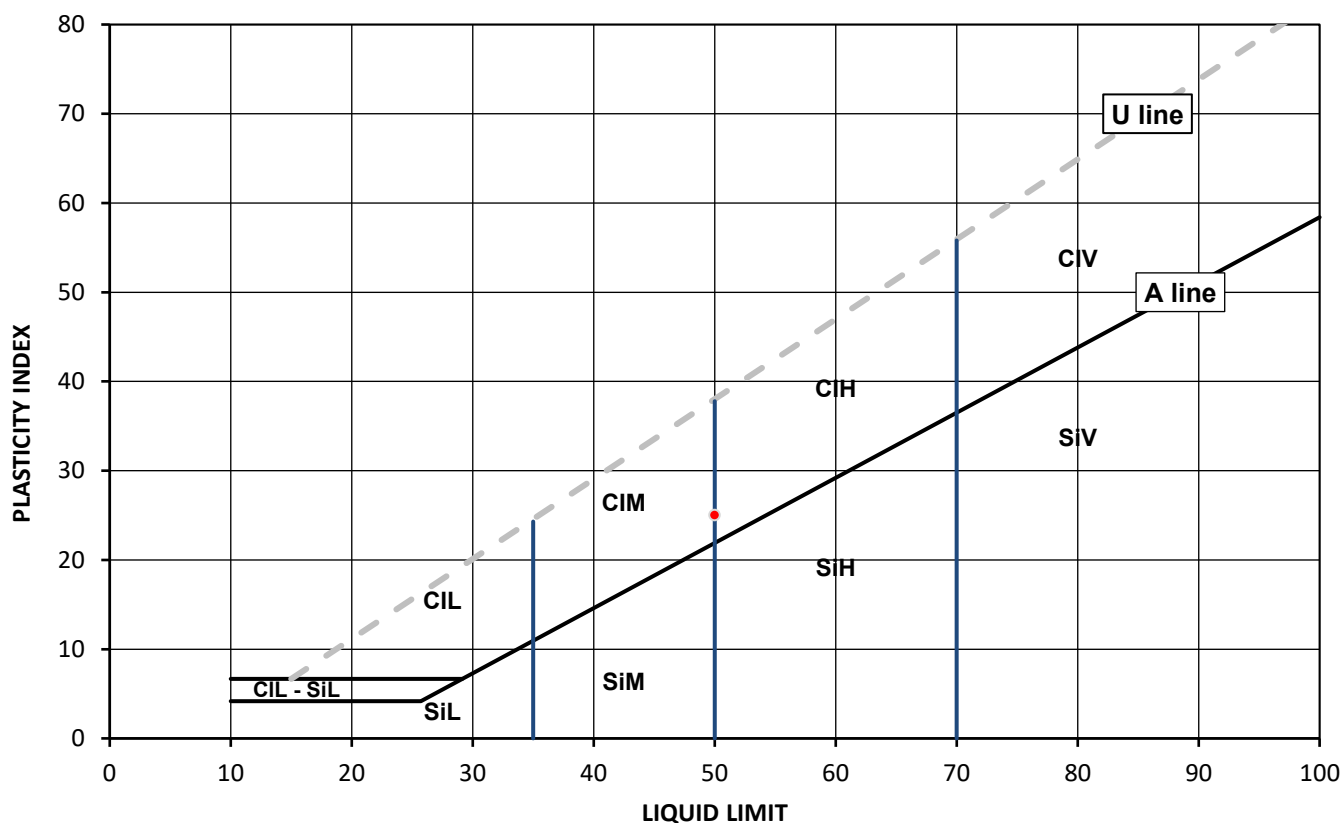
### Test Results:

Laboratory Reference: 639679  
Hole No.: TP104  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 2.80  
Depth Base [m]: 3.10  
Sample Type: B

Sample Preparation: Tested after >0.425mm removed by hand; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 26.0                            | 50                  | 25                   | 25                      | 0.04                     | 0.96                       | 92                            |



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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 24/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

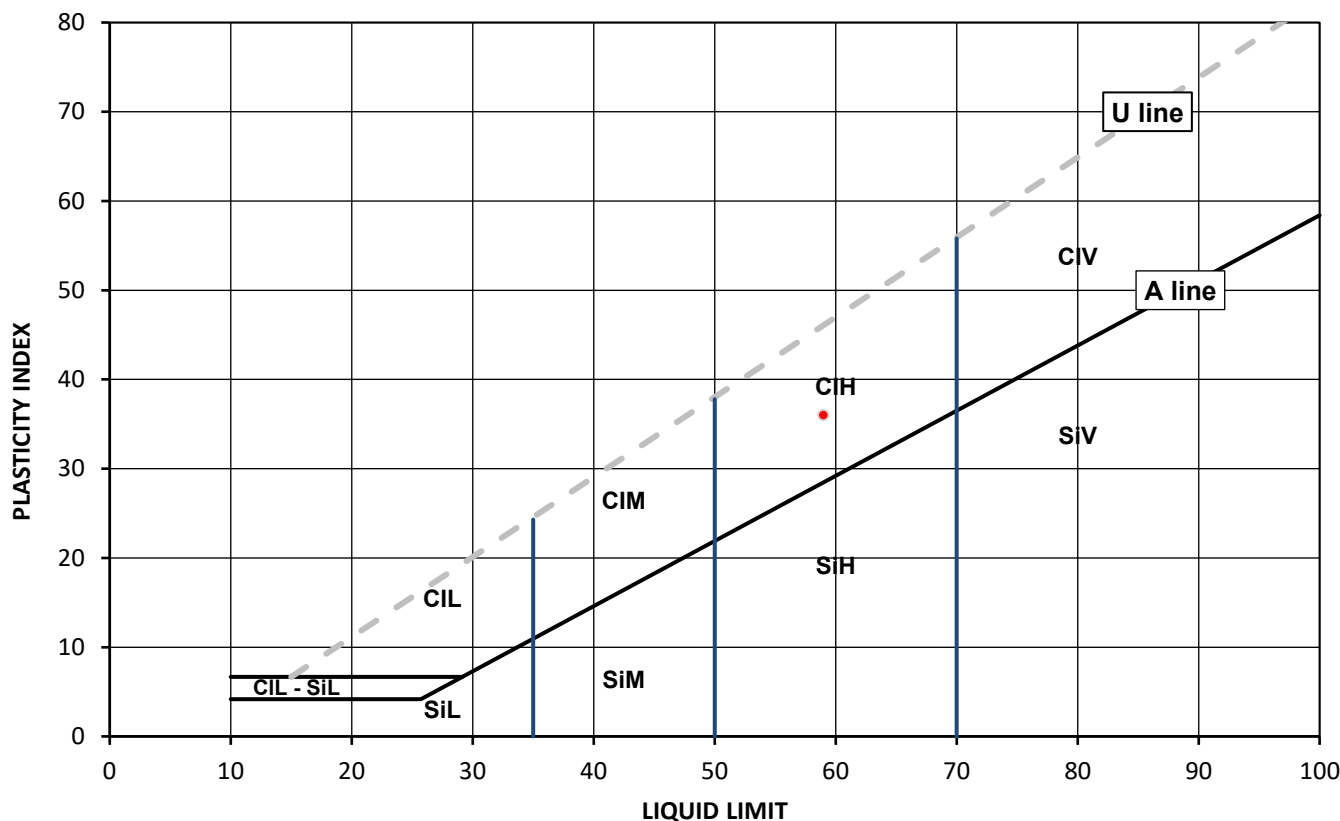
#### Test Results:

Laboratory Reference: 639680  
Hole No.: TP105  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 2.50  
Depth Base [m]: 3.00  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 23.1                            | 59                  | 23                   | 36                      | 0.00                     | 1.00                       | 95                            |



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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Client Reference: 4467  
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Date Sampled: 24/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

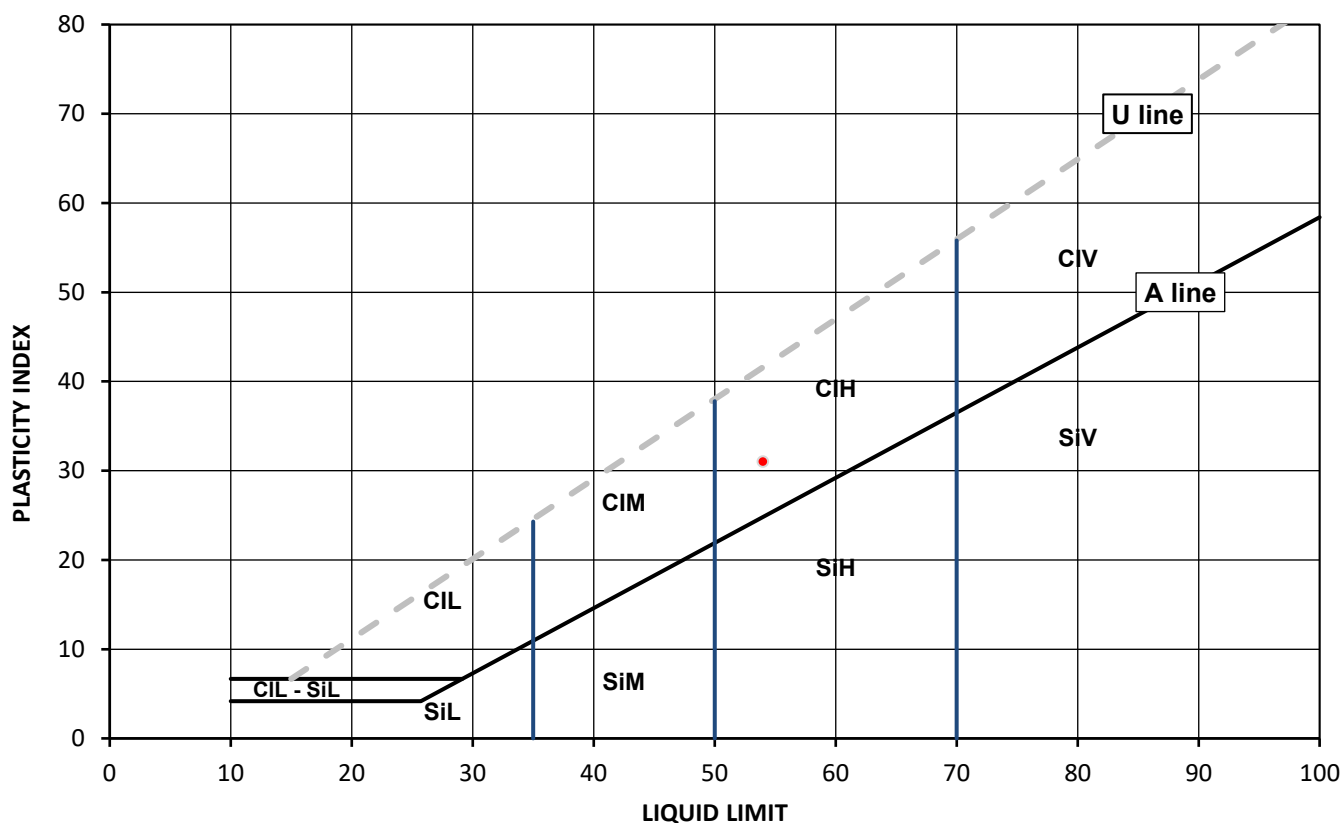
### Test Results:

Laboratory Reference: 639681  
Hole No.: TP106  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 0.40  
Depth Base [m]: 0.50  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 22.2                            | 54                  | 23                   | 31                      | -0.03                    | 1.03                       | 88                            |



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 EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 24/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

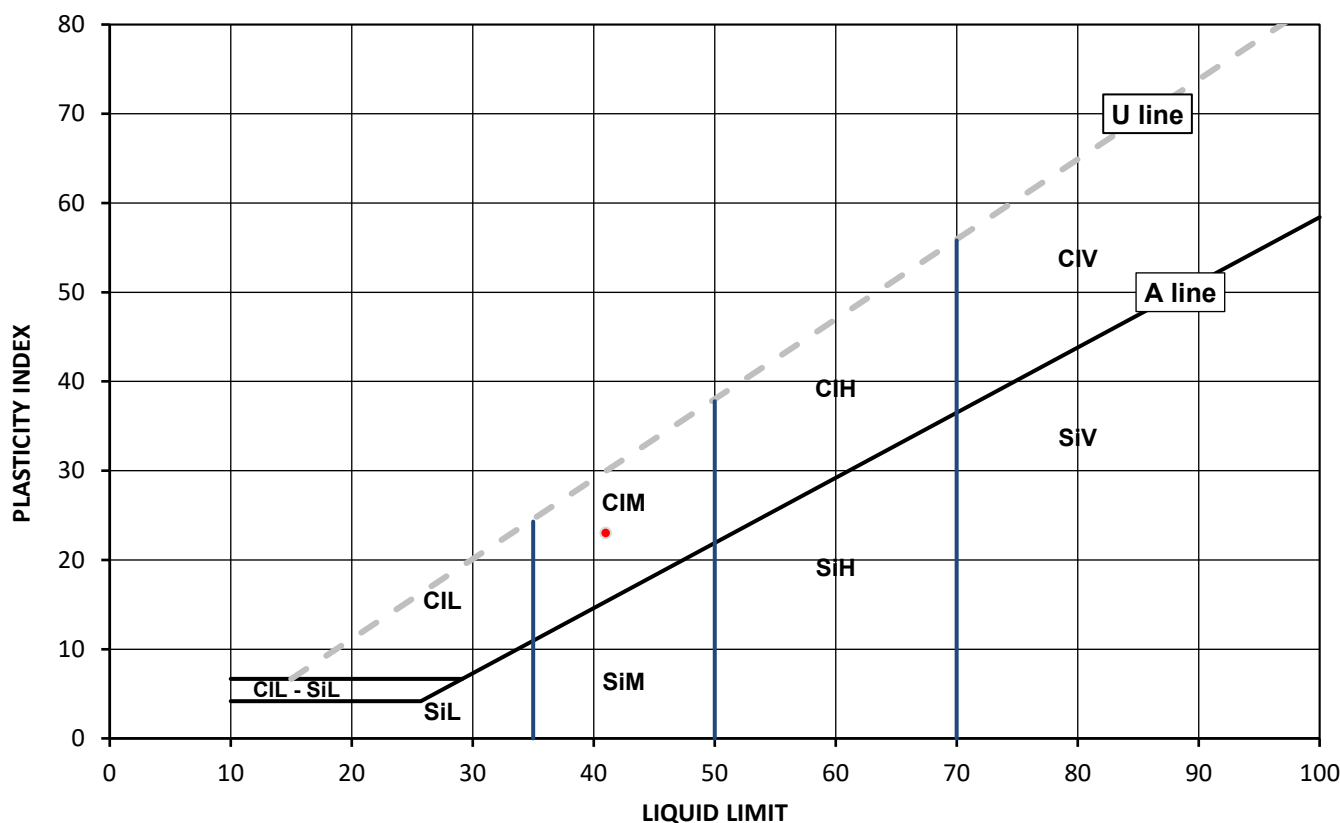
### Test Results:

Laboratory Reference: 639683  
Hole No.: TP107  
Sample Reference: Not Given  
Sample Description: Brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 3.00  
Depth Base [m]: 3.50  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 16.3                            | 41                  | 18                   | 23                      | -0.09                    | 1.09                       | 90                            |



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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

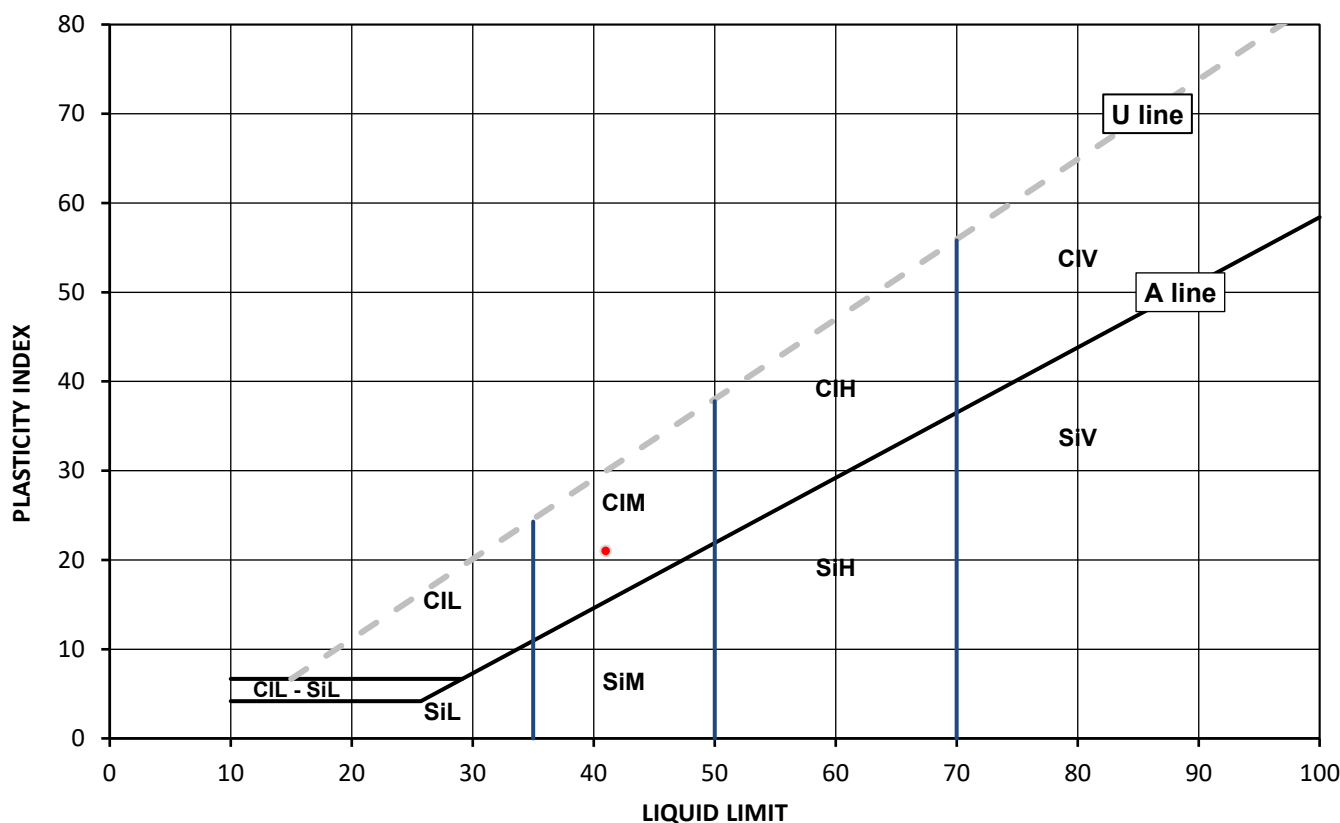
#### Test Results:

Laboratory Reference: 639685  
Hole No.: TP108  
Sample Reference: Not Given  
Sample Description: Yellowish brown slightly gravelly sandy CLAY

Depth Top [m]: 3.00  
Depth Base [m]: 3.20  
Sample Type: B

Sample Preparation: Tested after >0.425mm removed by hand; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 22.9                            | 41                  | 20                   | 21                      | 0.14                     | 0.86                       | 90                            |



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       | 50 to 70                                                |
|    | M Medium    | exceeding 70                                            |
|    | H High      | append to classification for organic material (eg CIHO) |
|    | V Very high |                                                         |
|    | O Organic   |                                                         |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

Remarks:

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
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 EN ISO 17892-12:2018+A2:2022,  
cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022,  
cl 5.2 and 6

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

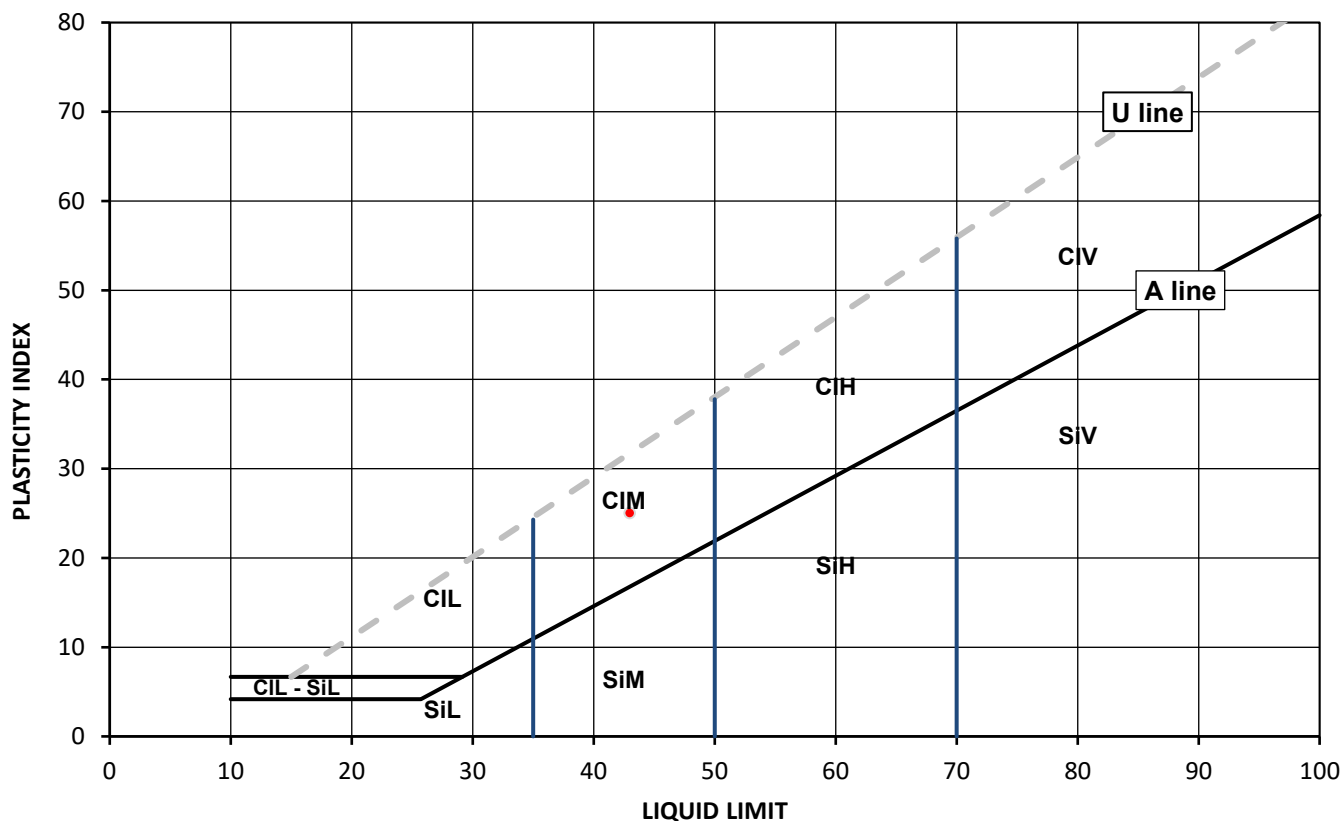
### Test Results:

Laboratory Reference: 639686  
Hole No.: TP109  
Sample Reference: Not Given  
Sample Description: Light brown gravelly slightly sandy CLAY

Depth Top [m]: 1.00  
Depth Base [m]: 1.30  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 11.2                            | 43                  | 18                   | 25                      | -0.28                    | 1.28                       | 46                            |



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 EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Site Address: Markfield

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Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

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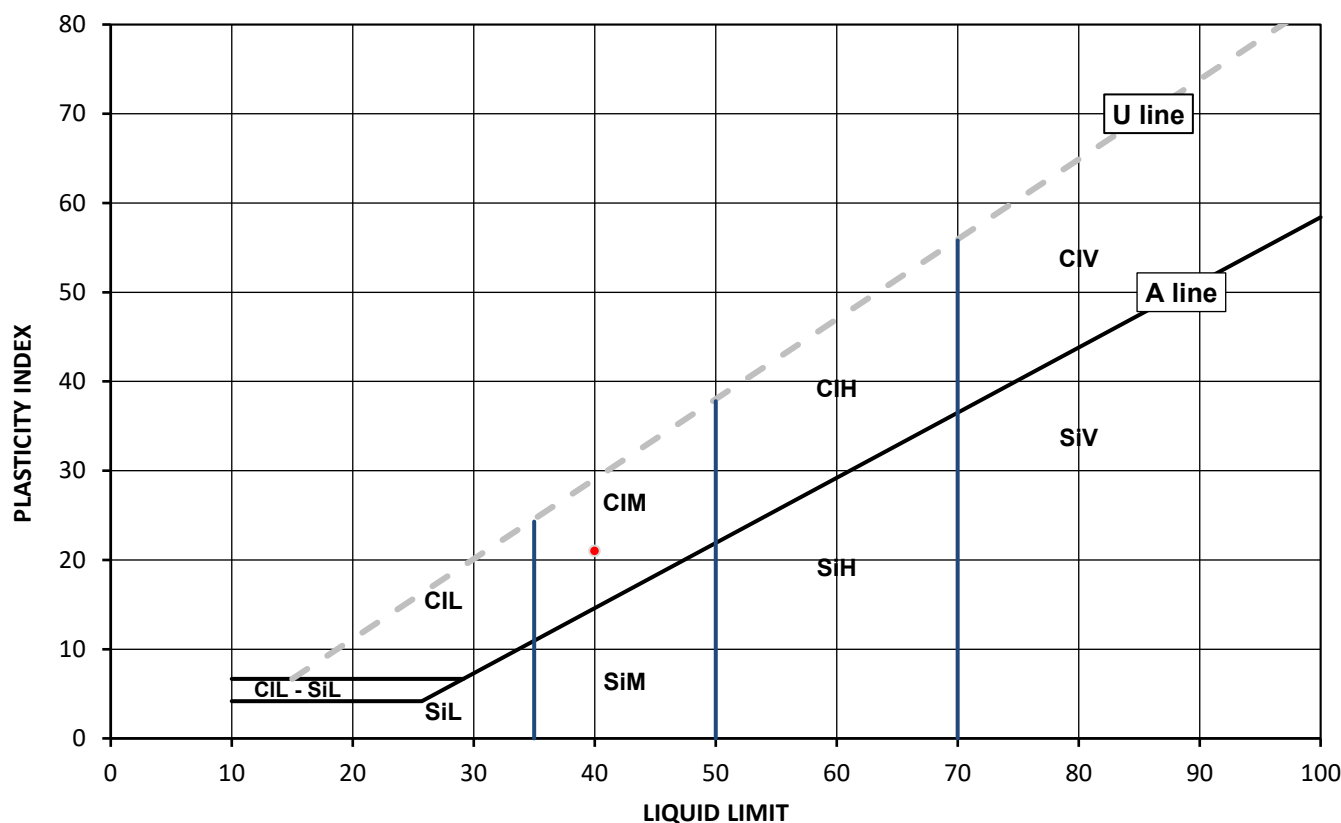
#### Test Results:

Laboratory Reference: 639687  
Hole No.: TP109  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 2.00  
Depth Base [m]: 2.20  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 12.8                            | 40                  | 19                   | 21                      | -0.29                    | 1.29                       | 85                            |



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                                                     |
| Si         | Silt | M            | Medium                                                  |
|            |      | H            | High                                                    |
|            |      | V            | Very high                                               |
|            |      | O            | Organic                                                 |
|            |      |              | append to classification for organic material (eg ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

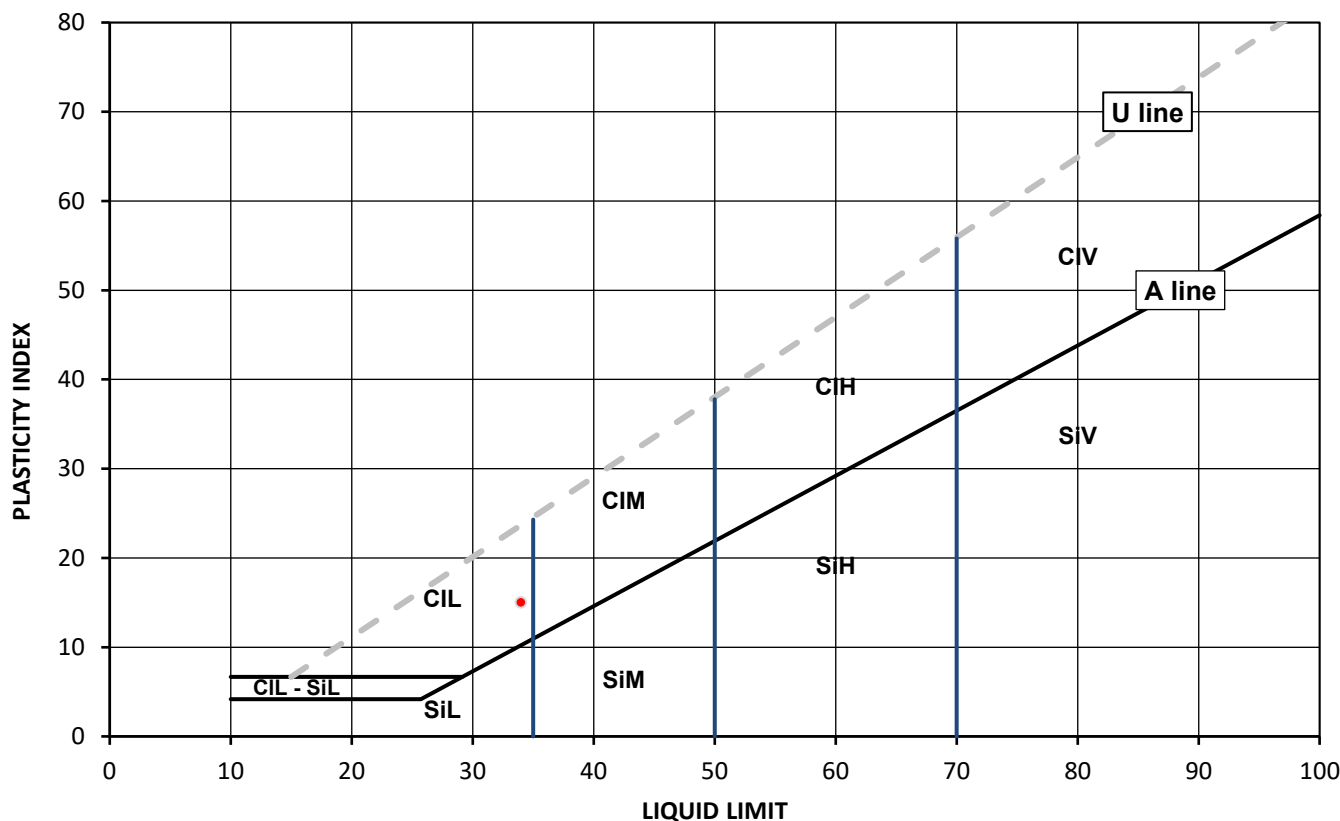
#### Test Results:

Laboratory Reference: 639688  
Hole No.: TP110  
Sample Reference: Not Given  
Sample Description: Light grey gravelly very sandy CLAY

Depth Top [m]: 0.30  
Depth Base [m]: 0.60  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 7.0                             | 34                  | 19                   | 15                      | -0.80                    | 1.80                       | 57                            |



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 EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 14/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

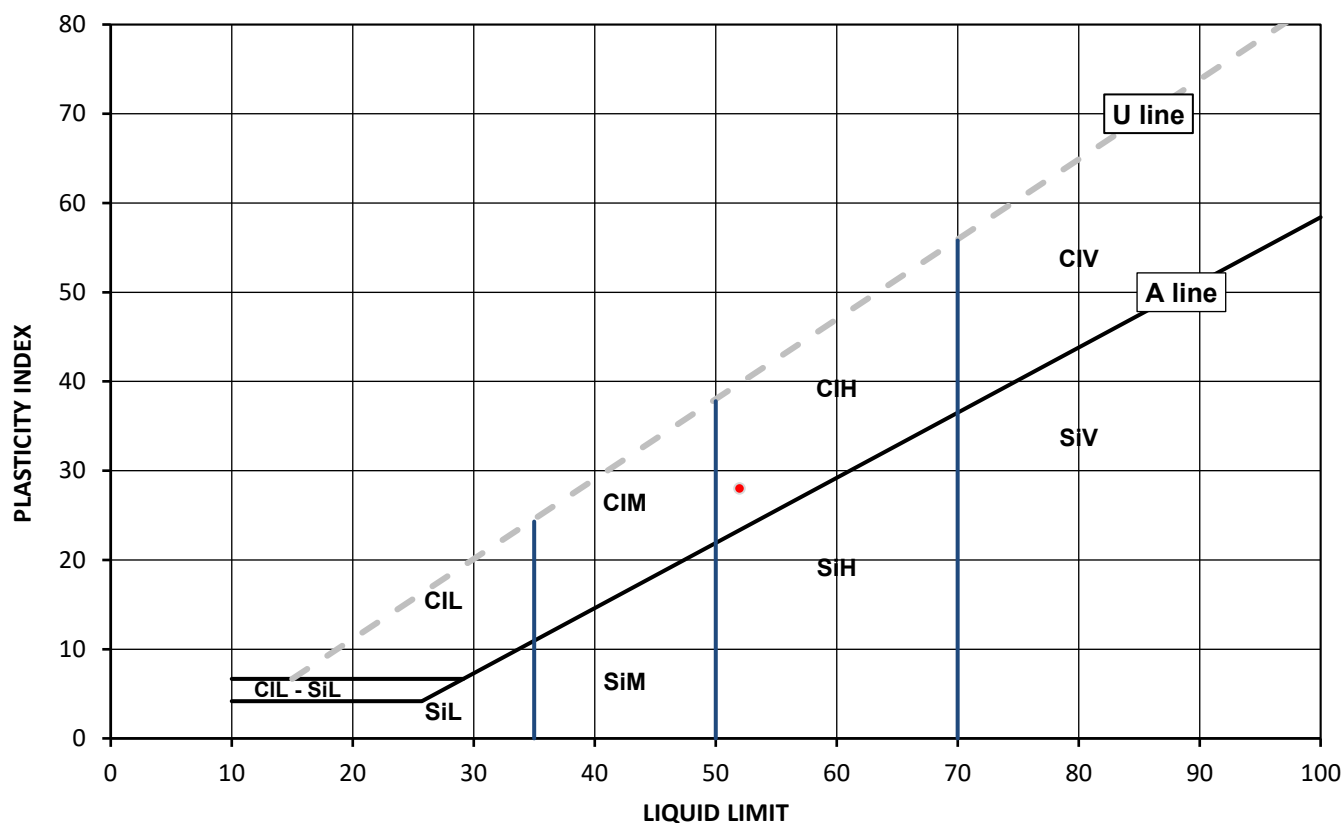
### Test Results:

Laboratory Reference: 639690  
Hole No.: TP111  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 2.50  
Depth Base [m]: 3.00  
Sample Type: B

Sample Preparation: Tested after >0.425mm removed by hand; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 14.4                            | 52                  | 24                   | 28                      | -0.36                    | 1.36                       | 86                            |



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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

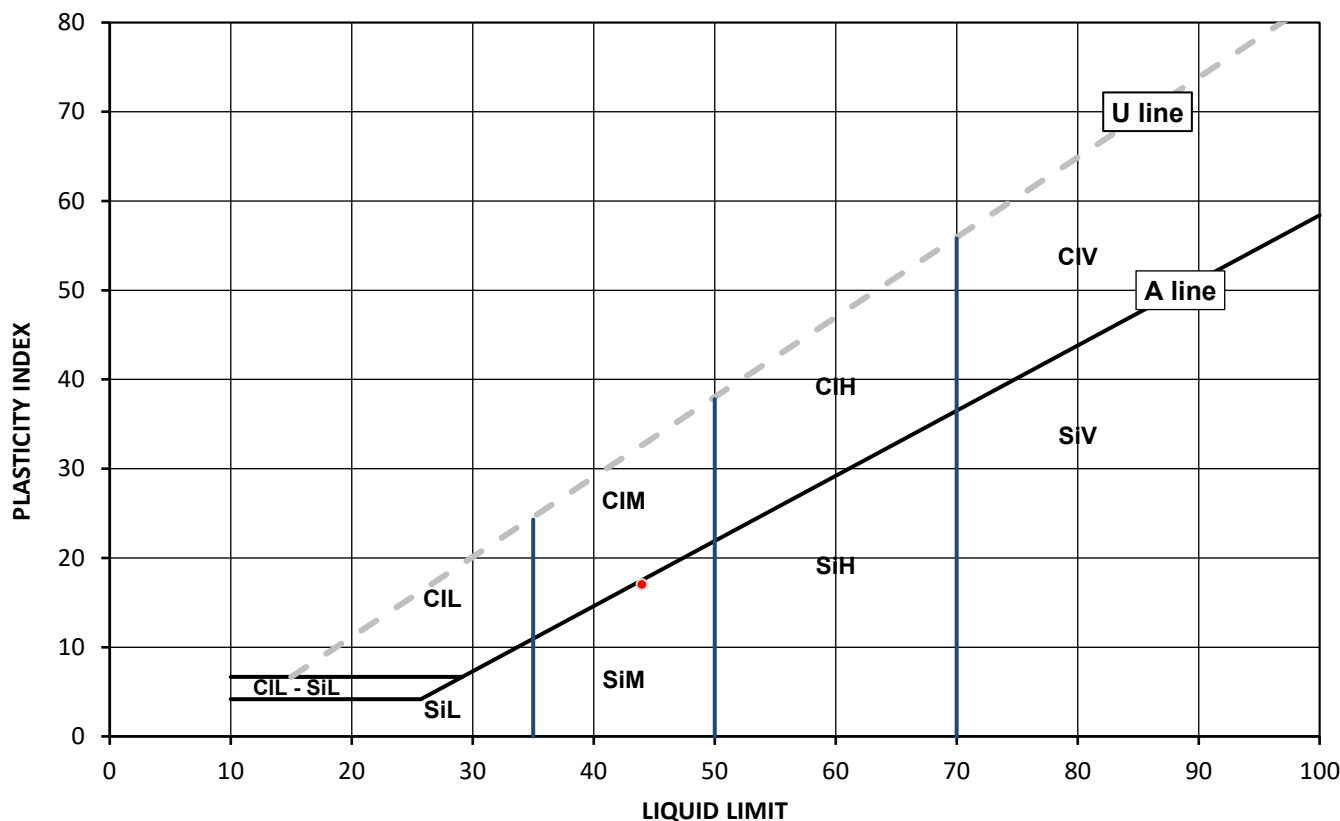
### Test Results:

Laboratory Reference: 639691  
Hole No.: TP112  
Sample Reference: Not Given  
Sample Description: Grey slightly gravelly sandy silty CLAY

Depth Top [m]: 0.10  
Depth Base [m]: 0.30  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 9.9                             | 44                  | 27                   | 17                      | -1.00                    | 2.00                       | 71                            |



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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Brackmills Industrial Estate  
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Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 24/07/2025  
Date Received: 31/07/2025  
Date Tested: 19/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

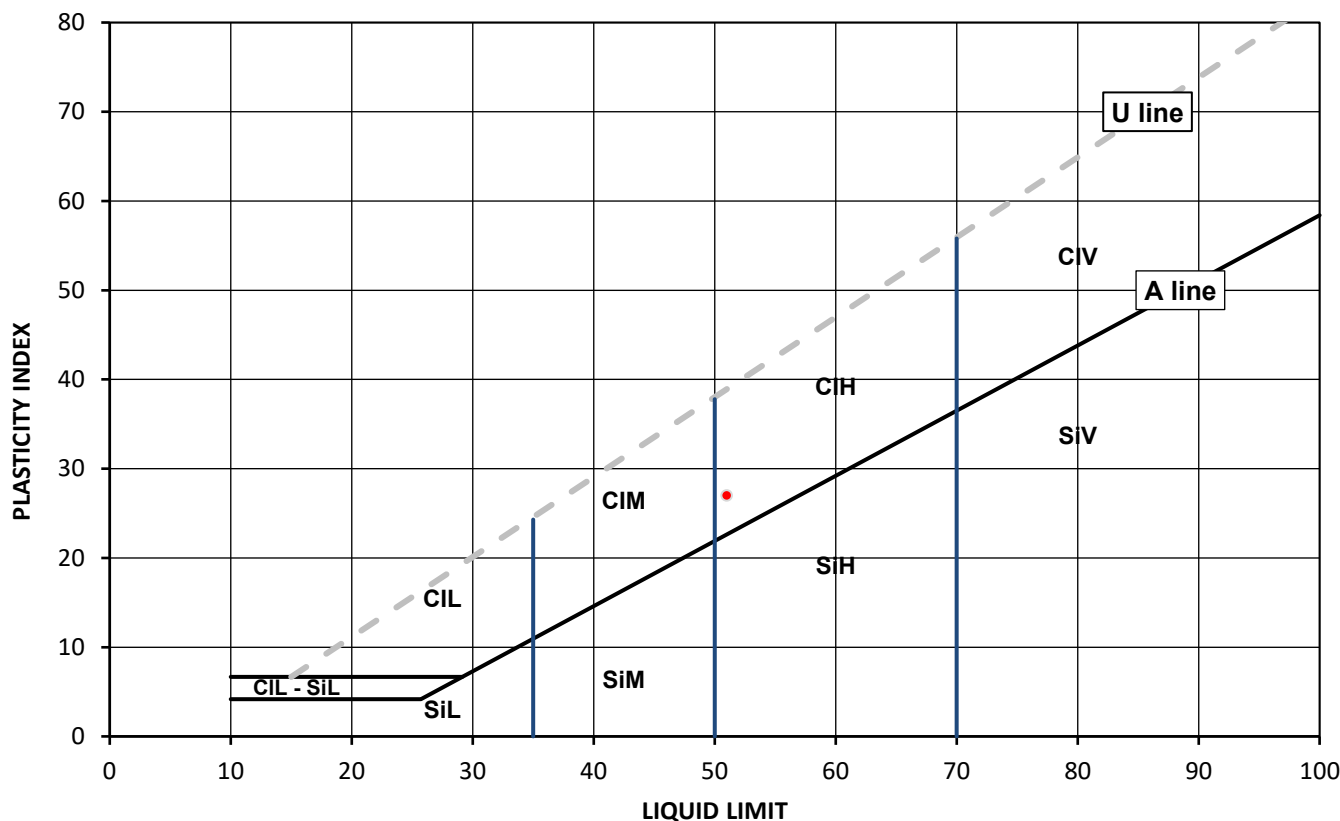
### Test Results:

Laboratory Reference: 639692  
Hole No.: TP112  
Sample Reference: Not Given  
Sample Description: Orangish brown slightly gravelly slightly sandy CLAY with chalk

Depth Top [m]: 2.30  
Depth Base [m]: 2.60  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 19.1                            | 51                  | 24                   | 27                      | -0.19                    | 1.19                       | 83                            |



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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Date Sampled: 24/07/2025  
Date Received: 31/07/2025  
Date Tested: 19/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

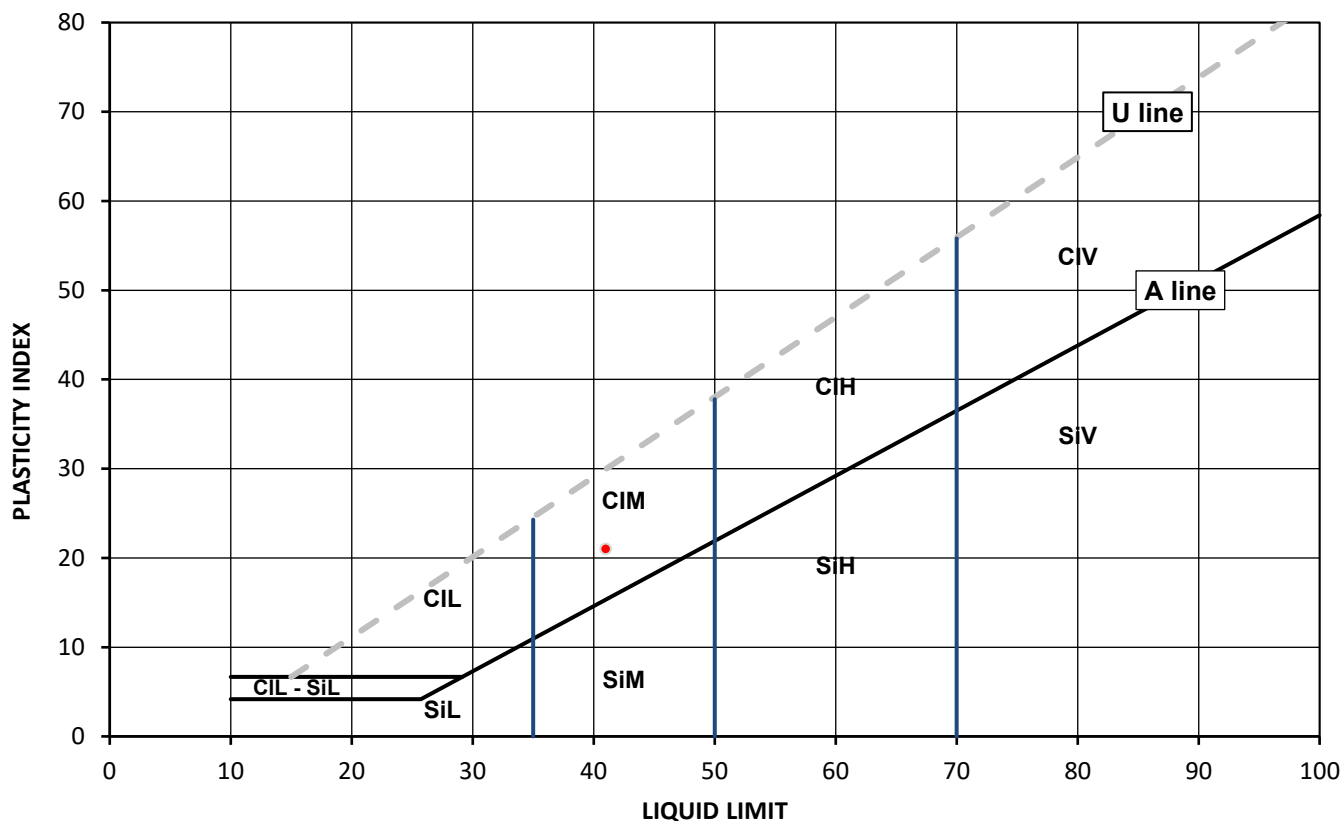
### Test Results:

Laboratory Reference: 639693  
Hole No.: TP113  
Sample Reference: Not Given  
Sample Description: Light brown sandy CLAY

Depth Top [m]: 0.45  
Depth Base [m]: 0.58  
Sample Type: B

Sample Preparation: Tested in natural condition; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 16.5                            | 41                  | 20                   | 21                      | -0.14                    | 1.14                       | 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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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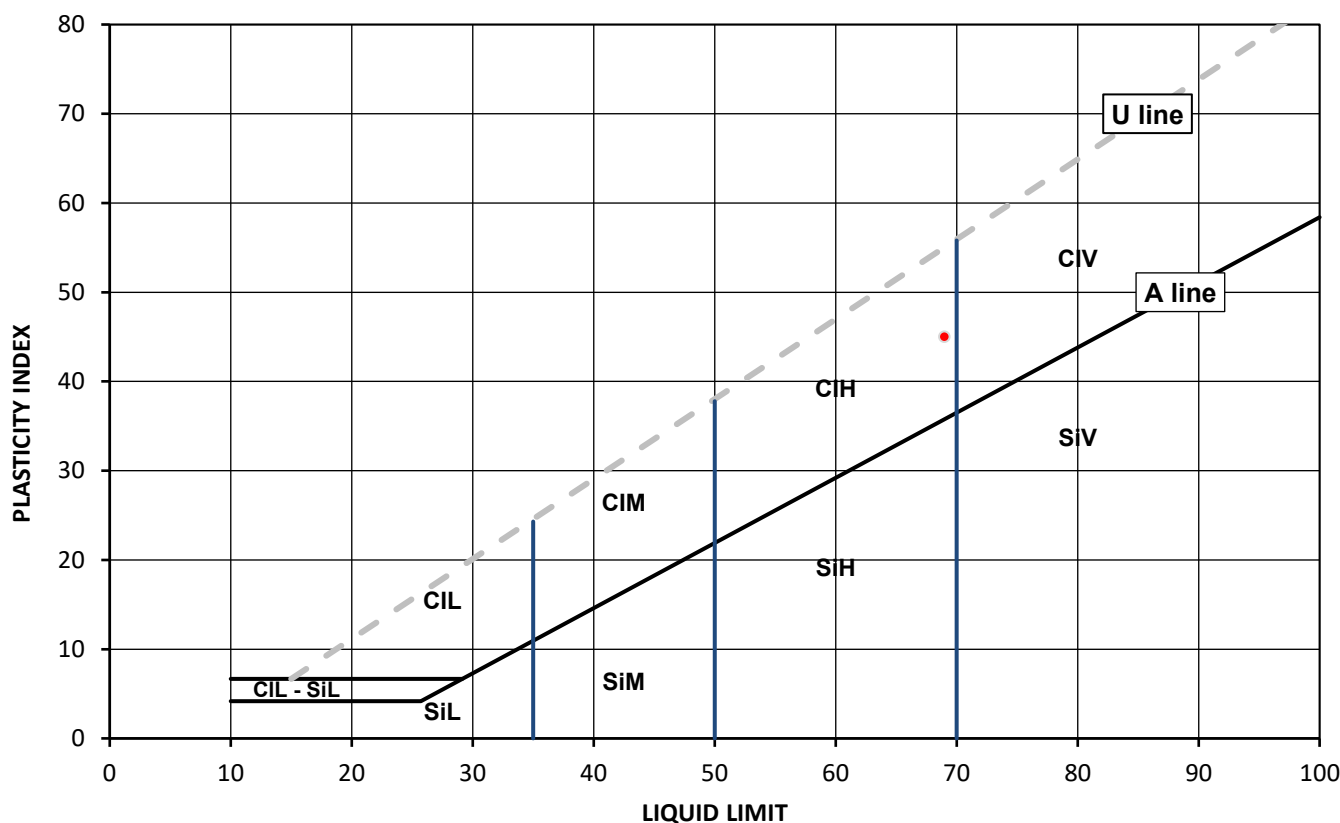
### Test Results:

Laboratory Reference: 639694  
Hole No.: TP113  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 2.20  
Depth Base [m]: 2.60  
Sample Type: B

Sample Preparation: Tested after >0.425mm removed by hand; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 19.4                            | 69                  | 24                   | 45                      | -0.11                    | 1.11                       | 92                            |



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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 19/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

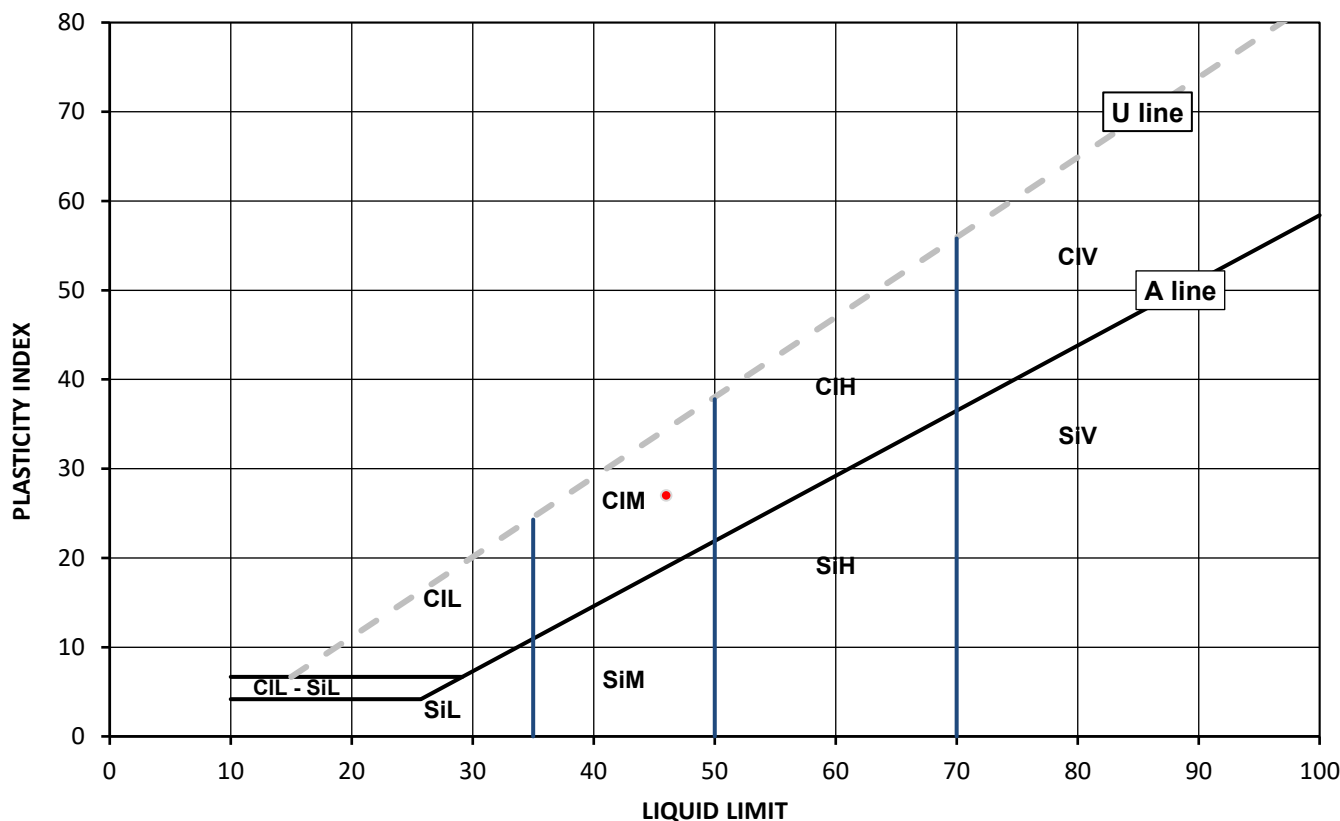
#### Test Results:

Laboratory Reference: 639695  
Hole No.: TP115  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY with chalk

Depth Top [m]: 0.40  
Depth Base [m]: 0.50  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 10.3                            | 46                  | 19                   | 27                      | -0.33                    | 1.33                       | 87                            |



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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

Remarks:

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
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 EN ISO 17892-12:2018+A2:2022,  
cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022,  
cl 5.2 and 6

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 19/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

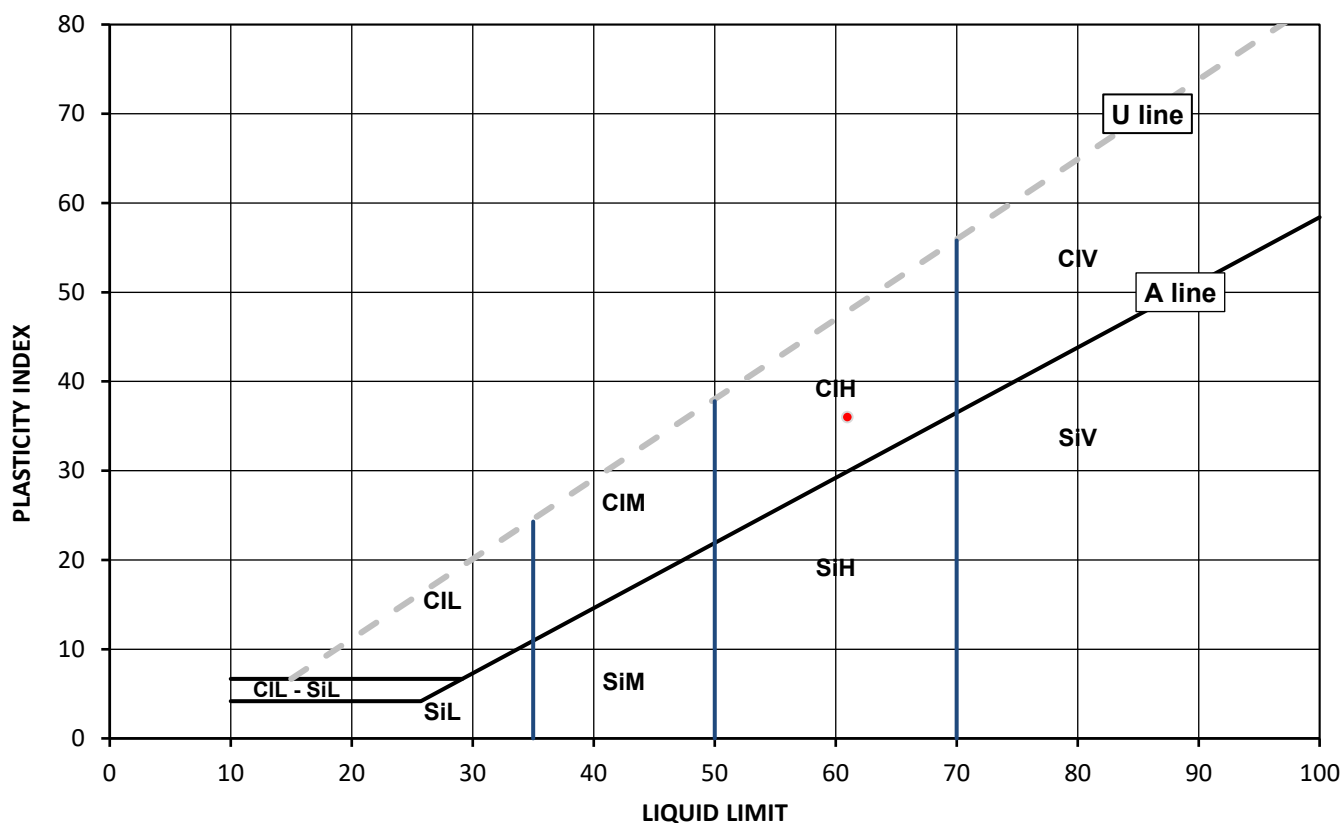
#### Test Results:

Laboratory Reference: 639697  
Hole No.: TP116  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 2.00  
Depth Base [m]: 2.50  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 15.5                            | 61                  | 25                   | 36                      | -0.25                    | 1.25                       | 93                            |



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 EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Date Tested: 19/08/2025  
Sampled By: Not Given

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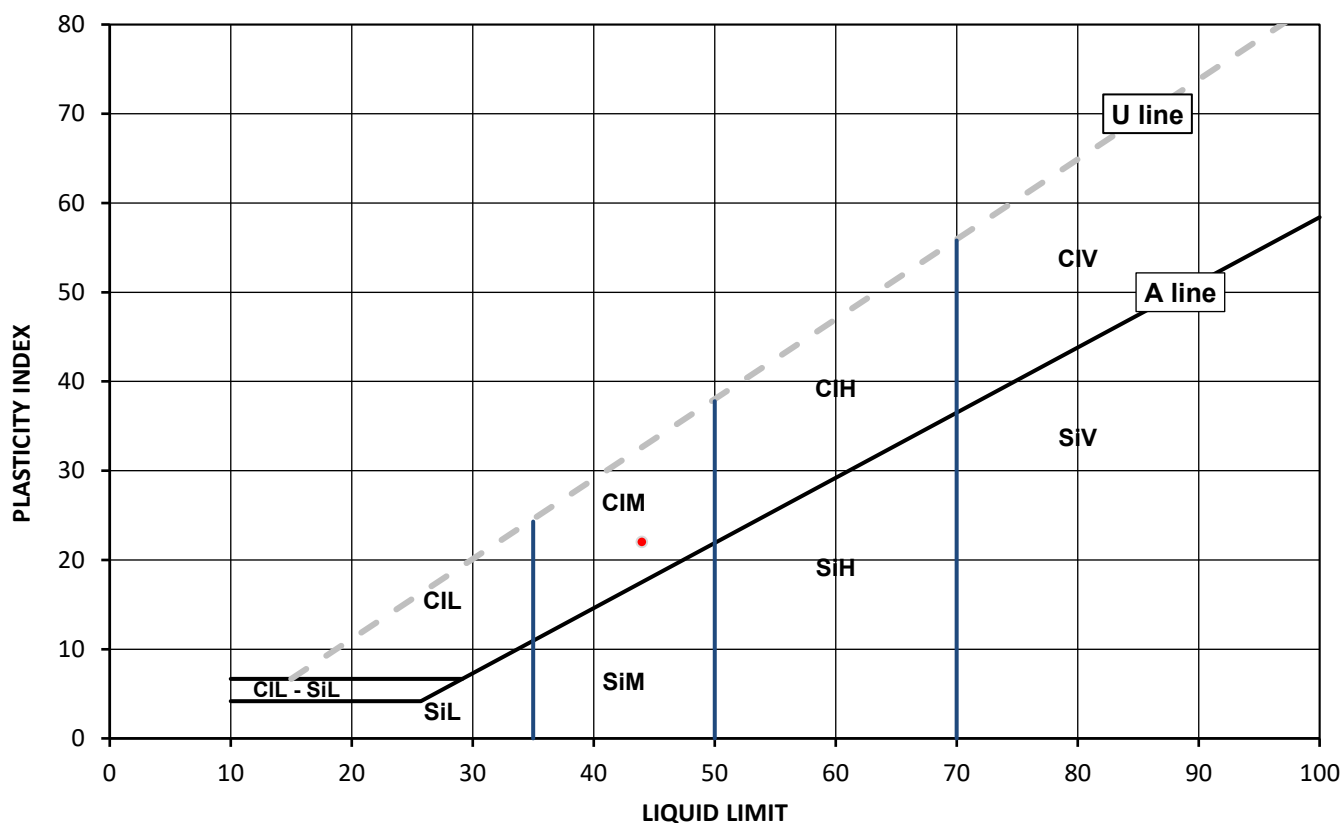
#### Test Results:

Laboratory Reference: 639698  
Hole No.: TP118  
Sample Reference: Not Given  
Sample Description: Orangish brown slightly gravelly slight sandy CLAY

Depth Top [m]: 0.50  
Depth Base [m]: 1.00  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 16.5                            | 44                  | 22                   | 22                      | -0.23                    | 1.23                       | 79                            |



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

|    | Plasticity | Liquid Limit                                            |
|----|------------|---------------------------------------------------------|
| Cl | Clay       | 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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Sampled By: Not Given

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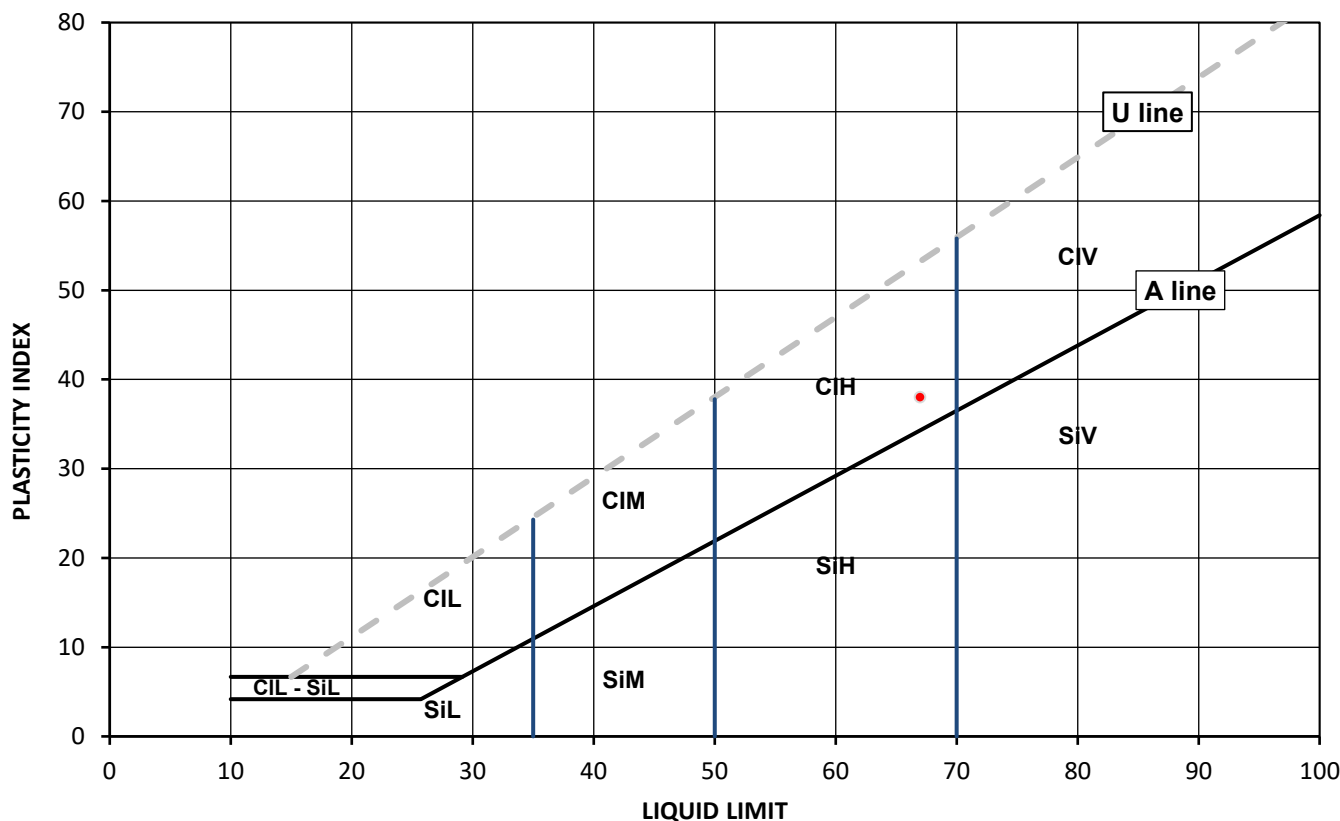
#### Test Results:

Laboratory Reference: 639702  
Hole No.: TP121  
Sample Reference: Not Given  
Sample Description: Light brown slightly sandy CLAY

Depth Top [m]: 0.80  
Depth Base [m]: 1.00  
Sample Type: B

Sample Preparation: Tested in natural condition; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 26.7                            | 67                  | 29                   | 38                      | -0.05                    | 1.05                       | 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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

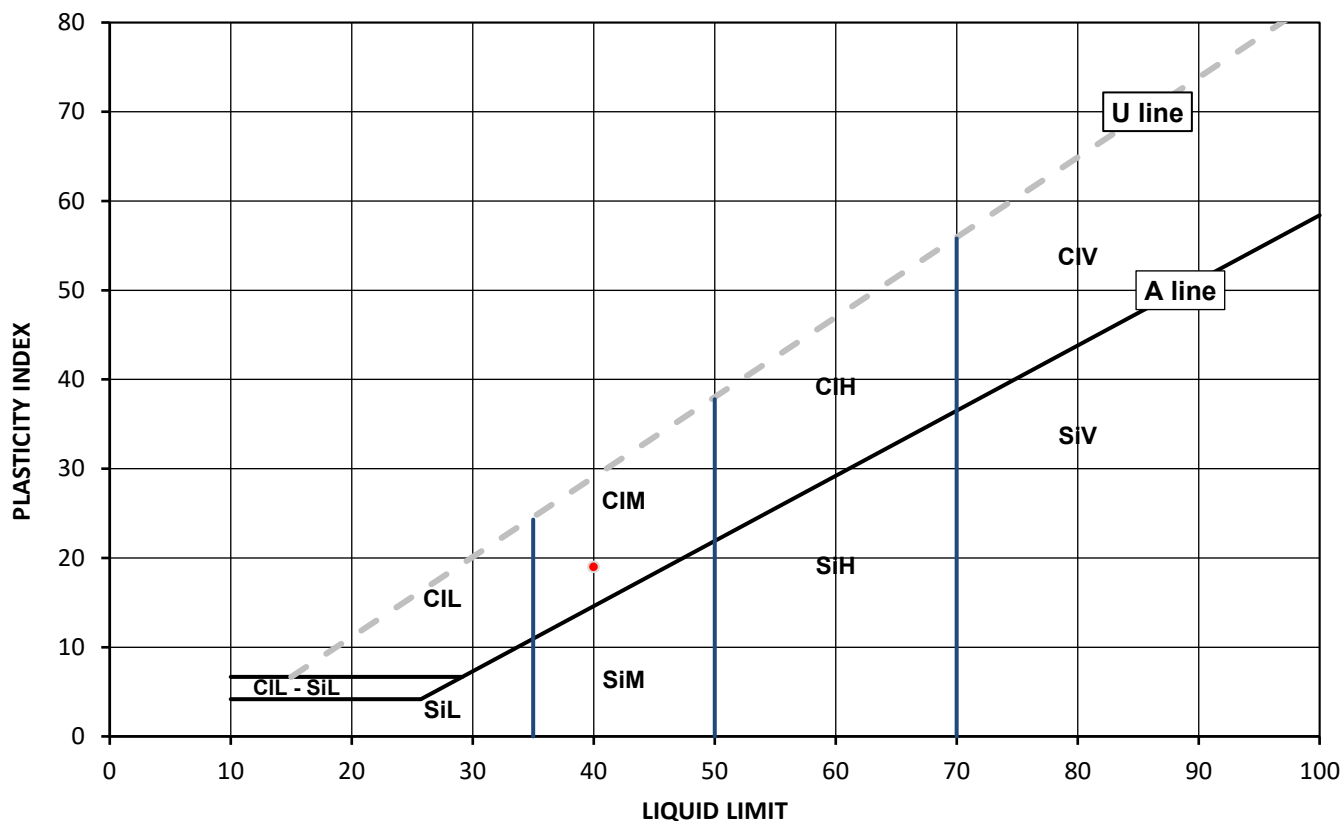
### Test Results:

Laboratory Reference: 639703  
Hole No.: TP121  
Sample Reference: Not Given  
Sample Description: Reddish brown slightly sandy CLAY

Depth Top [m]: 2.50  
Depth Base [m]: 3.00  
Sample Type: B

Sample Preparation: Tested after >0.425mm removed by hand; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 19.1                            | 40                  | 21                   | 19                      | -0.11                    | 1.11                       | 99                            |



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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

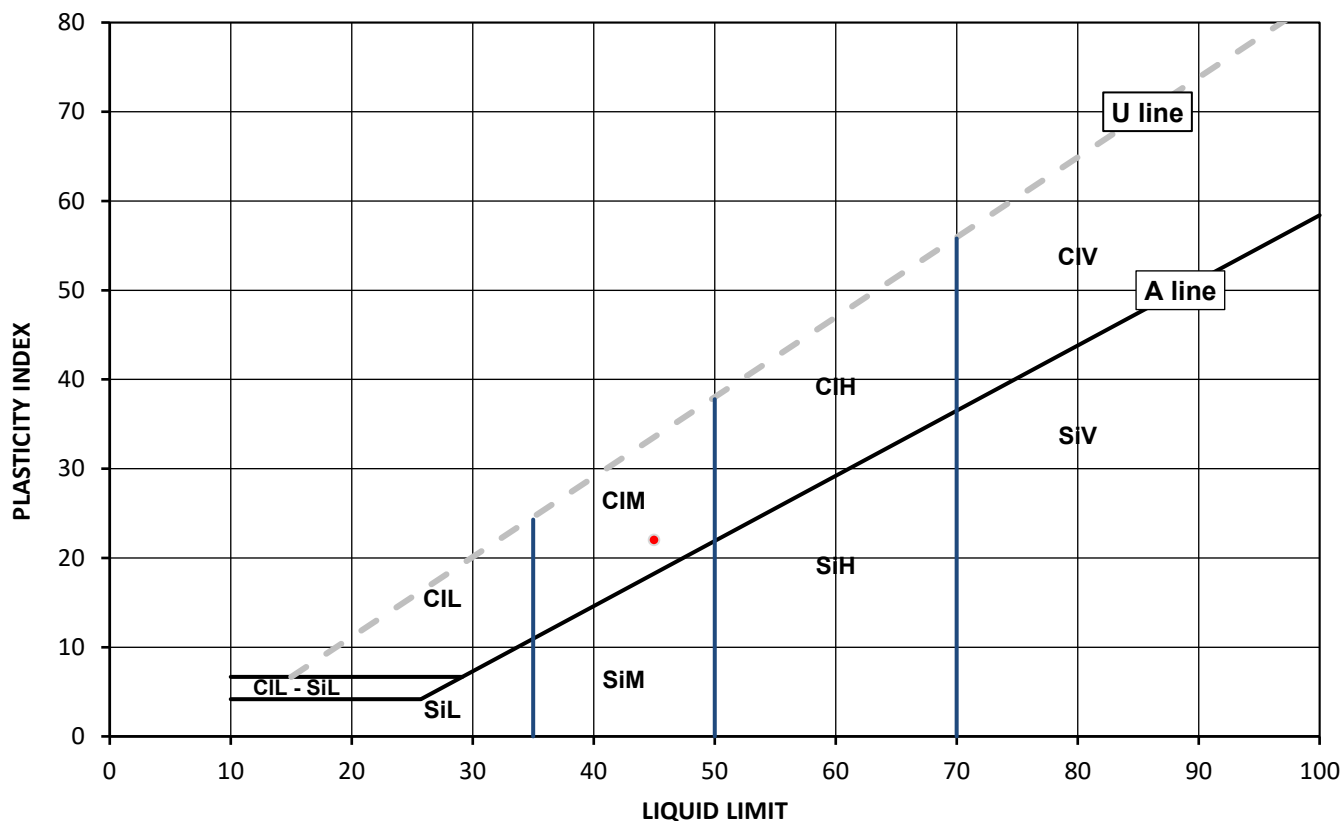
#### Test Results:

Laboratory Reference: 639704  
Hole No.: RH101  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 6.00  
Depth Base [m]: 7.00  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 12.2                            | 45                  | 23                   | 22                      | -0.50                    | 1.50                       | 85                            |



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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Contact: Alex Tabb  
Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

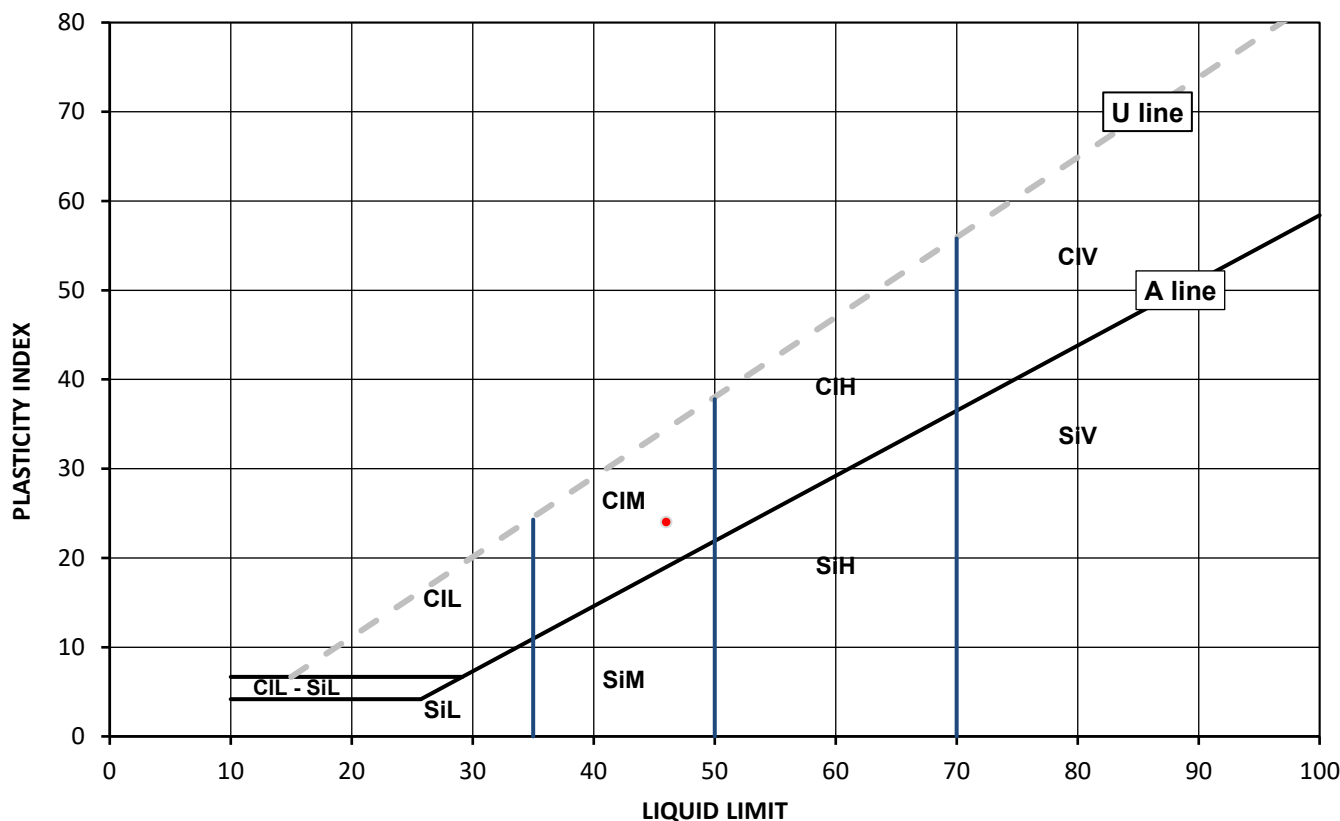
#### Test Results:

Laboratory Reference: 639705  
Hole No.: RH102  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 3.00  
Depth Base [m]: 4.00  
Sample Type: B

Sample Preparation: Tested after >0.425mm removed by hand; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 22.0                            | 46                  | 22                   | 24                      | 0.00                     | 1.00                       | 85                            |



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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

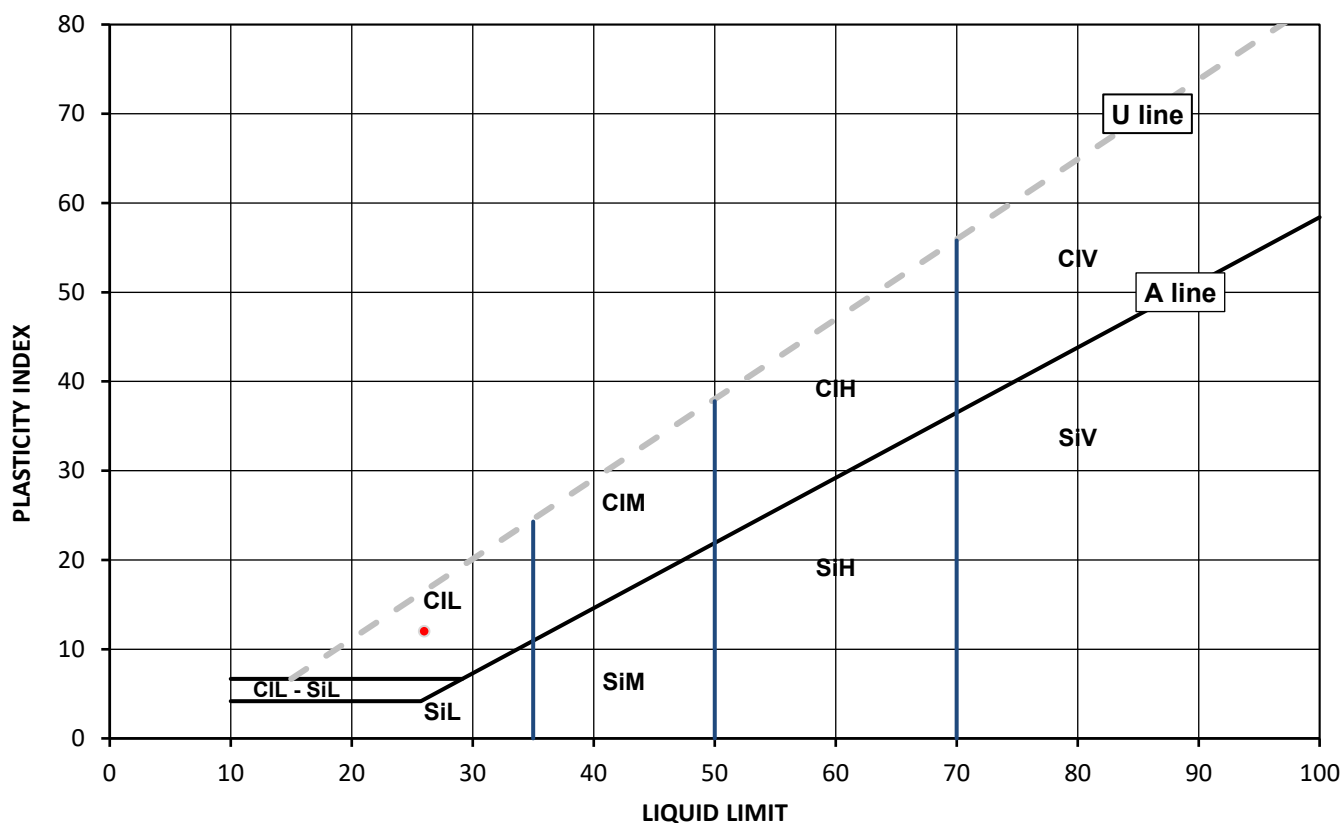
### Test Results:

Laboratory Reference: 639706  
Hole No.: RH104  
Sample Reference: Not Given  
Sample Description: Brown slightly gravelly very sandy CLAY

Depth Top [m]: 3.00  
Depth Base [m]: 4.00  
Sample Type: B

Sample Preparation: Tested after >0.425mm removed by hand; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 12.1                            | 26                  | 14                   | 12                      | -0.17                    | 1.17                       | 84                            |



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 EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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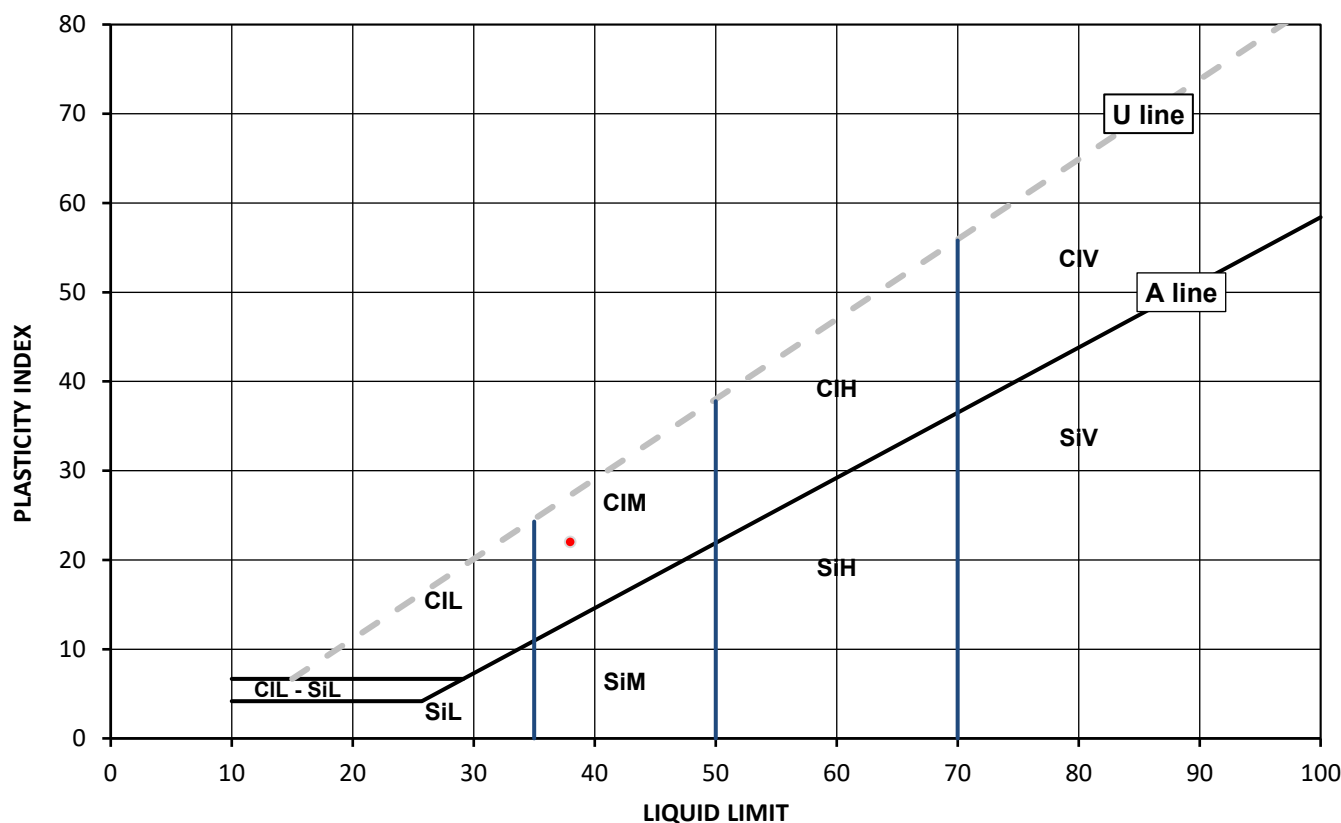
#### Test Results:

Laboratory Reference: 639707  
Hole No.: RH105  
Sample Reference: Not Given  
Sample Description: Brown slightly gravelly sandy CLAY

Depth Top [m]: 4.00  
Depth Base [m]: 5.00  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 15.4                            | 38                  | 16                   | 22                      | -0.05                    | 1.05                       | 84                            |



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 ClHO) |

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Sampled By: Not Given

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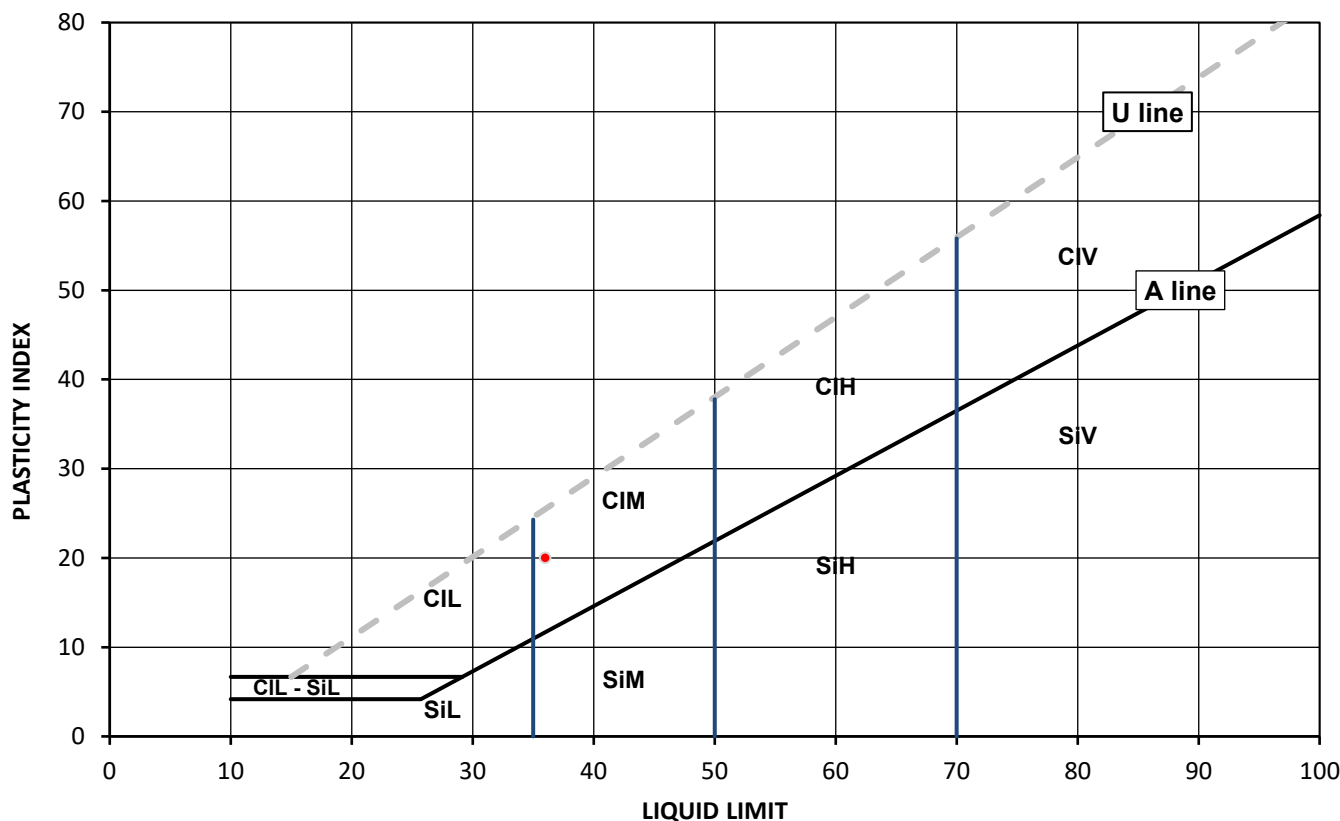
#### Test Results:

Laboratory Reference: 639708  
Hole No.: RH106  
Sample Reference: Not Given  
Sample Description: Reddish brown slightly gravelly sandy CLAY

Depth Top [m]: 3.50  
Depth Base [m]: 4.00  
Sample Type: B

Sample Preparation: Tested after >0.425mm removed by hand; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 12.4                            | 36                  | 16                   | 20                      | -0.20                    | 1.20                       | 92                            |



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 ClHO) |

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## DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022,  
cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022,  
cl 5.2 and 6

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

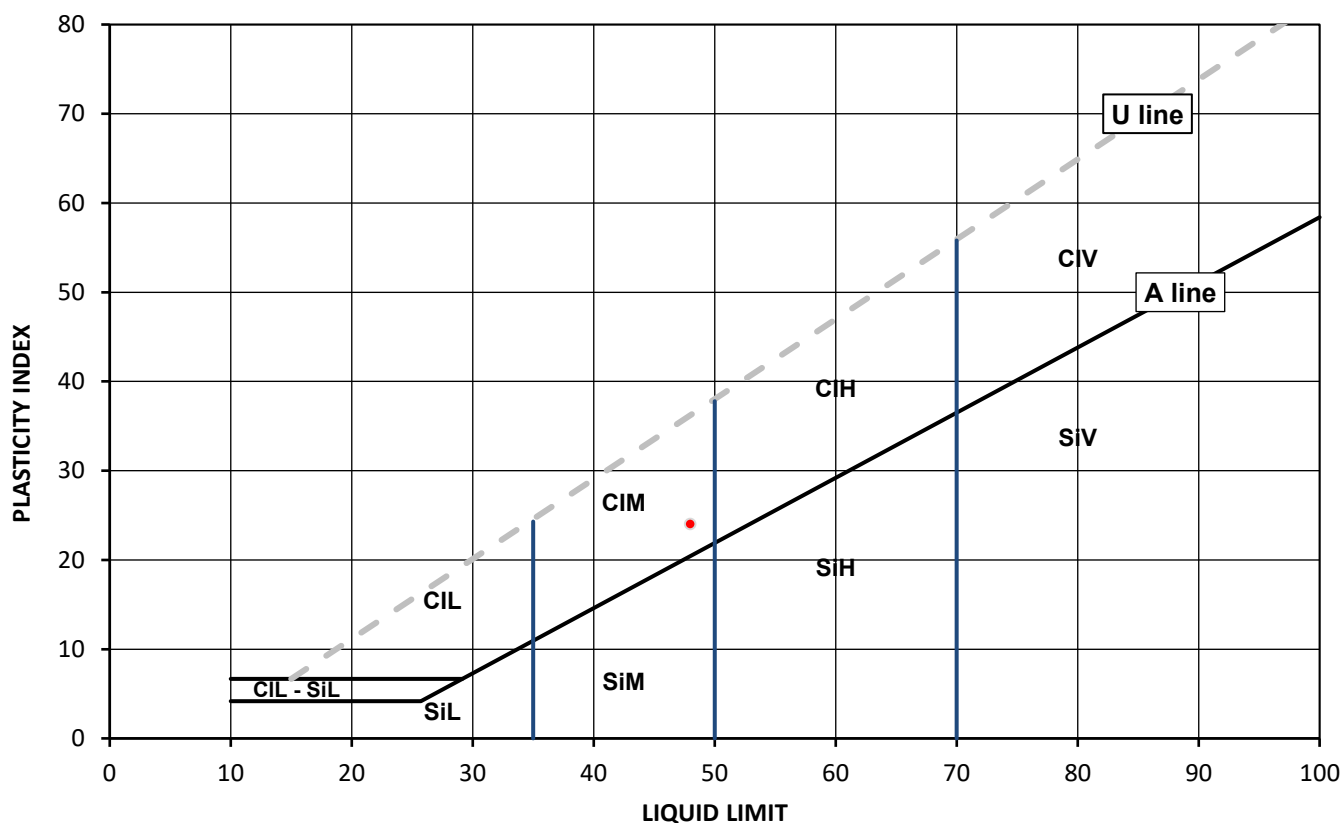
### Test Results:

Laboratory Reference: 639709  
Hole No.: RH107  
Sample Reference: Not Given  
Sample Description: Reddish brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 4.00  
Depth Base [m]: 5.00  
Sample Type: B

Sample Preparation: Tested after >0.425mm removed by hand; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 36.9                            | 48                  | 24                   | 24                      | 0.54                     | 0.46                       | 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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

Remarks:

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
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 EN ISO 17892-12:2018+A2:2022,  
cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022,  
cl 5.2 and 6

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Environmental Science

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Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

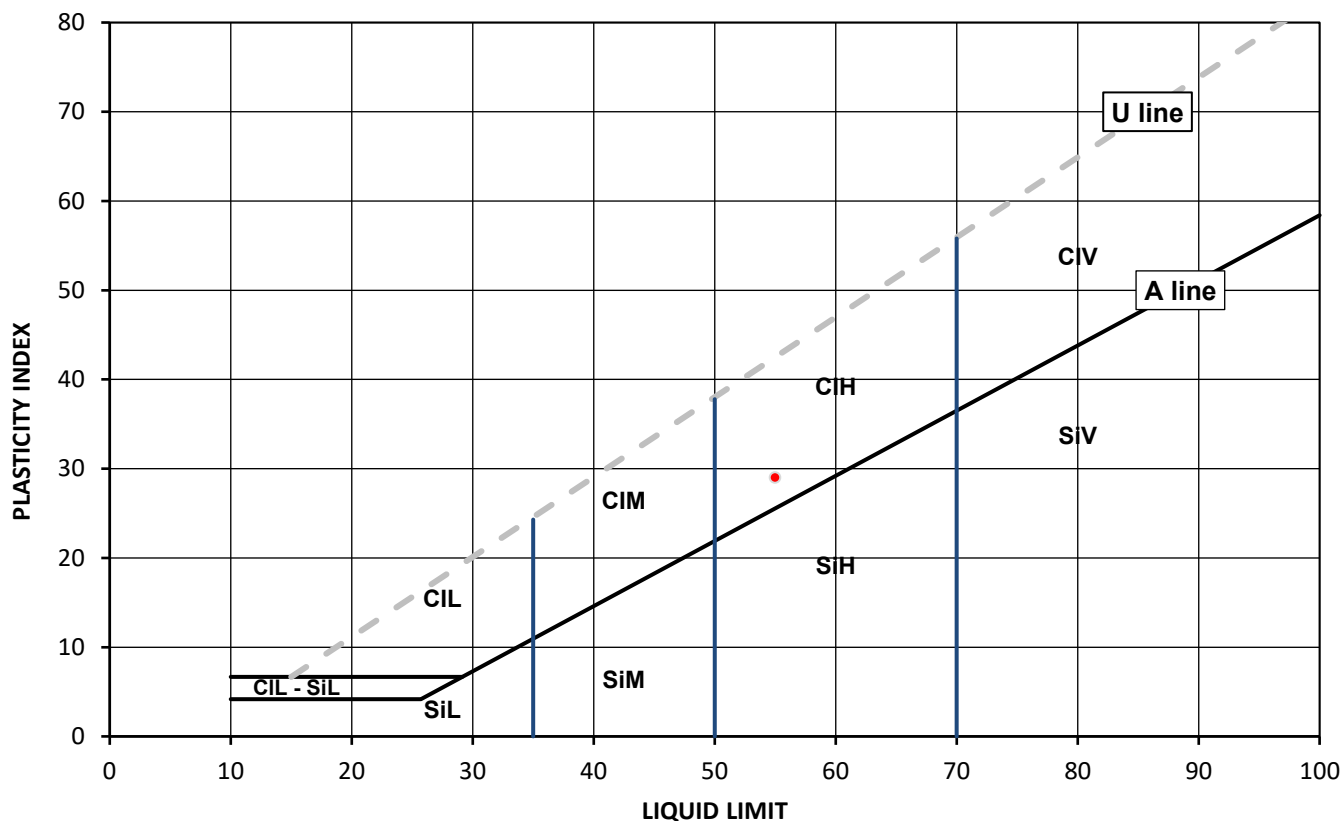
### Test Results:

Laboratory Reference: 639710  
Hole No.: RH108  
Sample Reference: Not Given  
Sample Description: Reddish brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 4.00  
Depth Base [m]: 6.00  
Sample Type: B

Sample Preparation: Tested after >0.425mm removed by hand; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 28.9                            | 55                  | 26                   | 29                      | 0.10                     | 0.90                       | 94                            |



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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

Remarks:

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cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022,  
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Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

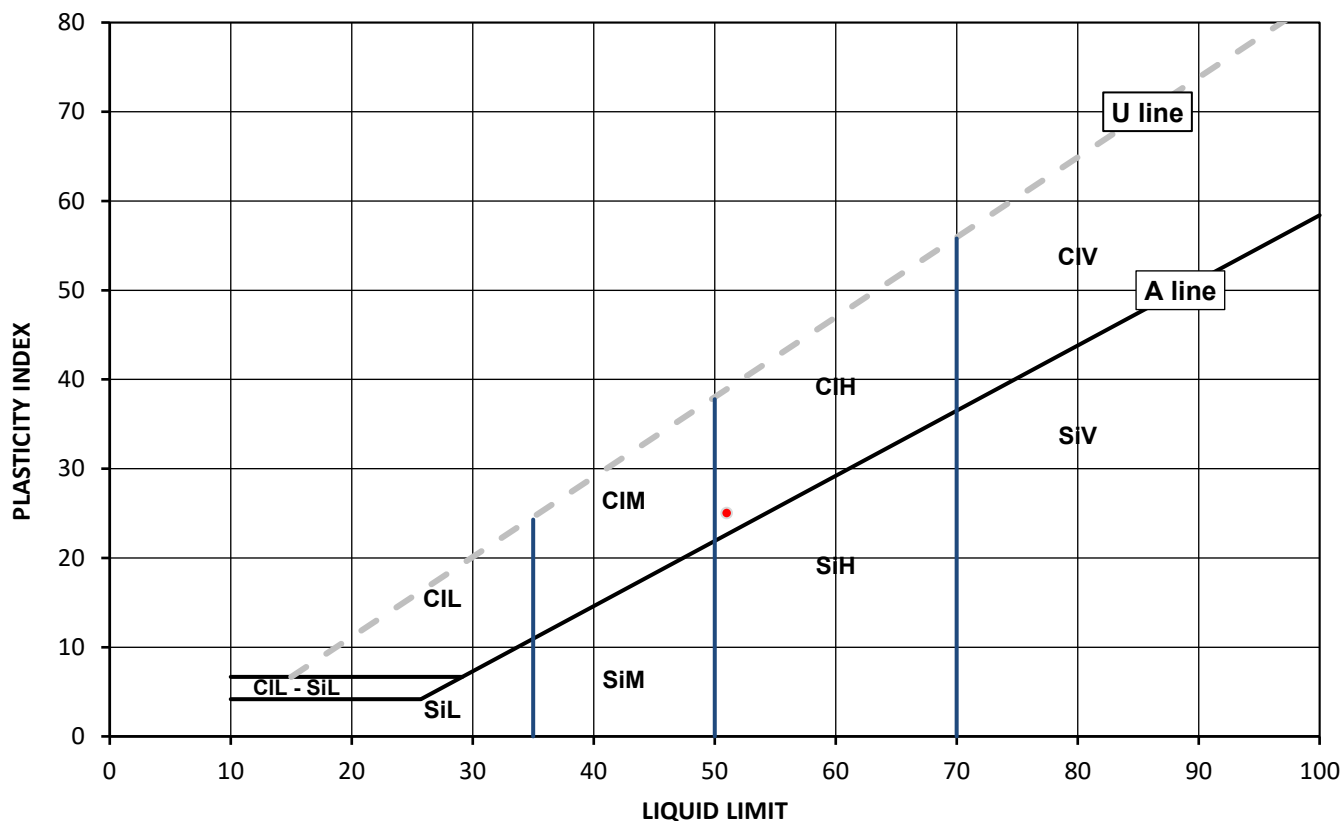
### Test Results:

Laboratory Reference: 639711  
Hole No.: RH109  
Sample Reference: Not Given  
Sample Description: Reddish brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 5.00  
Depth Base [m]: 6.00  
Sample Type: B

Sample Preparation: Tested after >0.425mm removed by hand; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 19.2                            | 51                  | 26                   | 25                      | -0.28                    | 1.28                       | 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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

Remarks:

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# TEST CERTIFICATE

## DETERMINATION OF LIQUID AND PLASTIC LIMITS

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Environmental Science

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Client Address: Coniston House, Louisa Street,  
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Contact: Alex Tabb  
Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

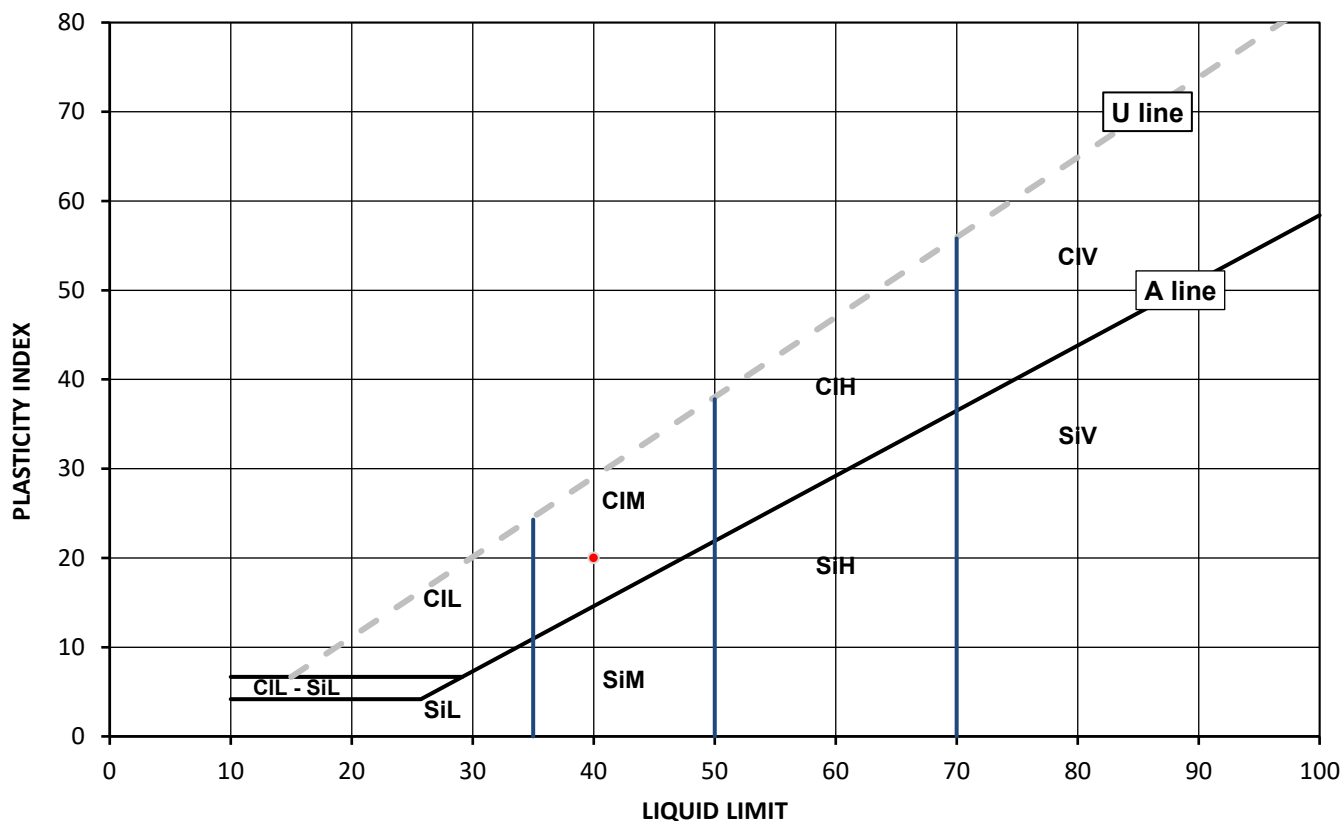
### Test Results:

Laboratory Reference: 639712  
Hole No.: RH110  
Sample Reference: Not Given  
Sample Description: Reddish brown slightly gravelly sandy CLAY

Depth Top [m]: 7.50  
Depth Base [m]: 8.00  
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased  
Cone Type: 80g/30deg

| As Received Water Content [W] % | Liquid Limit [WL] % | Plastic Limit [Wp] % | Plasticity Index [Ip] % | Liquidity Index [IL] % # | Consistency Index [IC] % # | % Passing 425µm BS Test Sieve |
|---------------------------------|---------------------|----------------------|-------------------------|--------------------------|----------------------------|-------------------------------|
| 13.7                            | 40                  | 20                   | 20                      | -0.30                    | 1.30                       | 93                            |



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 ClHO) |

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

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# SUMMARY REPORT

## SUMMARY OF CLASSIFICATION TEST RESULTS

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Northampton NN4 7EB



Environmental Science

4041

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Contact: Alex Tabb

Site Address: Markfield

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BS EN ISO 17892-12:2018+A2:2022 cl 5.3 and 5.5, Fall Cone Method, 4 Pt  
Test, BS 1377-2:2022, cl 5.2 and 6. W by BS EN ISO 17892-1:2014+A1:2022.

Client Reference: 4467

Job Number: 25-041823-1

Date Sampled: 23/07 - 25/07/2025

Date Received: 31/07/2025

Date Tested: 13/08/2025

Sampled By: Not Given

### Test results

| Laboratory Reference | Hole No. | Sample    |           |            |      | Description                                       | Remarks           | W    | Liquid & Plastic Limit |      |                    |    |    |            |                    |       | Density |      |  |
|----------------------|----------|-----------|-----------|------------|------|---------------------------------------------------|-------------------|------|------------------------|------|--------------------|----|----|------------|--------------------|-------|---------|------|--|
|                      |          | Reference | Depth Top | Depth Base | Type |                                                   |                   |      | % Passing 425um        | WL * | Correlation Factor | Wp | Ip | Cone type  | Sample Preparation | bulk  | dry     | PD   |  |
|                      |          |           | m         | m          |      |                                                   |                   |      | %                      | %    |                    | %  | %  |            |                    | Mg/m3 | Mg/m3   | Mg/m |  |
| 639675               | TP101    | Not Given | 2.00      | 2.50       | B    | Light brown slightly gravelly slightly sandy CLAY | Atterberg 4 Point | 19.1 | 84                     | 53   | -                  | 21 | 32 | 80g/30 deg | R / I              |       |         |      |  |
| 639678               | TP103    | Not Given | 2.50      | 3.00       | B    | Light brown slightly gravelly slightly sandy CLAY | Atterberg 4 Point | 23.1 | 89                     | 45   | -                  | 22 | 23 | 80g/30 deg | WR / I             |       |         |      |  |
| 639679               | TP104    | Not Given | 2.80      | 3.10       | B    | Light brown slightly gravelly slightly sandy CLAY | Atterberg 4 Point | 26.0 | 92                     | 50   | -                  | 25 | 25 | 80g/30 deg | R / I              |       |         |      |  |
| 639680               | TP105    | Not Given | 2.50      | 3.00       | B    | Light brown slightly gravelly slightly sandy CLAY | Atterberg 4 Point | 23.1 | 95                     | 59   | -                  | 23 | 36 | 80g/30 deg | WR / I             |       |         |      |  |
| 639681               | TP106    | Not Given | 0.40      | 0.50       | B    | Light brown slightly gravelly slightly sandy CLAY | Atterberg 4 Point | 22.2 | 88                     | 54   | -                  | 23 | 31 | 80g/30 deg | WR / I             |       |         |      |  |
| 639683               | TP107    | Not Given | 3.00      | 3.50       | B    | Brown slightly gravelly slightly sandy CLAY       | Atterberg 4 Point | 16.3 | 90                     | 41   | -                  | 18 | 23 | 80g/30 deg | WR / I             |       |         |      |  |
| 639685               | TP108    | Not Given | 3.00      | 3.20       | B    | Yellowish brown slightly gravelly sandy CLAY      | Atterberg 4 Point | 22.9 | 90                     | 41   | -                  | 20 | 21 | 80g/30 deg | R / I              |       |         |      |  |
| 639686               | TP109    | Not Given | 1.00      | 1.30       | B    | Light brown gravelly slightly sandy CLAY          | Atterberg 4 Point | 11.2 | 46                     | 43   | -                  | 18 | 25 | 80g/30 deg | WR / I             |       |         |      |  |
| 639687               | TP109    | Not Given | 2.00      | 2.20       | B    | Light brown slightly gravelly slightly sandy CLAY | Atterberg 4 Point | 12.8 | 85                     | 40   | -                  | 19 | 21 | 80g/30 deg | WR / I             |       |         |      |  |
| 639688               | TP110    | Not Given | 0.30      | 0.60       | B    | Light grey gravelly very sandy CLAY               | Atterberg 4 Point | 7.0  | 57                     | 34   | -                  | 19 | 15 | 80g/30 deg | WR / I             |       |         |      |  |

Note: # Non accredited; NP - Non plastic; N - Tested in natural condition, R - Tested after >0,425mm removed by hand, WR - Tested after washing to remove >425mm; I - The water content in the sample was increased, D - The water content in the sample was decreased; \* - One point liquid limit corrected as per the report Correlation Factor by Clayton C.R.I and Jukes A.W (1978)

Comments:

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
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# SUMMARY REPORT

## SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd

Client Address: Coniston House, Louisa Street,  
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Contact: Alex Tabb

Site Address: Markfield

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

BS EN ISO 17892-12:2018+A2:2022 cl 5.3 and 5.5, Fall Cone Method, 4 Pt  
Test, BS 1377-2:2022, cl 5.2 and 6. W by BS EN ISO 17892-1:2014+A1:2022.

Client Reference: 4467

Job Number: 25-041823-1

Date Sampled: 23/07 - 24/07/2025

Date Received: 31/07/2025

Date Tested: 13/08 - 19/08/2025

Sampled By: Not Given

### Test results

| Laboratory Reference | Hole No. | Sample    |           |            |      | Description                                                     | Remarks           | W    | Liquid & Plastic Limit |     |                    |    |    |            |                    | Density |     |    |
|----------------------|----------|-----------|-----------|------------|------|-----------------------------------------------------------------|-------------------|------|------------------------|-----|--------------------|----|----|------------|--------------------|---------|-----|----|
|                      |          | Reference | Depth Top | Depth Base | Type |                                                                 |                   |      | % Passing 425um        | WL* | Correlation Factor | Wp | Ip | Cone type  | Sample Preparation | bulk    | dry | PD |
|                      |          |           |           |            |      |                                                                 |                   |      |                        |     |                    |    |    |            |                    |         |     |    |
| 639690               | TP111    | Not Given | 2.50      | 3.00       | B    | Light brown slightly gravelly slightly sandy CLAY               | Atterberg 4 Point | 14.4 | 86                     | 52  | -                  | 24 | 28 | 80g/30 deg | R / I              |         |     |    |
| 639691               | TP112    | Not Given | 0.10      | 0.30       | B    | Grey slightly gravelly sandy silty CLAY                         | Atterberg 4 Point | 9.9  | 71                     | 44  | -                  | 27 | 17 | 80g/30 deg | WR / I             |         |     |    |
| 639692               | TP112    | Not Given | 2.30      | 2.60       | B    | Orangish brown slightly gravelly slightly sandy CLAY with chalk | Atterberg 4 Point | 19.1 | 83                     | 51  | -                  | 24 | 27 | 80g/30 deg | WR / I             |         |     |    |
| 639693               | TP113    | Not Given | 0.45      | 0.58       | B    | Light brown sandy CLAY                                          | Atterberg 4 Point | 16.5 | 100                    | 41  | -                  | 20 | 21 | 80g/30 deg | N / I              |         |     |    |
| 639694               | TP113    | Not Given | 2.20      | 2.60       | B    | Light brown slightly gravelly slightly sandy CLAY               | Atterberg 4 Point | 19.4 | 92                     | 69  | -                  | 24 | 45 | 80g/30 deg | R / I              |         |     |    |
| 639695               | TP115    | Not Given | 0.40      | 0.50       | B    | Light brown slightly gravelly slightly sandy CLAY with chalk    | Atterberg 4 Point | 10.3 | 87                     | 46  | -                  | 19 | 27 | 80g/30 deg | WR / I             |         |     |    |
| 639696               | TP115    | Not Given | 2.50      | 3.00       | B    | Light brown sandy very clayey GRAVEL                            |                   | 11.3 |                        |     |                    |    |    |            |                    |         |     |    |
| 639697               | TP116    | Not Given | 2.00      | 2.50       | B    | Light brown slightly gravelly slightly sandy CLAY               | Atterberg 4 Point | 15.5 | 93                     | 61  | -                  | 25 | 36 | 80g/30 deg | WR / I             |         |     |    |
| 639698               | TP118    | Not Given | 0.50      | 1.00       | B    | Orangish brown slightly gravelly slightit sandy CLAY            | Atterberg 4 Point | 16.5 | 79                     | 44  | -                  | 22 | 22 | 80g/30 deg | WR / I             |         |     |    |
| 639701               | TP120    | Not Given | 0.80      | 1.00       | B    | Light brown slightly gravelly sandy CLAY                        |                   | 5.6  |                        |     |                    |    |    |            |                    |         |     |    |

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Comments:

Signed:

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## SUMMARY REPORT

### SUMMARY OF CLASSIFICATION TEST RESULTS

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Environmental Science

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Test, BS 1377-2:2022, cl 5.2 and 6. W by BS EN ISO 17892-1:2014+A1:2022.

Client Reference: 4467

Job Number: 25-041823-1

Date Sampled: 23/07 - 25/07/2025

Date Received: 31/07/2025

Date Tested: 13/08/2025

Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

### Test results

| Laboratory Reference | Hole No. | Sample    |           |            |      | Description                                         | Remarks           | W    | Liquid & Plastic Limit |     |                    |    |    |            |                    | Density |     |    |
|----------------------|----------|-----------|-----------|------------|------|-----------------------------------------------------|-------------------|------|------------------------|-----|--------------------|----|----|------------|--------------------|---------|-----|----|
|                      |          | Reference | Depth Top | Depth Base | Type |                                                     |                   |      | % Passing 425um        | WL* | Correlation Factor | Wp | Ip | Cone type  | Sample Preparation | bulk    | dry | PD |
|                      |          |           | m         | m          |      |                                                     |                   |      |                        |     |                    |    |    |            |                    |         |     |    |
| 639702               | TP121    | Not Given | 0.80      | 1.00       | B    | Light brown slightly sandy CLAY                     | Atterberg 4 Point | 26.7 | 100                    | 67  | -                  | 29 | 38 | 80g/30 deg | N / I              |         |     |    |
| 639703               | TP121    | Not Given | 2.50      | 3.00       | B    | Reddish brown slightly sandy CLAY                   | Atterberg 4 Point | 19.1 | 99                     | 40  | -                  | 21 | 19 | 80g/30 deg | R / I              |         |     |    |
| 639704               | RH101    | Not Given | 6.00      | 7.00       | B    | Light brown slightly gravelly slightly sandy CLAY   | Atterberg 4 Point | 12.2 | 85                     | 45  | -                  | 23 | 22 | 80g/30 deg | WR / I             |         |     |    |
| 639705               | RH102    | Not Given | 3.00      | 4.00       | B    | Light brown slightly gravelly slightly sandy CLAY   | Atterberg 4 Point | 22.0 | 85                     | 46  | -                  | 22 | 24 | 80g/30 deg | R / I              |         |     |    |
| 639706               | RH104    | Not Given | 3.00      | 4.00       | B    | Brown slightly gravelly very sandy CLAY             | Atterberg 4 Point | 12.1 | 84                     | 26  | -                  | 14 | 12 | 80g/30 deg | R / I              |         |     |    |
| 639707               | RH105    | Not Given | 4.00      | 5.00       | B    | Brown slightly gravelly sandy CLAY                  | Atterberg 4 Point | 15.4 | 84                     | 38  | -                  | 16 | 22 | 80g/30 deg | WR / I             |         |     |    |
| 639708               | RH106    | Not Given | 3.50      | 4.00       | B    | Reddish brown slightly gravelly sandy CLAY          | Atterberg 4 Point | 12.4 | 92                     | 36  | -                  | 16 | 20 | 80g/30 deg | R / I              |         |     |    |
| 639709               | RH107    | Not Given | 4.00      | 5.00       | B    | Reddish brown slightly gravelly slightly sandy CLAY | Atterberg 4 Point | 36.9 | 97                     | 48  | -                  | 24 | 24 | 80g/30 deg | R / I              |         |     |    |
| 639710               | RH108    | Not Given | 4.00      | 6.00       | B    | Reddish brown slightly gravelly slightly sandy CLAY | Atterberg 4 Point | 28.9 | 94                     | 55  | -                  | 26 | 29 | 80g/30 deg | R / I              |         |     |    |
| 639711               | RH109    | Not Given | 5.00      | 6.00       | B    | Reddish brown slightly gravelly slightly sandy CLAY | Atterberg 4 Point | 19.2 | 99                     | 51  | -                  | 26 | 25 | 80g/30 deg | R / I              |         |     |    |

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Environmental Science

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BS EN ISO 17892-12:2018+A2:2022 cl 5.3 and 5.5, Fall Cone Method, 4 Pt  
Test, BS 1377-2:2022, cl 5.2 and 6. W by BS EN ISO 17892-1:2014+A1:2022.

Client Reference: 4467

Job Number: 25-041823-1

Date Sampled: 25/07/2025

Date Received: 31/07/2025

Date Tested: 13/08/2025

Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

### Test results

| Laboratory<br>Reference | Hole<br>No. | Sample    |              |               |      | Description                                | Remarks           | W    | Liquid & Plastic Limit |      |                       |    |    |               |                       | Density |     |    |
|-------------------------|-------------|-----------|--------------|---------------|------|--------------------------------------------|-------------------|------|------------------------|------|-----------------------|----|----|---------------|-----------------------|---------|-----|----|
|                         |             | Reference | Depth<br>Top | Depth<br>Base | Type |                                            |                   |      | %<br>Passing<br>425um  | WL * | Correlation<br>Factor | Wp | Ip | Cone<br>type  | Sample<br>Preparation | bulk    | dry | PD |
|                         |             |           | m            | m             |      |                                            |                   |      |                        |      |                       |    |    |               |                       |         |     |    |
| 639712                  | RH110       | Not Given | 7.50         | 8.00          | B    | Reddish brown slightly gravelly sandy CLAY | Atterberg 4 Point | 13.7 | 93                     | 40   | -                     | 20 | 20 | 80g/30<br>deg | WR / I                |         |     |    |
|                         |             |           |              |               |      |                                            |                   |      |                        |      |                       |    |    |               |                       |         |     |    |
|                         |             |           |              |               |      |                                            |                   |      |                        |      |                       |    |    |               |                       |         |     |    |
|                         |             |           |              |               |      |                                            |                   |      |                        |      |                       |    |    |               |                       |         |     |    |
|                         |             |           |              |               |      |                                            |                   |      |                        |      |                       |    |    |               |                       |         |     |    |
|                         |             |           |              |               |      |                                            |                   |      |                        |      |                       |    |    |               |                       |         |     |    |
|                         |             |           |              |               |      |                                            |                   |      |                        |      |                       |    |    |               |                       |         |     |    |
|                         |             |           |              |               |      |                                            |                   |      |                        |      |                       |    |    |               |                       |         |     |    |
|                         |             |           |              |               |      |                                            |                   |      |                        |      |                       |    |    |               |                       |         |     |    |
|                         |             |           |              |               |      |                                            |                   |      |                        |      |                       |    |    |               |                       |         |     |    |
|                         |             |           |              |               |      |                                            |                   |      |                        |      |                       |    |    |               |                       |         |     |    |
|                         |             |           |              |               |      |                                            |                   |      |                        |      |                       |    |    |               |                       |         |     |    |
|                         |             |           |              |               |      |                                            |                   |      |                        |      |                       |    |    |               |                       |         |     |    |
|                         |             |           |              |               |      |                                            |                   |      |                        |      |                       |    |    |               |                       |         |     |    |

Note: # Non accredited; NP - Non plastic; N - Tested in natural condition, R - Tested after >0,425mm removed by hand, WR - Tested after washing to remove >425mm; I - The water content in the sample was increased ,  
D - The water content in the sample was decreased; \* - One point liquid limit corrected as per the report Correlation Factor by Clayton C.R.I and Jukes A.W (1978)

Comments:

Signed:

Katarzyna  
Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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## SUMMARY REPORT

### DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS EN ISO 17892-1:2014+A1:2022, BS 1377-2: 2022, clause 4.1

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

**4041**  
Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07 - 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

### Test results

| Laboratory Reference | Hole No. | Sample    |                |                 |      | Description                                       | Remarks | WC   |  |  |  |  |  |  |  |  |  |  |  |
|----------------------|----------|-----------|----------------|-----------------|------|---------------------------------------------------|---------|------|--|--|--|--|--|--|--|--|--|--|--|
|                      |          | Reference | Depth Top<br>m | Depth Base<br>m | Type |                                                   |         |      |  |  |  |  |  |  |  |  |  |  |  |
| 639675               | TP101    | Not Given | 2.00           | 2.50            | B    | Light brown slightly gravelly slightly sandy CLAY |         | 19.1 |  |  |  |  |  |  |  |  |  |  |  |
| 639678               | TP103    | Not Given | 2.50           | 3.00            | B    | Light brown slightly gravelly slightly sandy CLAY |         | 23.1 |  |  |  |  |  |  |  |  |  |  |  |
| 639679               | TP104    | Not Given | 2.80           | 3.10            | B    | Light brown slightly gravelly slightly sandy CLAY |         | 26.0 |  |  |  |  |  |  |  |  |  |  |  |
| 639680               | TP105    | Not Given | 2.50           | 3.00            | B    | Light brown slightly gravelly slightly sandy CLAY |         | 23.1 |  |  |  |  |  |  |  |  |  |  |  |
| 639681               | TP106    | Not Given | 0.40           | 0.50            | B    | Light brown slightly gravelly slightly sandy CLAY |         | 22.2 |  |  |  |  |  |  |  |  |  |  |  |
| 639683               | TP107    | Not Given | 3.00           | 3.50            | B    | Brown slightly gravelly slightly sandy CLAY       |         | 16.3 |  |  |  |  |  |  |  |  |  |  |  |
| 639685               | TP108    | Not Given | 3.00           | 3.20            | B    | Yellowish brown slightly gravelly sandy CLAY      |         | 22.9 |  |  |  |  |  |  |  |  |  |  |  |
| 639686               | TP109    | Not Given | 1.00           | 1.30            | B    | Light brown gravelly slightly sandy CLAY          |         | 11.2 |  |  |  |  |  |  |  |  |  |  |  |
| 639687               | TP109    | Not Given | 2.00           | 2.20            | B    | Light brown slightly gravelly slightly sandy CLAY |         | 12.8 |  |  |  |  |  |  |  |  |  |  |  |
| 639688               | TP110    | Not Given | 0.30           | 0.60            | B    | Light grey gravelly very sandy CLAY               |         | 7.0  |  |  |  |  |  |  |  |  |  |  |  |

Comments:

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Signed:

*Katarzyna Koziel*

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd



## SUMMARY REPORT

### DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS EN ISO 17892-1:2014+A1:2022, BS 1377-2: 2022, clause 4.1

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

**4041**  
Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07 - 24/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08 - 19/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

### Test results

| Laboratory Reference | Hole No. | Sample    |                |                 |      | Description                                                     | Remarks | WC   |  |  |  |  |  |  |  |  |  |  |  |
|----------------------|----------|-----------|----------------|-----------------|------|-----------------------------------------------------------------|---------|------|--|--|--|--|--|--|--|--|--|--|--|
|                      |          | Reference | Depth Top<br>m | Depth Base<br>m | Type |                                                                 |         |      |  |  |  |  |  |  |  |  |  |  |  |
| 639690               | TP111    | Not Given | 2.50           | 3.00            | B    | Light brown slightly gravelly slightly sandy CLAY               |         | 14.4 |  |  |  |  |  |  |  |  |  |  |  |
| 639691               | TP112    | Not Given | 0.10           | 0.30            | B    | Grey slightly gravelly sandy silty CLAY                         |         | 9.9  |  |  |  |  |  |  |  |  |  |  |  |
| 639692               | TP112    | Not Given | 2.30           | 2.60            | B    | Orangish brown slightly gravelly slightly sandy CLAY with chalk |         | 19.1 |  |  |  |  |  |  |  |  |  |  |  |
| 639693               | TP113    | Not Given | 0.45           | 0.58            | B    | Light brown sandy CLAY                                          |         | 16.5 |  |  |  |  |  |  |  |  |  |  |  |
| 639694               | TP113    | Not Given | 2.20           | 2.60            | B    | Light brown slightly gravelly slightly sandy CLAY               |         | 19.4 |  |  |  |  |  |  |  |  |  |  |  |
| 639695               | TP115    | Not Given | 0.40           | 0.50            | B    | Light brown slightly gravelly slightly sandy CLAY with chalk    |         | 10.3 |  |  |  |  |  |  |  |  |  |  |  |
| 639696               | TP115    | Not Given | 2.50           | 3.00            | B    | Light brown sandy very clayey GRAVEL                            |         | 11.3 |  |  |  |  |  |  |  |  |  |  |  |
| 639697               | TP116    | Not Given | 2.00           | 2.50            | B    | Light brown slightly gravelly slightly sandy CLAY               |         | 15.5 |  |  |  |  |  |  |  |  |  |  |  |
| 639698               | TP118    | Not Given | 0.50           | 1.00            | B    | Orangish brown slightly gravelly slightlt sandy CLAY            |         | 16.5 |  |  |  |  |  |  |  |  |  |  |  |
| 639701               | TP120    | Not Given | 0.80           | 1.00            | B    | Light brown slightly gravelly sandy CLAY                        |         | 5.6  |  |  |  |  |  |  |  |  |  |  |  |

Comments:

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Signed:

*Katarzyna Koziel*

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd



## SUMMARY REPORT

### DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS EN ISO 17892-1:2014+A1:2022, BS 1377-2: 2022, clause 4.1

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



**4041**  
Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07 - 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

#### Test results

| Laboratory Reference | Hole No. | Sample    |                |                 |      | Description                                         | Remarks | WC   |  |  |  |  |  |  |  |  |  |  |  |
|----------------------|----------|-----------|----------------|-----------------|------|-----------------------------------------------------|---------|------|--|--|--|--|--|--|--|--|--|--|--|
|                      |          | Reference | Depth Top<br>m | Depth Base<br>m | Type |                                                     |         |      |  |  |  |  |  |  |  |  |  |  |  |
| 639702               | TP121    | Not Given | 0.80           | 1.00            | B    | Light brown slightly sandy CLAY                     |         | 26.7 |  |  |  |  |  |  |  |  |  |  |  |
| 639703               | TP121    | Not Given | 2.50           | 3.00            | B    | Reddish brown slightly sandy CLAY                   |         | 19.1 |  |  |  |  |  |  |  |  |  |  |  |
| 639704               | RH101    | Not Given | 6.00           | 7.00            | B    | Light brown slightly gravelly slightly sandy CLAY   |         | 12.2 |  |  |  |  |  |  |  |  |  |  |  |
| 639705               | RH102    | Not Given | 3.00           | 4.00            | B    | Light brown slightly gravelly slightly sandy CLAY   |         | 22.0 |  |  |  |  |  |  |  |  |  |  |  |
| 639706               | RH104    | Not Given | 3.00           | 4.00            | B    | Brown slightly gravelly very sandy CLAY             |         | 12.1 |  |  |  |  |  |  |  |  |  |  |  |
| 639707               | RH105    | Not Given | 4.00           | 5.00            | B    | Brown slightly gravelly sandy CLAY                  |         | 15.4 |  |  |  |  |  |  |  |  |  |  |  |
| 639708               | RH106    | Not Given | 3.50           | 4.00            | B    | Reddish brown slightly gravelly sandy CLAY          |         | 12.4 |  |  |  |  |  |  |  |  |  |  |  |
| 639709               | RH107    | Not Given | 4.00           | 5.00            | B    | Reddish brown slightly gravelly slightly sandy CLAY |         | 36.9 |  |  |  |  |  |  |  |  |  |  |  |
| 639710               | RH108    | Not Given | 4.00           | 6.00            | B    | Reddish brown slightly gravelly slightly sandy CLAY |         | 28.9 |  |  |  |  |  |  |  |  |  |  |  |
| 639711               | RH109    | Not Given | 5.00           | 6.00            | B    | Reddish brown slightly gravelly slightly sandy CLAY |         | 19.2 |  |  |  |  |  |  |  |  |  |  |  |

Comments:

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Signed:

*Katarzyna Koziel*

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd



**SUMMARY REPORT**  
**DETERMINATION OF WATER CONTENT**

Tested in Accordance with: BS EN ISO 17892-1:2014+A1:2022, BS 1377-2: 2022, clause 4.1

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

**4041**  
Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE  
Contact: Alex Tabb  
Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test results**

| Laboratory Reference | Hole No. | Sample    |                |                 |      | Description                                | Remarks | WC   |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------|----------|-----------|----------------|-----------------|------|--------------------------------------------|---------|------|--|--|--|--|--|--|--|--|--|--|--|--|
|                      |          | Reference | Depth Top<br>m | Depth Base<br>m | Type |                                            |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
| 639712               | RH110    | Not Given | 7.50           | 8.00            | B    | Reddish brown slightly gravelly sandy CLAY |         | 13.7 |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |          |           |                |                 |      |                                            |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |          |           |                |                 |      |                                            |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |          |           |                |                 |      |                                            |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |          |           |                |                 |      |                                            |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |          |           |                |                 |      |                                            |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |          |           |                |                 |      |                                            |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |          |           |                |                 |      |                                            |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |          |           |                |                 |      |                                            |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |          |           |                |                 |      |                                            |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |          |           |                |                 |      |                                            |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |          |           |                |                 |      |                                            |         |      |  |  |  |  |  |  |  |  |  |  |  |  |
|                      |          |           |                |                 |      |                                            |         |      |  |  |  |  |  |  |  |  |  |  |  |  |

Comments:

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Signed:

*Katarzyna Koziel*

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd



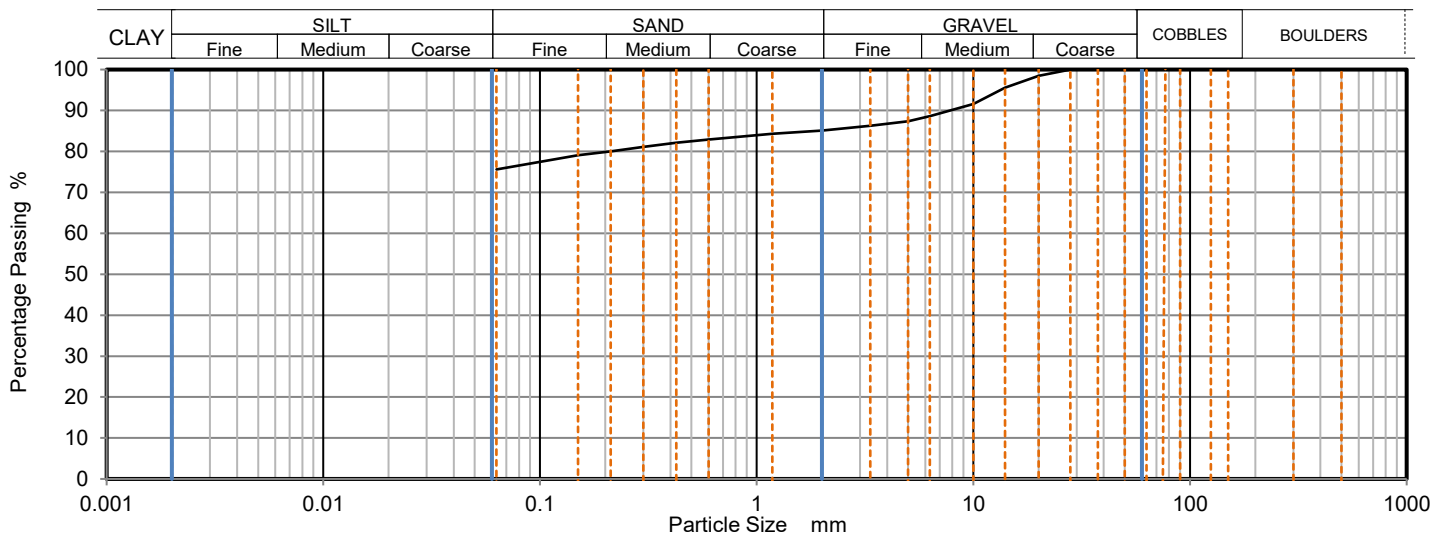
4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE  
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639675  
Hole No.: TP101  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 107.9 °C and broken down by hand.Depth Top [m]: 2.00  
Depth Base [m]: 2.50  
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             | 100       |                  |           |
| 28               | 100       |                  |           |
| 20               | 99        |                  |           |
| 14               | 96        |                  |           |
| 10               | 92        |                  |           |
| 6.3              | 89        |                  |           |
| 5                | 87        |                  |           |
| 3.35             | 86        |                  |           |
| 2                | 85        |                  |           |
| 1.18             | 84        |                  |           |
| 0.6              | 83        |                  |           |
| 0.425            | 82        |                  |           |
| 0.3              | 81        |                  |           |
| 0.212            | 80        |                  |           |
| 0.15             | 79        |                  |           |
| 0.063            | 76        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 14         |
| Sand               | 10         |
| Fines <0.063 mm    | 76         |

| Grading Analysis       |    |    |
|------------------------|----|----|
| D100                   | mm | 28 |
| D60                    | mm |    |
| D30                    | mm |    |
| D10                    | mm |    |
| Uniformity Coefficient |    |    |
| Curvature Coefficient  |    |    |

Uniformity and Curvature Coefficient calculated in accordance  
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

*Katarzyna Koziel*Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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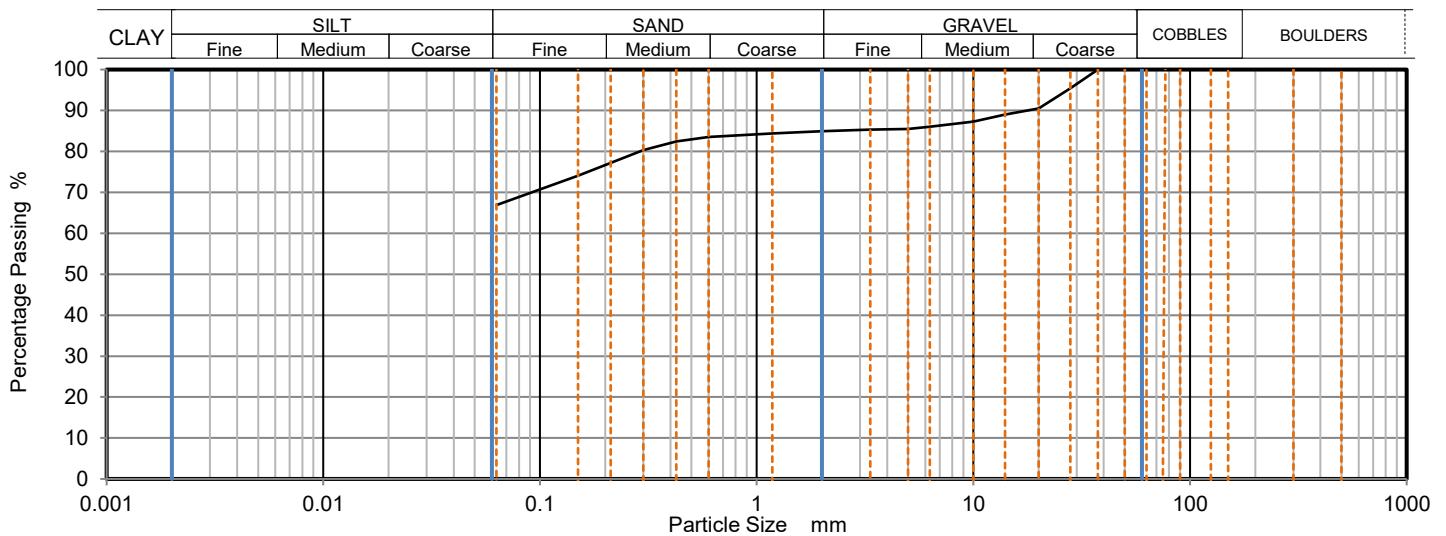
4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE  
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639676  
Hole No.: TP102  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 107.9 °C and broken down by hand.Depth Top [m]: 0.40  
Depth Base [m]: 0.60  
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               | 95        |                  |           |
| 20               | 91        |                  |           |
| 14               | 89        |                  |           |
| 10               | 87        |                  |           |
| 6.3              | 86        |                  |           |
| 5                | 86        |                  |           |
| 3.35             | 85        |                  |           |
| 2                | 85        |                  |           |
| 1.18             | 84        |                  |           |
| 0.6              | 84        |                  |           |
| 0.425            | 82        |                  |           |
| 0.3              | 80        |                  |           |
| 0.212            | 77        |                  |           |
| 0.15             | 74        |                  |           |
| 0.063            | 67        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 15         |
| Sand               | 18         |
| Fines <0.063 mm    | 67         |

| Grading Analysis       |    |      |
|------------------------|----|------|
| D100                   | mm | 37.5 |
| D60                    | mm |      |
| D30                    | mm |      |
| D10                    | mm |      |
| Uniformity Coefficient |    |      |
| Curvature Coefficient  |    |      |

Uniformity and Curvature Coefficient calculated in accordance  
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

*Katarzyna Koziel*Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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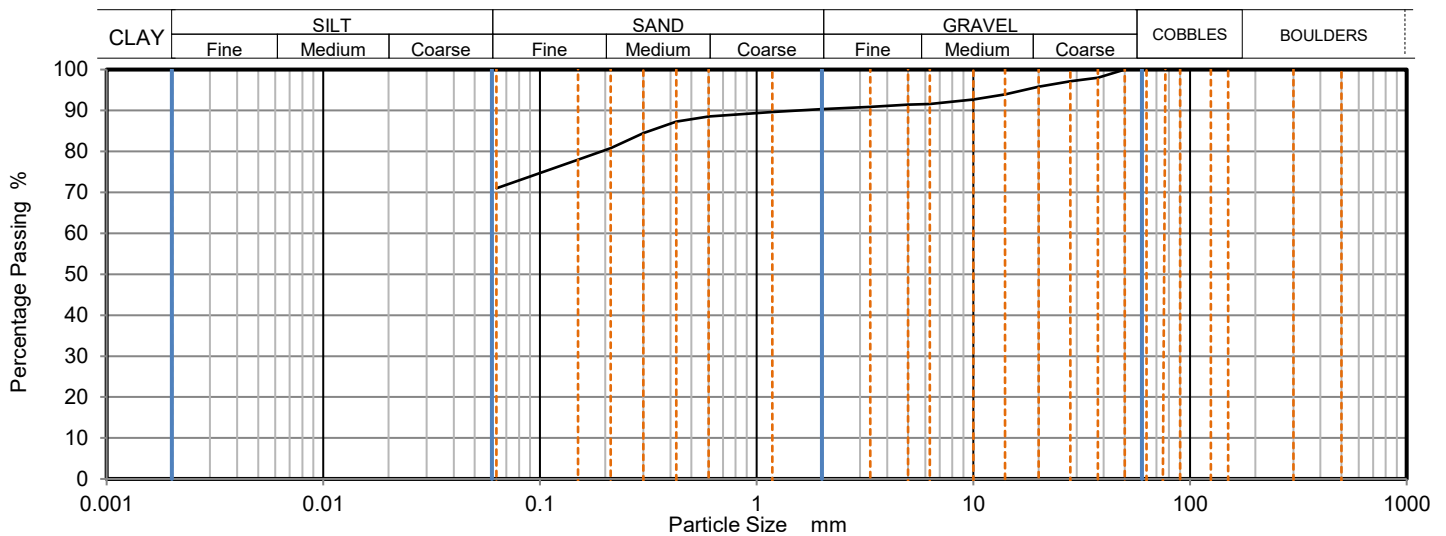
4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE  
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639677  
Hole No.: TP103  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was whole tested, oven dried at 107.9 °C and broken down by hand.Depth Top [m]: 0.40  
Depth Base [m]: 0.50  
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             | 98        |                  |           |
| 28               | 97        |                  |           |
| 20               | 96        |                  |           |
| 14               | 94        |                  |           |
| 10               | 93        |                  |           |
| 6.3              | 92        |                  |           |
| 5                | 91        |                  |           |
| 3.35             | 91        |                  |           |
| 2                | 90        |                  |           |
| 1.18             | 90        |                  |           |
| 0.6              | 89        |                  |           |
| 0.425            | 87        |                  |           |
| 0.3              | 85        |                  |           |
| 0.212            | 81        |                  |           |
| 0.15             | 78        |                  |           |
| 0.063            | 71        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 10         |
| Sand               | 19         |
| Fines <0.063 mm    | 71         |

| Grading Analysis       |    |    |
|------------------------|----|----|
| D100                   | mm | 50 |
| D60                    | mm |    |
| D30                    | mm |    |
| D10                    | mm |    |
| Uniformity Coefficient |    |    |
| Curvature Coefficient  |    |    |

Uniformity and Curvature Coefficient calculated in accordance  
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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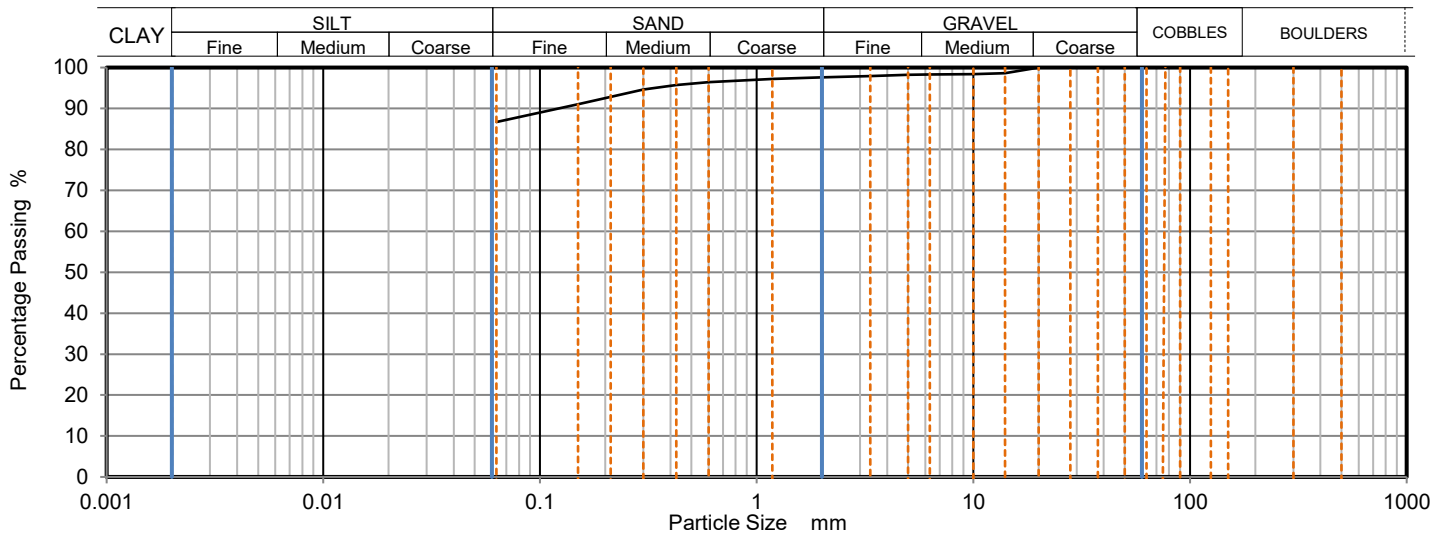
4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE  
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 24/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639679  
Hole No.: TP104  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 107.9 °C and broken down by hand.Depth Top [m]: 2.80  
Depth Base [m]: 3.10  
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               | 99        |                  |           |
| 10               | 98        |                  |           |
| 6.3              | 98        |                  |           |
| 5                | 98        |                  |           |
| 3.35             | 98        |                  |           |
| 2                | 98        |                  |           |
| 1.18             | 97        |                  |           |
| 0.6              | 96        |                  |           |
| 0.425            | 96        |                  |           |
| 0.3              | 95        |                  |           |
| 0.212            | 93        |                  |           |
| 0.15             | 91        |                  |           |
| 0.063            | 87        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 2          |
| Sand               | 11         |
| Fines <0.063 mm    | 87         |

| Grading Analysis       |    |    |
|------------------------|----|----|
| D100                   | mm | 20 |
| D60                    | mm |    |
| D30                    | mm |    |
| D10                    | mm |    |
| Uniformity Coefficient |    |    |
| Curvature Coefficient  |    |    |

Uniformity and Curvature Coefficient calculated in accordance  
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

*Katarzyna Koziel*Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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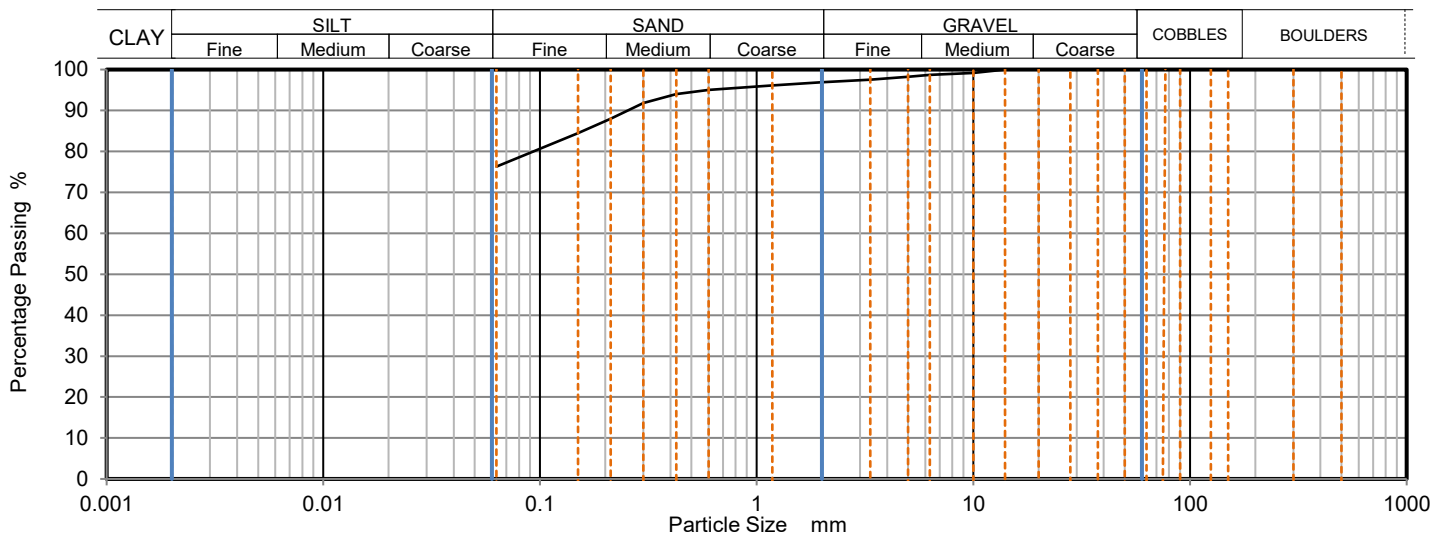
4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE  
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 24/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639683  
Hole No.: TP107  
Sample Reference: Not Given  
Sample Description: Brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 107.9 °C and broken down by hand.Depth Top [m]: 3.00  
Depth Base [m]: 3.50  
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             | 100       |                  |           |
| 28               | 100       |                  |           |
| 20               | 100       |                  |           |
| 14               | 100       |                  |           |
| 10               | 99        |                  |           |
| 6.3              | 99        |                  |           |
| 5                | 98        |                  |           |
| 3.35             | 98        |                  |           |
| 2                | 97        |                  |           |
| 1.18             | 96        |                  |           |
| 0.6              | 95        |                  |           |
| 0.425            | 94        |                  |           |
| 0.3              | 92        |                  |           |
| 0.212            | 88        |                  |           |
| 0.15             | 85        |                  |           |
| 0.063            | 76        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 3          |
| Sand               | 21         |
| Fines <0.063 mm    | 76         |

| Grading Analysis       |    |    |
|------------------------|----|----|
| D100                   | mm | 20 |
| D60                    | mm |    |
| D30                    | mm |    |
| D10                    | mm |    |
| Uniformity Coefficient |    |    |
| Curvature Coefficient  |    |    |

Uniformity and Curvature Coefficient calculated in accordance  
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

*Katarzyna Koziel*Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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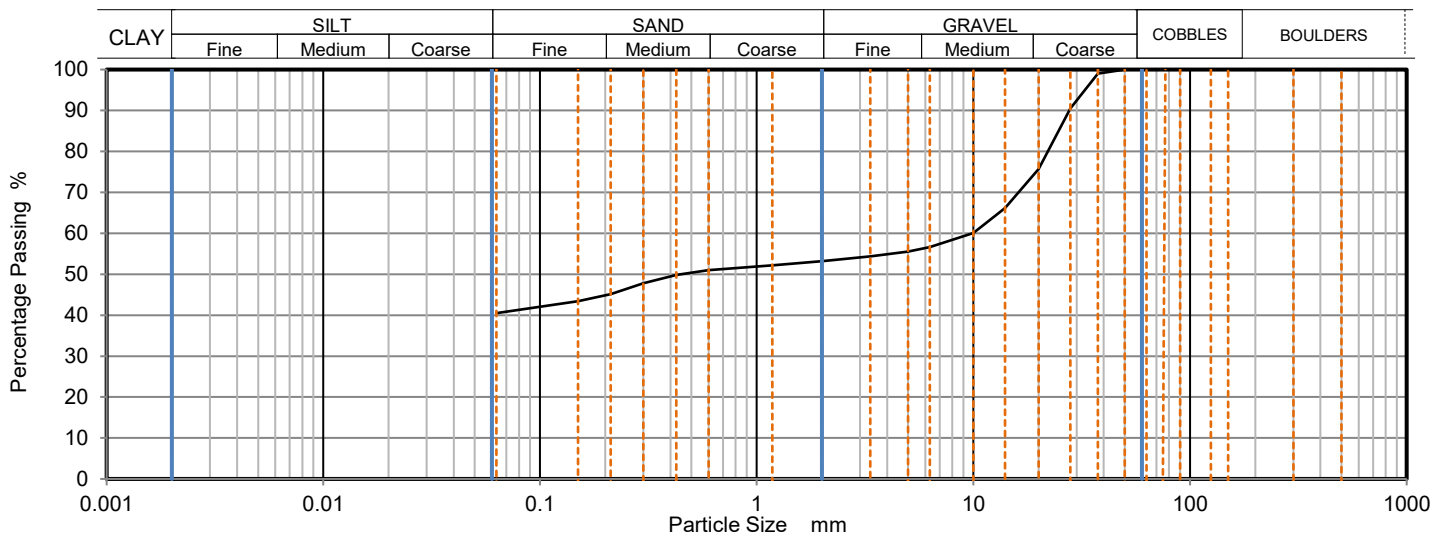
4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE  
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639686  
Hole No.: TP109  
Sample Reference: Not Given  
Sample Description: Light brown gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 107.9 °C and broken down by hand.Depth Top [m]: 1.00  
Depth Base [m]: 1.30  
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               | 91        |                  |           |
| 20               | 76        |                  |           |
| 14               | 66        |                  |           |
| 10               | 60        |                  |           |
| 6.3              | 57        |                  |           |
| 5                | 56        |                  |           |
| 3.35             | 54        |                  |           |
| 2                | 53        |                  |           |
| 1.18             | 52        |                  |           |
| 0.6              | 51        |                  |           |
| 0.425            | 50        |                  |           |
| 0.3              | 48        |                  |           |
| 0.212            | 45        |                  |           |
| 0.15             | 43        |                  |           |
| 0.063            | 41        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 47         |
| Sand               | 13         |
| Fines <0.063 mm    | 40         |

| Grading Analysis       |         |
|------------------------|---------|
| D100                   | mm 50   |
| D60                    | mm 9.84 |
| D30                    | mm      |
| D10                    | mm      |
| Uniformity Coefficient |         |
| Curvature Coefficient  |         |

Uniformity and Curvature Coefficient calculated in accordance  
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

*Katarzyna Koziel*Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

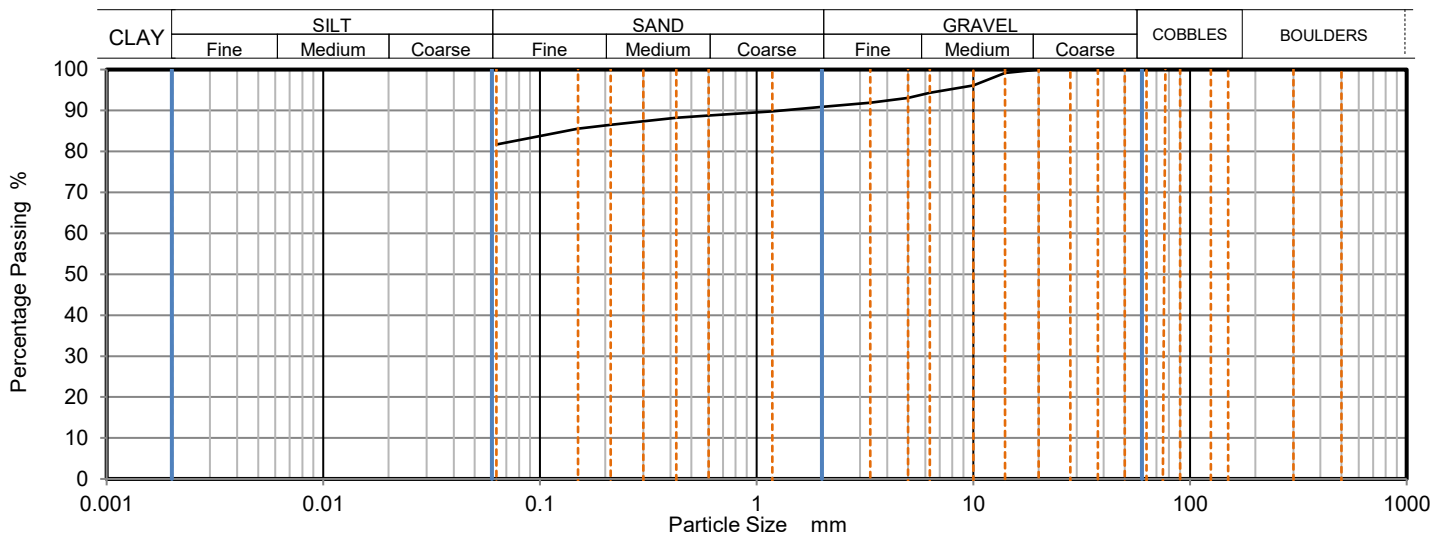
Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 639687  
Hole No.: TP109  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 107.9 °C and broken down by hand.

Depth Top [m]: 2.00  
Depth Base [m]: 2.20  
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               | 100       |                  |           |
| 37.5             | 100       |                  |           |
| 28               | 100       |                  |           |
| 20               | 100       |                  |           |
| 14               | 99        |                  |           |
| 10               | 96        |                  |           |
| 6.3              | 94        |                  |           |
| 5                | 93        |                  |           |
| 3.35             | 92        |                  |           |
| 2                | 91        |                  |           |
| 1.18             | 90        |                  |           |
| 0.6              | 89        |                  |           |
| 0.425            | 88        |                  |           |
| 0.3              | 87        |                  |           |
| 0.212            | 87        |                  |           |
| 0.15             | 86        |                  |           |
| 0.063            | 82        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 9          |
| Sand               | 9          |
| Fines <0.063 mm    | 82         |

| Grading Analysis       |    |    |
|------------------------|----|----|
| D100                   | mm | 20 |
| D60                    | mm |    |
| D30                    | mm |    |
| D10                    | mm |    |
| Uniformity Coefficient |    |    |
| Curvature Coefficient  |    |    |

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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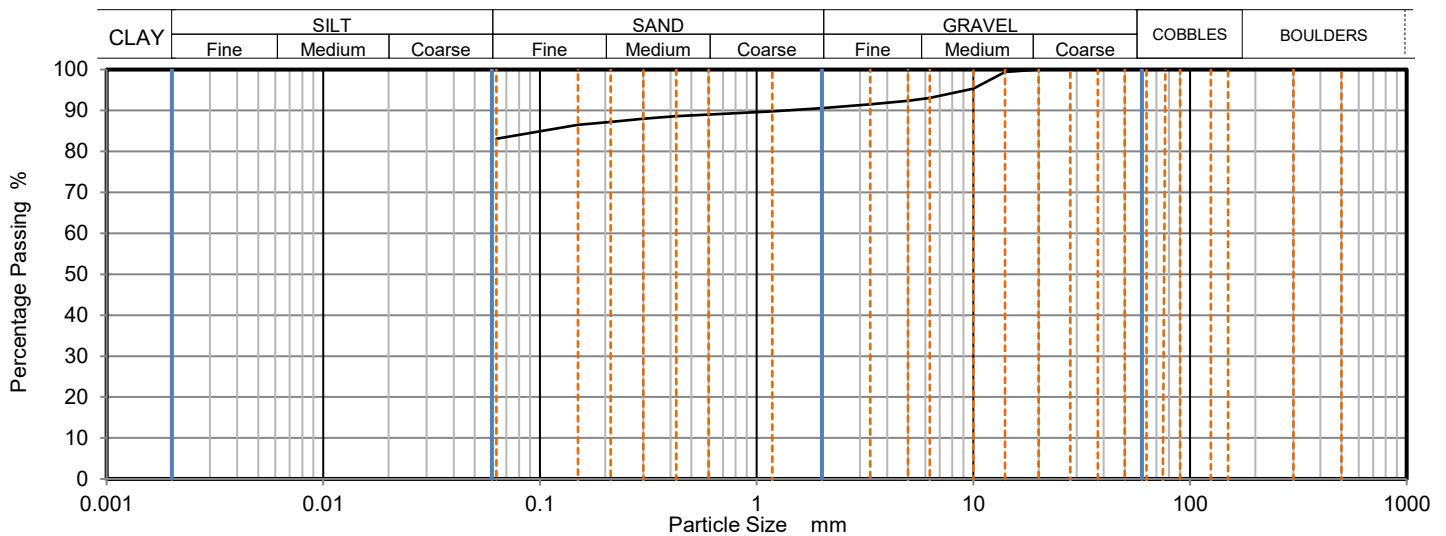
4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE  
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 14/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639690  
Hole No.: TP111  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 106.5 °C and broken down by hand.Depth Top [m]: 2.50  
Depth Base [m]: 3.00  
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               | 99        |                  |           |
| 10               | 95        |                  |           |
| 6.3              | 93        |                  |           |
| 5                | 92        |                  |           |
| 3.35             | 92        |                  |           |
| 2                | 91        |                  |           |
| 1.18             | 90        |                  |           |
| 0.6              | 89        |                  |           |
| 0.425            | 89        |                  |           |
| 0.3              | 88        |                  |           |
| 0.212            | 87        |                  |           |
| 0.15             | 87        |                  |           |
| 0.063            | 83        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 10         |
| Sand               | 7          |
| Fines <0.063 mm    | 83         |

| Grading Analysis       |    |
|------------------------|----|
| D100                   | mm |
| D60                    | mm |
| D30                    | mm |
| D10                    | mm |
| Uniformity Coefficient |    |
| Curvature Coefficient  |    |

Uniformity and Curvature Coefficient calculated in accordance  
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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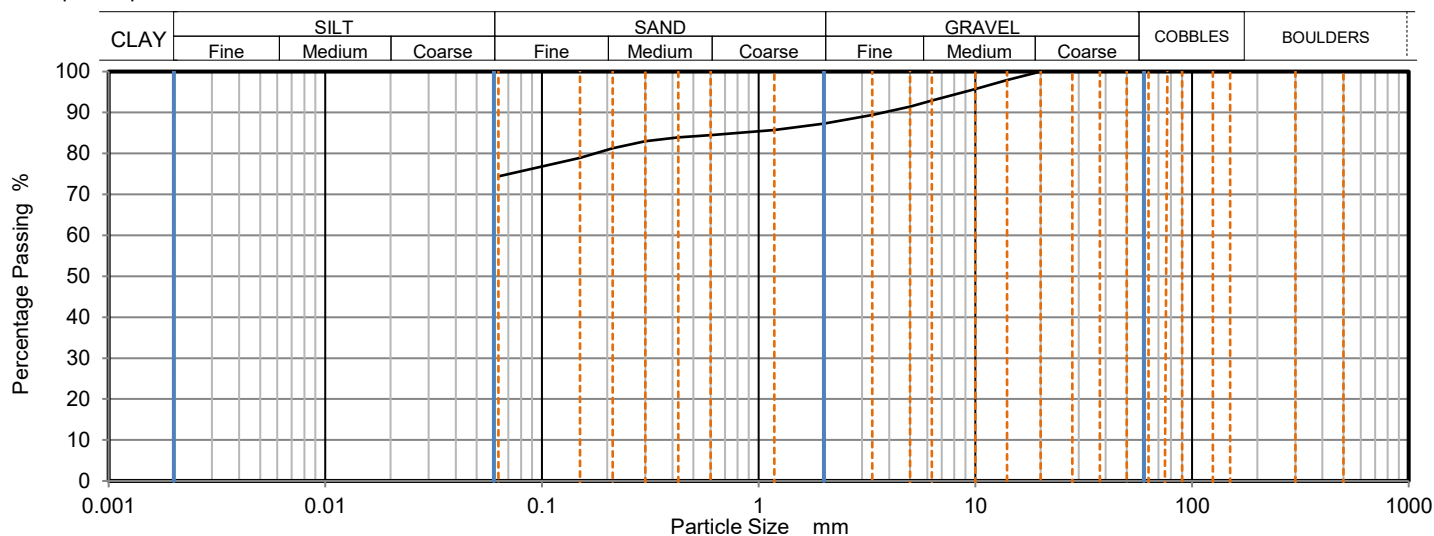
4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE  
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 24/07/2025  
Date Received: 31/07/2025  
Date Tested: 19/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639692  
Hole No.: TP112  
Sample Reference: Not Given  
Sample Description: Orangish brown slightly gravelly slightly sandy CLAY with chalk  
Sample Preparation: Sample was quartered, oven dried at 107.2 °C and broken down by hand.Depth Top [m]: 2.30  
Depth Base [m]: 2.60  
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               | 98        |                  |           |
| 10               | 96        |                  |           |
| 6.3              | 93        |                  |           |
| 5                | 91        |                  |           |
| 3.35             | 89        |                  |           |
| 2                | 87        |                  |           |
| 1.18             | 86        |                  |           |
| 0.6              | 85        |                  |           |
| 0.425            | 84        |                  |           |
| 0.3              | 83        |                  |           |
| 0.212            | 81        |                  |           |
| 0.15             | 79        |                  |           |
| 0.063            | 74        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 13         |
| Sand               | 13         |
| Fines <0.063 mm    | 74         |

| Grading Analysis       |    |
|------------------------|----|
| D100                   | mm |
| D60                    | mm |
| D30                    | mm |
| D10                    | mm |
| Uniformity Coefficient |    |
| Curvature Coefficient  |    |

Uniformity and Curvature Coefficient calculated in accordance  
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

**Remarks:****Signed:***Katarzyna Koziel*Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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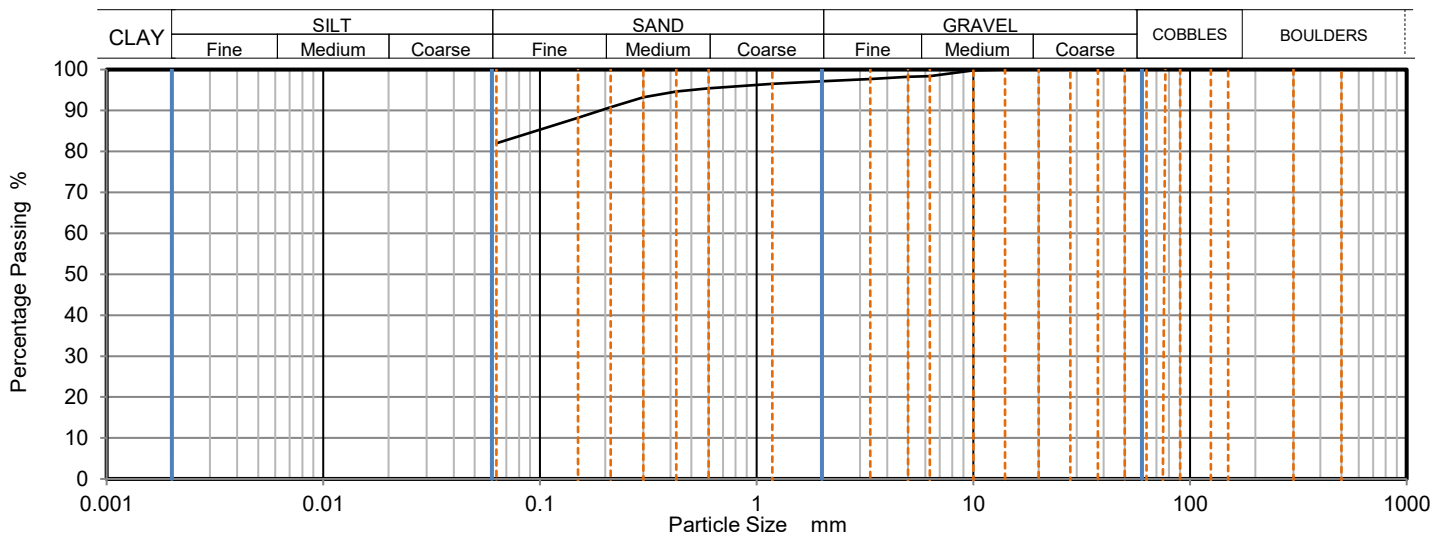
4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE  
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 24/07/2025  
Date Received: 31/07/2025  
Date Tested: 19/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639694  
Hole No.: TP113  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 107.2 °C and broken down by hand.Depth Top [m]: 2.20  
Depth Base [m]: 2.60  
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               | 100       |                  |           |
| 10               | 100       |                  |           |
| 6.3              | 98        |                  |           |
| 5                | 98        |                  |           |
| 3.35             | 98        |                  |           |
| 2                | 97        |                  |           |
| 1.18             | 97        |                  |           |
| 0.6              | 95        |                  |           |
| 0.425            | 95        |                  |           |
| 0.3              | 93        |                  |           |
| 0.212            | 91        |                  |           |
| 0.15             | 88        |                  |           |
| 0.063            | 82        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 3          |
| Sand               | 15         |
| Fines <0.063 mm    | 82         |

| Grading Analysis       |    |
|------------------------|----|
| D100                   | mm |
| D60                    | mm |
| D30                    | mm |
| D10                    | mm |
| Uniformity Coefficient |    |
| Curvature Coefficient  |    |

Uniformity and Curvature Coefficient calculated in accordance  
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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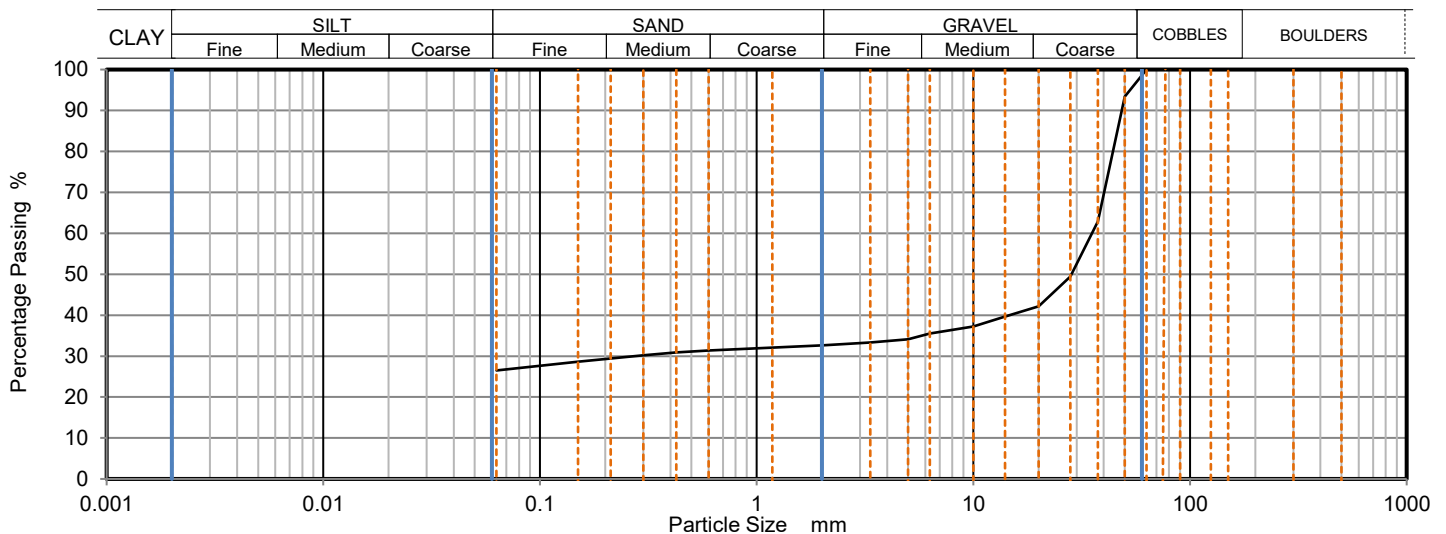
4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE  
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 14/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639696  
Hole No.: TP115  
Sample Reference: Not Given  
Sample Description: Light brown sandy very clayey GRAVEL  
Sample Preparation: Sample was quartered, oven dried at 106.5 °C and broken down by hand.Depth Top [m]: 2.50  
Depth Base [m]: 3.00  
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               | 93        |                  |           |
| 37.5             | 63        |                  |           |
| 28               | 49        |                  |           |
| 20               | 42        |                  |           |
| 14               | 40        |                  |           |
| 10               | 37        |                  |           |
| 6.3              | 36        |                  |           |
| 5                | 34        |                  |           |
| 3.35             | 33        |                  |           |
| 2                | 33        |                  |           |
| 1.18             | 32        |                  |           |
| 0.6              | 31        |                  |           |
| 0.425            | 31        |                  |           |
| 0.3              | 30        |                  |           |
| 0.212            | 29        |                  |           |
| 0.15             | 29        |                  |           |
| 0.063            | 27        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 68         |
| Sand               | 6          |
| Fines <0.063 mm    | 26         |

| Grading Analysis       |          |
|------------------------|----------|
| D100                   | mm 63    |
| D60                    | mm 35.2  |
| D30                    | mm 0.272 |
| D10                    | mm       |
| Uniformity Coefficient |          |
| Curvature Coefficient  |          |

Uniformity and Curvature Coefficient calculated in accordance  
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

*Katarzyna Koziel*Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

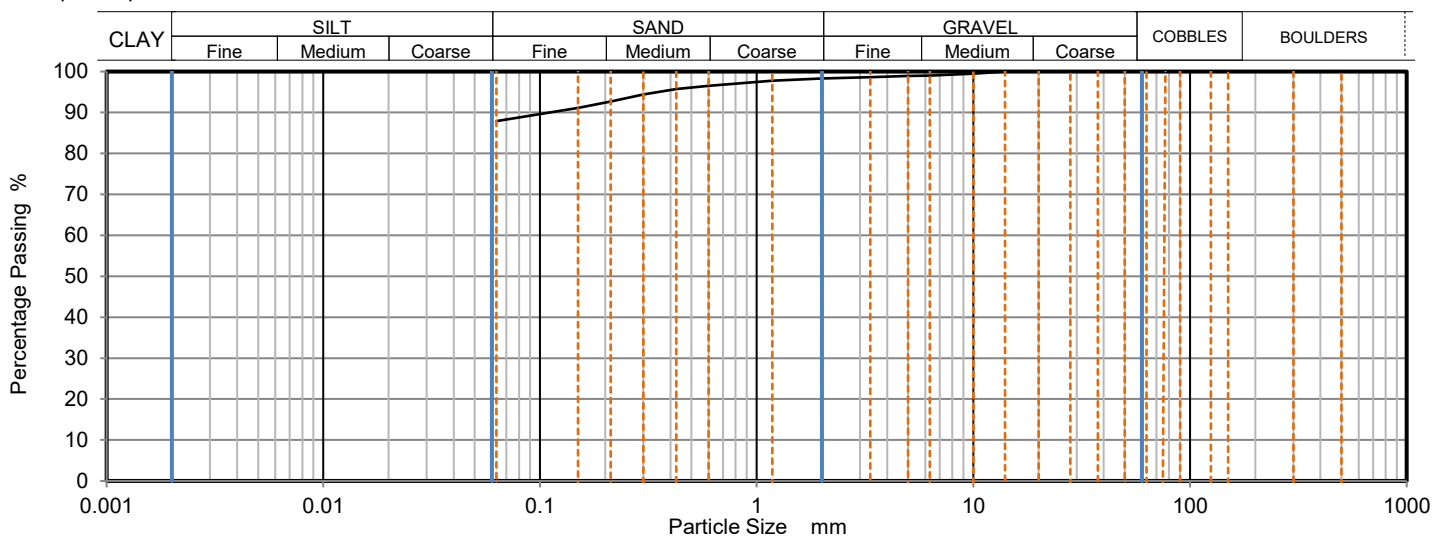
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 19/08/2025  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 639697  
Hole No.: TP116  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 107.2 °C and broken down by hand.

Depth Top [m]: 2.00  
Depth Base [m]: 2.50  
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             | 100       |                  |           |
| 28               | 100       |                  |           |
| 20               | 100       |                  |           |
| 14               | 100       |                  |           |
| 10               | 100       |                  |           |
| 6.3              | 99        |                  |           |
| 5                | 99        |                  |           |
| 3.35             | 99        |                  |           |
| 2                | 98        |                  |           |
| 1.18             | 98        |                  |           |
| 0.6              | 97        |                  |           |
| 0.425            | 96        |                  |           |
| 0.3              | 94        |                  |           |
| 0.212            | 93        |                  |           |
| 0.15             | 91        |                  |           |
| 0.063            | 88        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 2          |
| Sand               | 10         |
| Fines <0.063 mm    | 88         |

| Grading Analysis       |    |    |
|------------------------|----|----|
| D100                   | mm | 14 |
| D60                    | mm |    |
| D30                    | mm |    |
| D10                    | mm |    |
| Uniformity Coefficient |    |    |
| Curvature Coefficient  |    |    |

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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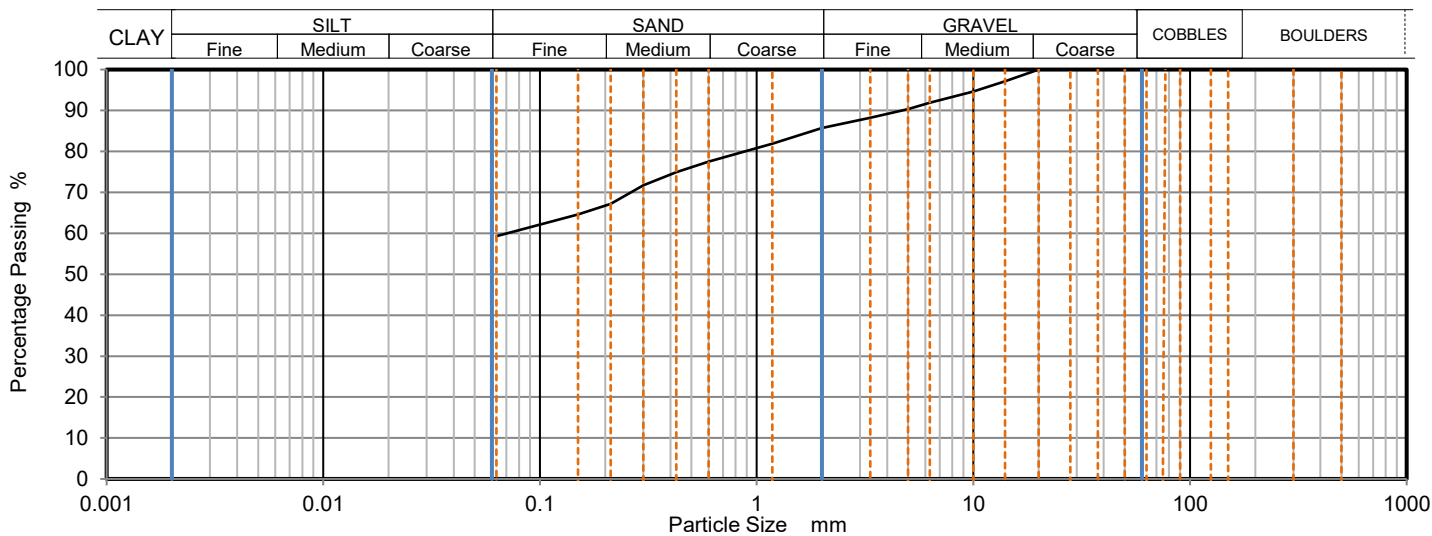
4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE  
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 19/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639698  
Hole No.: TP118  
Sample Reference: Not Given  
Sample Description: Orangish brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 107.2 °C and broken down by hand.Depth Top [m]: 0.50  
Depth Base [m]: 1.00  
Sample Type: B



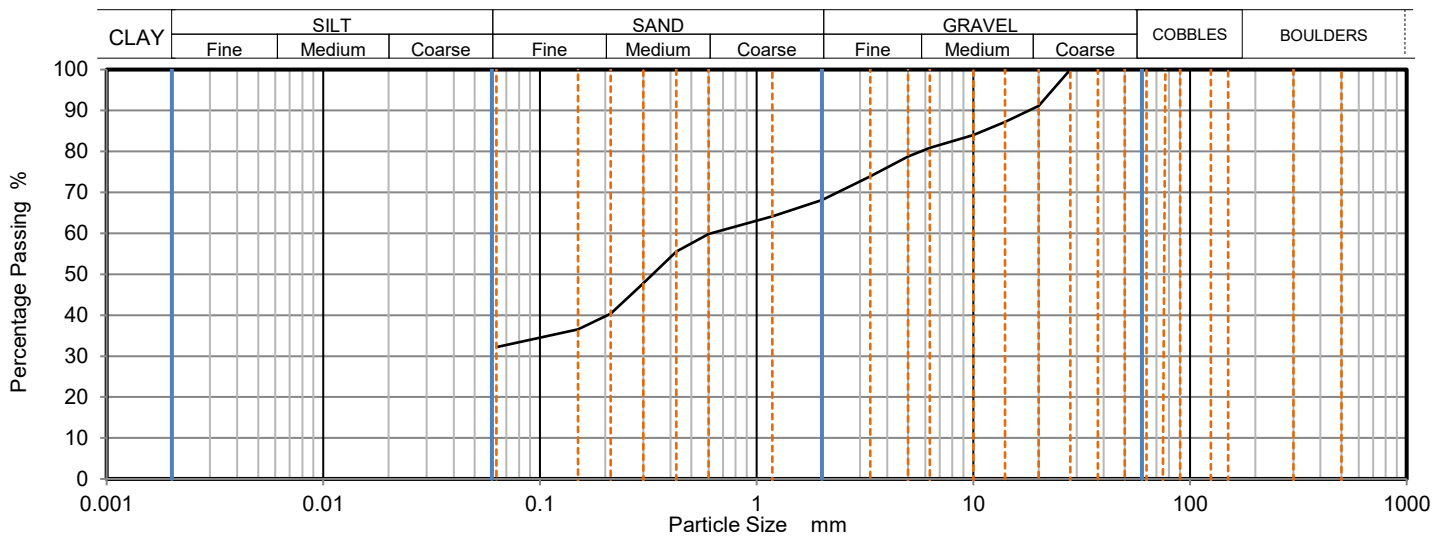
4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE  
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639701  
Hole No.: TP120  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 107.9 °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       |                  |           |
| 300              | 100       |                  |           |
| 150              | 100       |                  |           |
| 125              | 100       |                  |           |
| 90               | 100       |                  |           |
| 75               | 100       |                  |           |
| 63               | 100       |                  |           |
| 50               | 100       |                  |           |
| 37.5             | 100       |                  |           |
| 28               | 100       |                  |           |
| 20               | 91        |                  |           |
| 14               | 87        |                  |           |
| 10               | 84        |                  |           |
| 6.3              | 81        |                  |           |
| 5                | 79        |                  |           |
| 3.35             | 74        |                  |           |
| 2                | 68        |                  |           |
| 1.18             | 64        |                  |           |
| 0.6              | 60        |                  |           |
| 0.425            | 56        |                  |           |
| 0.3              | 48        |                  |           |
| 0.212            | 40        |                  |           |
| 0.15             | 37        |                  |           |
| 0.063            | 32        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 32         |
| Sand               | 36         |
| Fines <0.063 mm    | 32         |

| Grading Analysis       |    |
|------------------------|----|
| D100                   | mm |
| D60                    | mm |
| D30                    | mm |
| D10                    | mm |
| Uniformity Coefficient |    |
| Curvature Coefficient  |    |

Uniformity and Curvature Coefficient calculated in accordance  
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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4041



# TEST CERTIFICATE

## DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

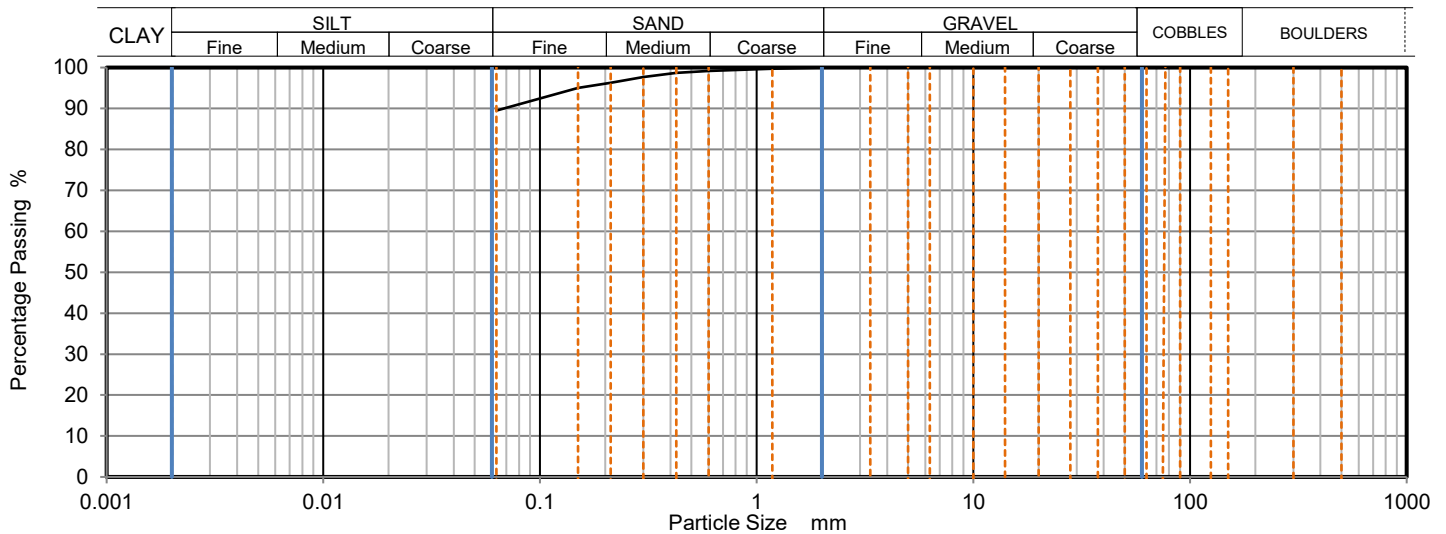
Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 639702  
Hole No.: TP121  
Sample Reference: Not Given  
Sample Description: Light brown slightly sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 107.9 °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       |                  |           |
| 300              | 100       |                  |           |
| 150              | 100       |                  |           |
| 125              | 100       |                  |           |
| 90               | 100       |                  |           |
| 75               | 100       |                  |           |
| 63               | 100       |                  |           |
| 50               | 100       |                  |           |
| 37.5             | 100       |                  |           |
| 28               | 100       |                  |           |
| 20               | 100       |                  |           |
| 14               | 100       |                  |           |
| 10               | 100       |                  |           |
| 6.3              | 100       |                  |           |
| 5                | 100       |                  |           |
| 3.35             | 100       |                  |           |
| 2                | 100       |                  |           |
| 1.18             | 100       |                  |           |
| 0.6              | 99        |                  |           |
| 0.425            | 99        |                  |           |
| 0.3              | 98        |                  |           |
| 0.212            | 96        |                  |           |
| 0.15             | 95        |                  |           |
| 0.063            | 90        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 0          |
| Sand               | 11         |
| Fines <0.063 mm    | 89         |

| Grading Analysis       |    |      |
|------------------------|----|------|
| D100                   | mm | 3.35 |
| D60                    | mm |      |
| D30                    | mm |      |
| D10                    | mm |      |
| Uniformity Coefficient |    |      |
| Curvature Coefficient  |    |      |

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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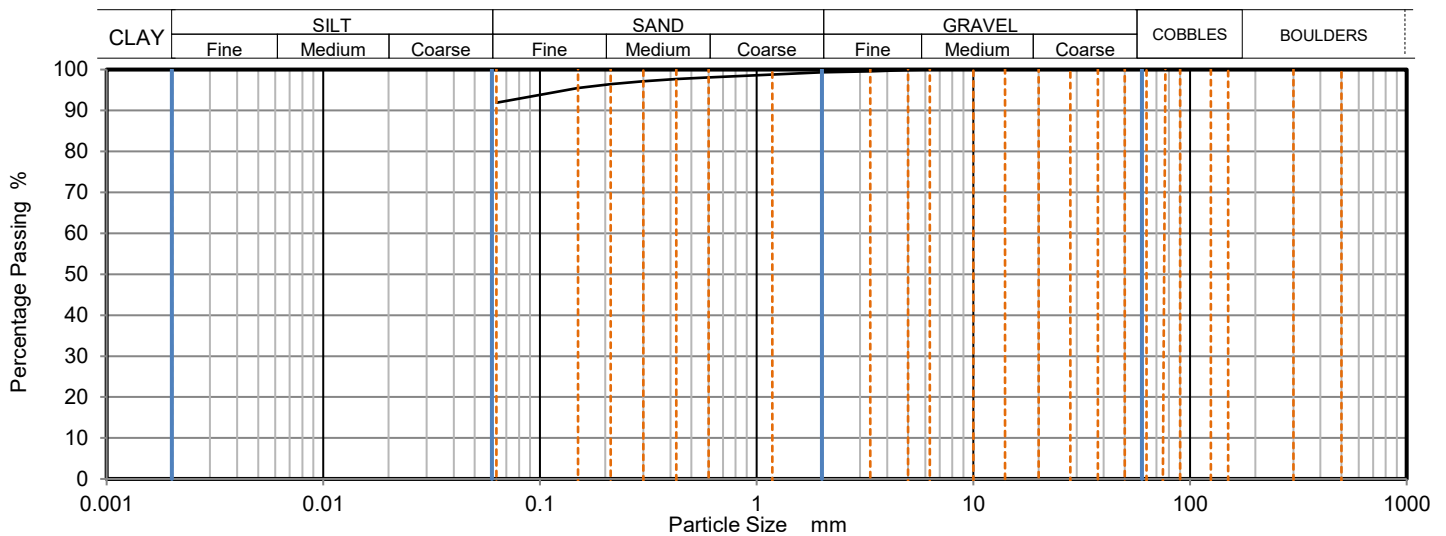
4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE  
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,  
BS 1377-2:2022 cl. 10i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 13/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639703  
Hole No.: TP121  
Sample Reference: Not Given  
Sample Description: Reddish brown slightly sandy CLAY  
Sample Preparation: Sample was quartered, oven dried at 107.9 °C and broken down by hand.Depth Top [m]: 2.50  
Depth Base [m]: 3.00  
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               | 100       |                  |           |
| 10               | 100       |                  |           |
| 6.3              | 100       |                  |           |
| 5                | 100       |                  |           |
| 3.35             | 100       |                  |           |
| 2                | 99        |                  |           |
| 1.18             | 99        |                  |           |
| 0.6              | 98        |                  |           |
| 0.425            | 98        |                  |           |
| 0.3              | 97        |                  |           |
| 0.212            | 96        |                  |           |
| 0.15             | 96        |                  |           |
| 0.063            | 92        |                  |           |

| Sample Proportions | % dry mass |
|--------------------|------------|
| Very coarse        | 0          |
| Gravel             | 1          |
| Sand               | 7          |
| Fines <0.063 mm    | 92         |

| Grading Analysis       |    |     |
|------------------------|----|-----|
| D100                   | mm | 6.3 |
| D60                    | mm |     |
| D30                    | mm |     |
| D10                    | mm |     |
| Uniformity Coefficient |    |     |
| Curvature Coefficient  |    |     |

Uniformity and Curvature Coefficient calculated in accordance  
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

*Katarzyna Koziel*Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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4041

**TEST CERTIFICATE****DETERMINATION OF DRY DENSITY/WATER  
CONTENT RELATIONSHIP COMPACTION METHOD  
USING 2.5 KG RAMMER**

Tested in Accordance with: BS 1377-2: 2022, cl.11

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

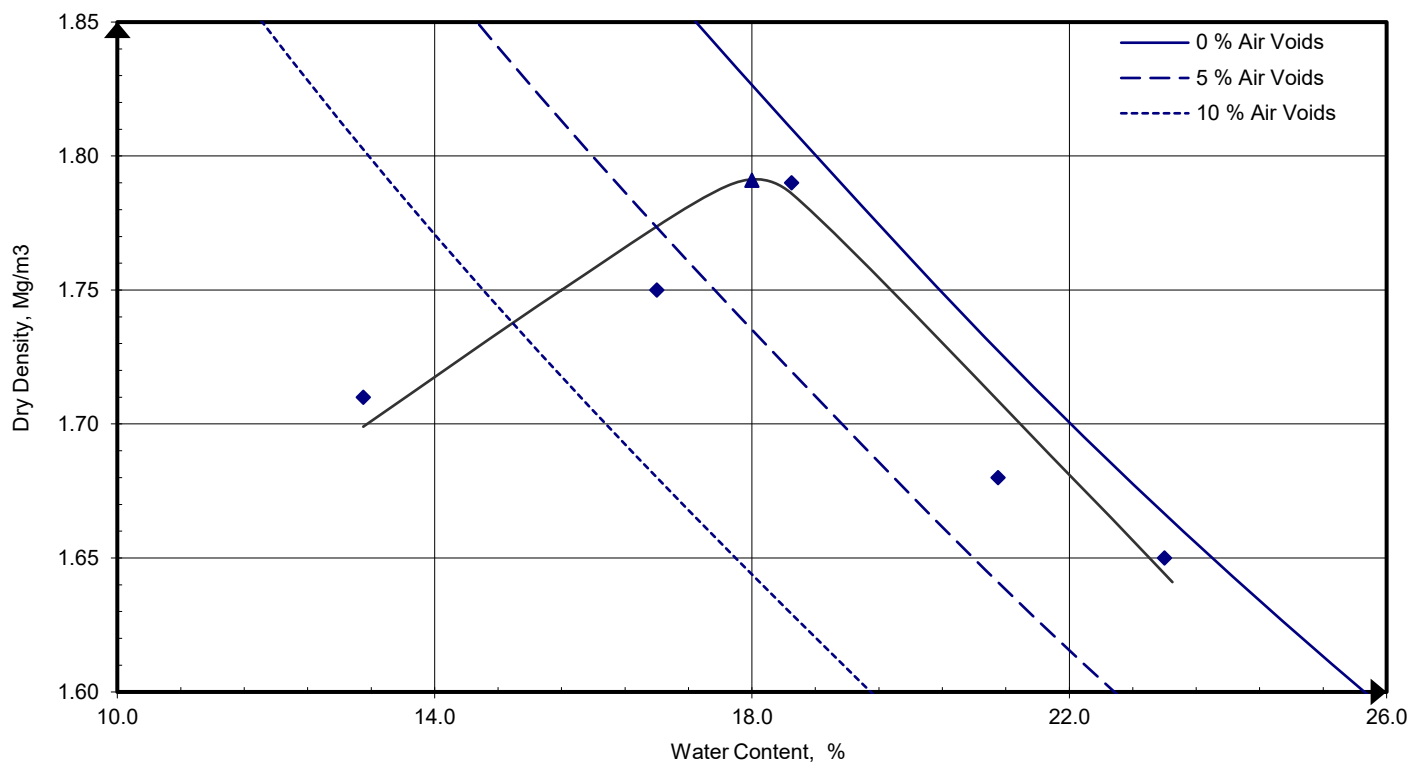
Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**

Laboratory Reference: 639675  
Hole No.: TP101  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 2.00  
Depth Base [m]: 2.50  
Sample Type: B



| Compaction Point No. |       | 1    | 2    | 3    | 4    | 5    |
|----------------------|-------|------|------|------|------|------|
| Water Content        | %     | 13.1 | 16.8 | 18.5 | 21.1 | 23.2 |
| Dry Density          | Mg/m³ | 1.71 | 1.75 | 1.79 | 1.68 | 1.65 |

|              |                      |
|--------------|----------------------|
| Grading zone | 4                    |
| Mould Type   | CBR                  |
| Samples Used | Single sample tested |

|                                    |       |      |
|------------------------------------|-------|------|
| Material Retained on 37.5 mm Sieve | %     | 5    |
| Material Retained on 20.0 mm Sieve | %     | 7    |
| Particle Density - Assumed         | Mg/m³ | 2.72 |
| As received Water Content          | %     | 19.1 |
| Maximum Dry Density                | Mg/m³ | 1.79 |

|                       |   |    |
|-----------------------|---|----|
| Optimum Water Content | % | 18 |
|-----------------------|---|----|

Note: BS 1377-2:2022, CL 11.4

Remarks:

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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## TEST CERTIFICATE

### DETERMINATION OF DRY DENSITY/WATER CONTENT RELATIONSHIP COMPACTION METHOD USING 2.5 KG RAMMER

Tested in Accordance with: BS 1377-2: 2022, cl.11

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

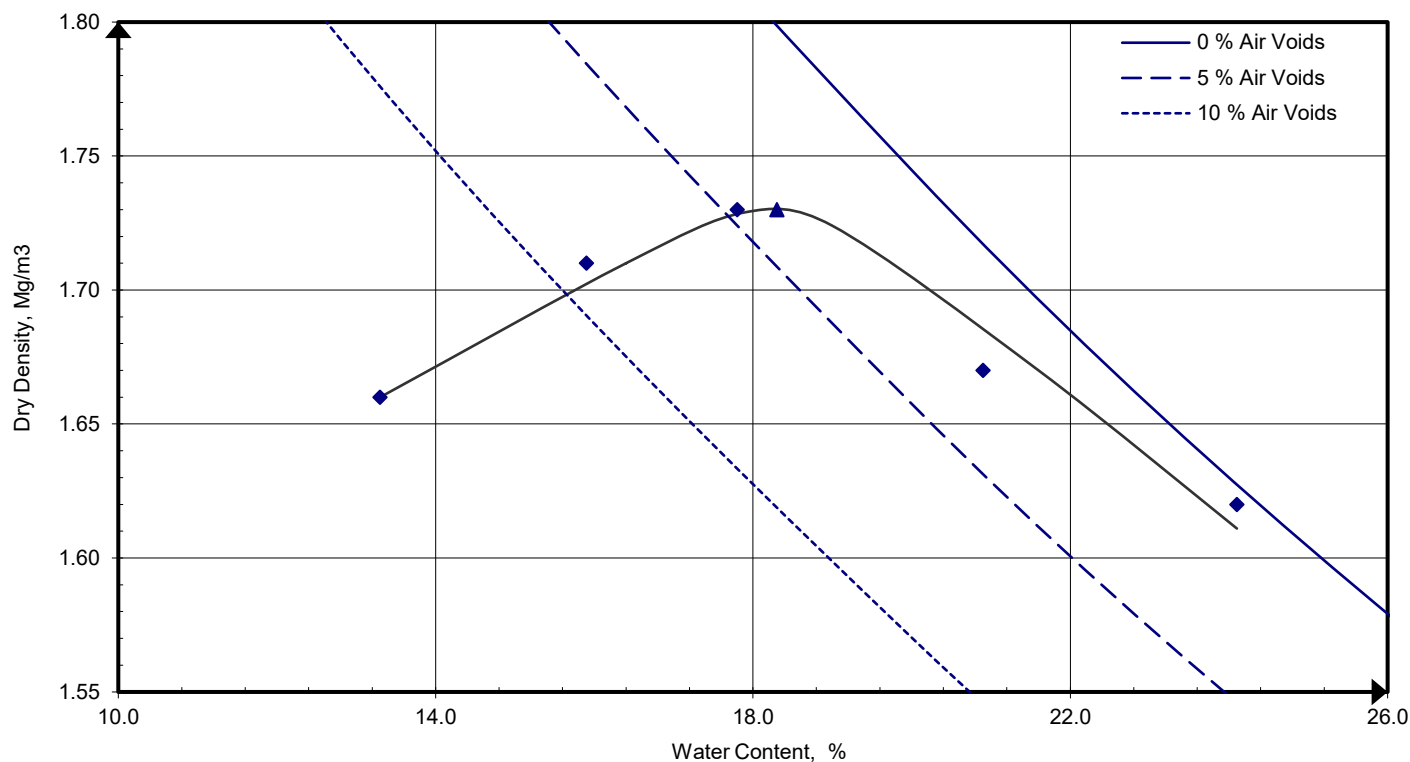
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

#### Test Results:

Laboratory Reference: 639676  
Hole No.: TP102  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 0.40  
Depth Base [m]: 0.60  
Sample Type: B



|                      |       |      |      |      |      |      |
|----------------------|-------|------|------|------|------|------|
| Compaction Point No. |       | 1    | 2    | 3    | 4    | 5    |
| Water Content        | %     | 13.3 | 15.9 | 17.8 | 20.9 | 24.1 |
| Dry Density          | Mg/m³ | 1.66 | 1.71 | 1.73 | 1.67 | 1.62 |

|              |                      |
|--------------|----------------------|
| Grading zone | 4                    |
| Mould Type   | CBR                  |
| Samples Used | Single sample tested |

|                                    |       |      |
|------------------------------------|-------|------|
| Material Retained on 37.5 mm Sieve | %     | 4    |
| Material Retained on 20.0 mm Sieve | %     | 8    |
| Particle Density - Assumed         | Mg/m³ | 2.68 |
| As received Water Content          | %     | 14.5 |
| Maximum Dry Density                | Mg/m³ | 1.73 |

|                       |   |    |
|-----------------------|---|----|
| Optimum Water Content | % | 18 |
|-----------------------|---|----|

Note: BS 1377-2:2022, CL 11.4

Remarks:

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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## TEST CERTIFICATE

### DETERMINATION OF DRY DENSITY/WATER CONTENT RELATIONSHIP COMPACTION METHOD USING 2.5 KG RAMMER

Tested in Accordance with: BS 1377-2: 2022, cl.11

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

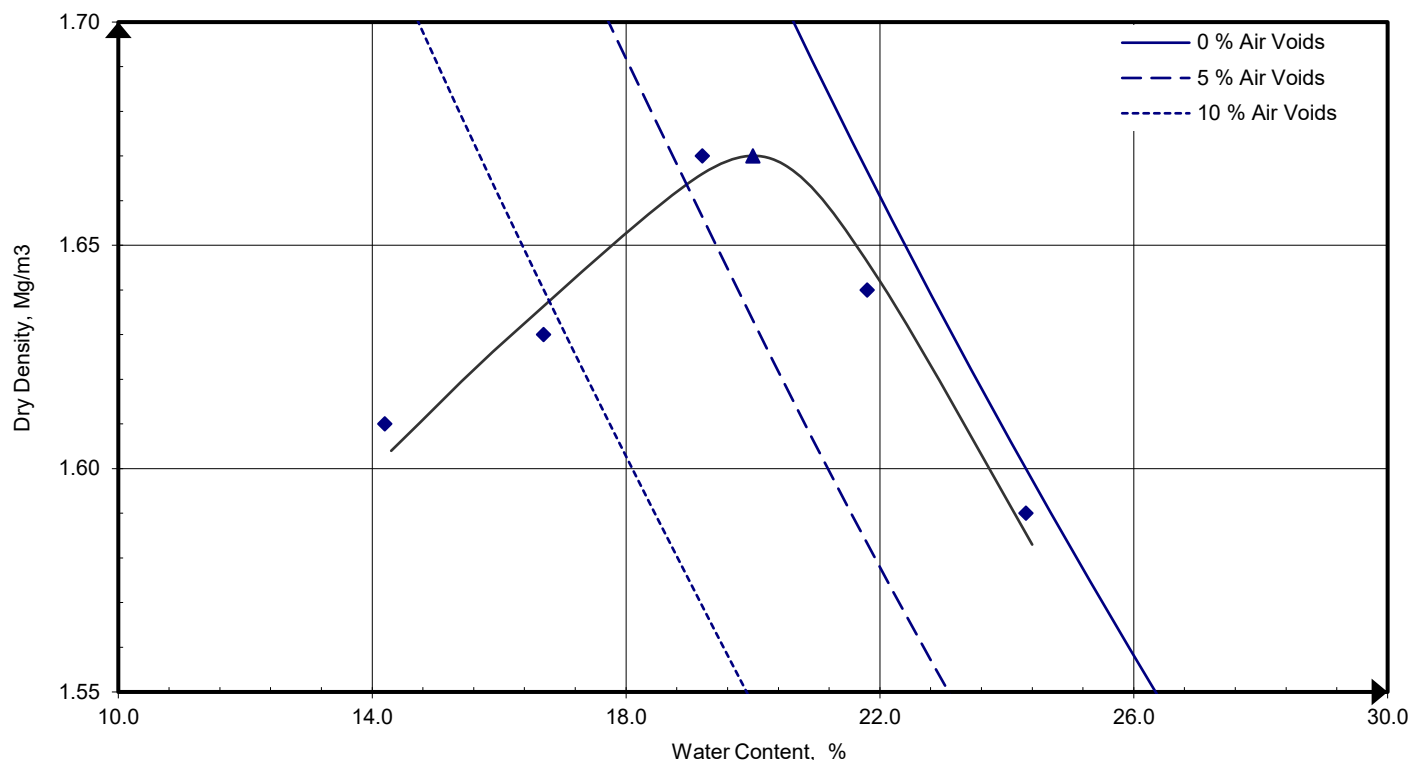
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 24/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

#### Test Results:

Laboratory Reference: 639679  
Hole No.: TP104  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 2.80  
Depth Base [m]: 3.10  
Sample Type: B



| Compaction Point No. |       | 1    | 2    | 3    | 4    | 5    |
|----------------------|-------|------|------|------|------|------|
| Water Content        | %     | 14.2 | 16.7 | 19.2 | 21.8 | 24.3 |
| Dry Density          | Mg/m³ | 1.61 | 1.63 | 1.67 | 1.64 | 1.59 |

|              |                      |
|--------------|----------------------|
| Grading zone | 1                    |
| 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 - Assumed         | Mg/m³ | 2.62 |
| As received Water Content          | %     | 26.0 |
| Maximum Dry Density                | Mg/m³ | 1.67 |

|                       |   |    |
|-----------------------|---|----|
| Optimum Water Content | % | 20 |
|-----------------------|---|----|

Note: BS 1377-2:2022, cl 11.3

Remarks:

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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4041

**TEST CERTIFICATE****DETERMINATION OF DRY DENSITY/WATER  
CONTENT RELATIONSHIP COMPACTION METHOD  
USING 2.5 KG RAMMER**

Tested in Accordance with: BS 1377-2: 2022, cl.11

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

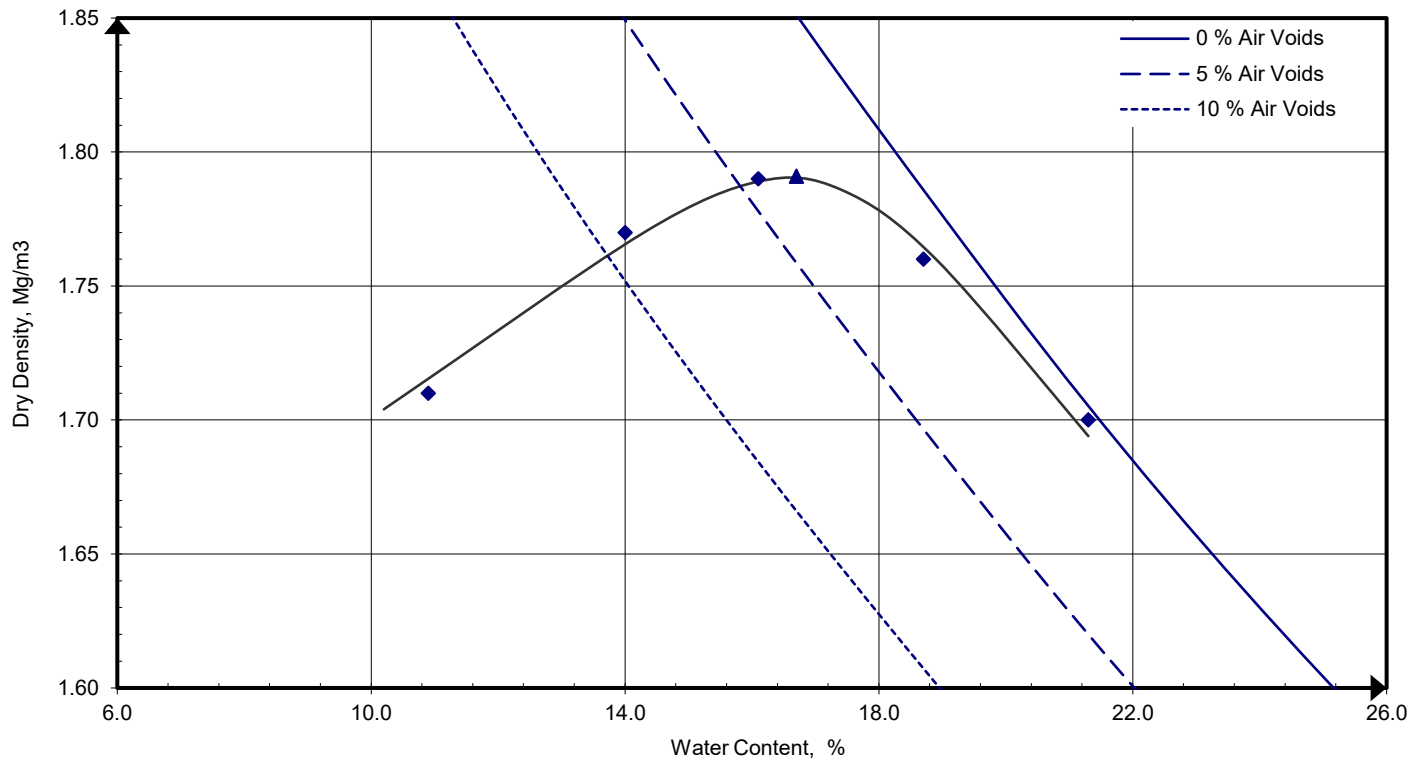
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 24/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

**Test Results:**

Laboratory Reference: 639683  
Hole No.: TP107  
Sample Reference: Not Given  
Sample Description: Brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 3.00  
Depth Base [m]: 3.50  
Sample Type: B



|                      |       |      |      |      |      |      |
|----------------------|-------|------|------|------|------|------|
| Compaction Point No. |       | 1    | 2    | 3    | 4    | 5    |
| Water Content        | %     | 10.9 | 14.0 | 16.1 | 18.7 | 21.3 |
| Dry Density          | Mg/m³ | 1.71 | 1.77 | 1.79 | 1.76 | 1.70 |

|              |                      |
|--------------|----------------------|
| Grading zone | 2                    |
| Mould Type   | 1 Litre              |
| Samples Used | Single sample tested |

|                                    |       |      |
|------------------------------------|-------|------|
| Material Retained on 37.5 mm Sieve | %     | 0    |
| Material Retained on 20.0 mm Sieve | %     | 4    |
| Particle Density - Assumed         | Mg/m³ | 2.68 |
| As received Water Content          | %     | 16.3 |
| Maximum Dry Density                | Mg/m³ | 1.79 |

|                       |   |    |
|-----------------------|---|----|
| Optimum Water Content | % | 17 |
|-----------------------|---|----|

Note: BS 1377-2:2022, cl 11.3

Remarks:

Signed:

Katarzyna  
Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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## TEST CERTIFICATE

### DETERMINATION OF DRY DENSITY/WATER CONTENT RELATIONSHIP COMPACTION METHOD USING 2.5 KG RAMMER

Tested in Accordance with: BS 1377-2: 2022, cl.11

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

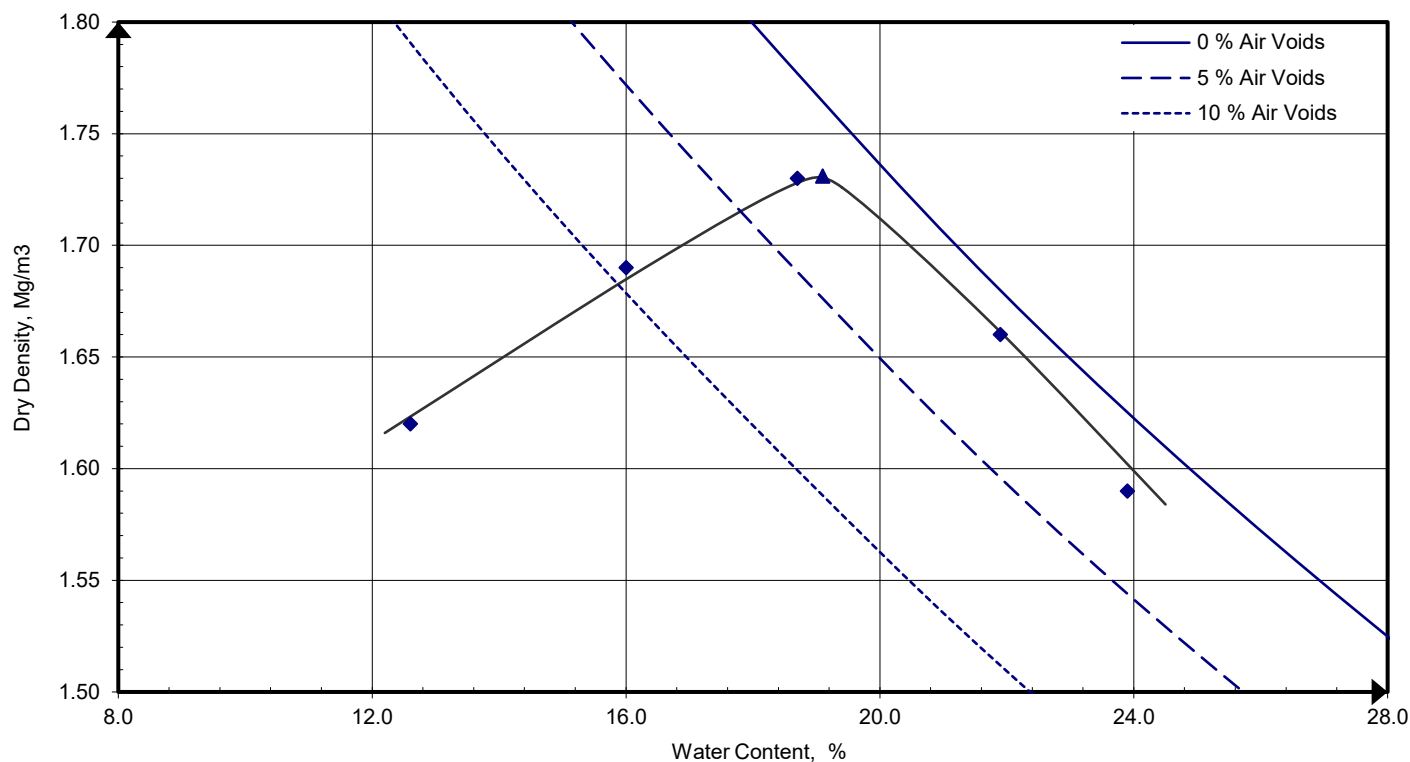
Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

#### Test Results:

Laboratory Reference: 639690  
Hole No.: TP111  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 2.50  
Depth Base [m]: 3.00  
Sample Type: B



|                      |       |      |      |      |      |      |
|----------------------|-------|------|------|------|------|------|
| Compaction Point No. |       | 1    | 2    | 3    | 4    | 5    |
| Water Content        | %     | 12.6 | 16.0 | 18.7 | 21.9 | 23.9 |
| Dry Density          | Mg/m³ | 1.62 | 1.69 | 1.73 | 1.66 | 1.59 |

|              |                      |
|--------------|----------------------|
| Grading zone | 2                    |
| Mould Type   | 1 Litre              |
| Samples Used | Single sample tested |

|                                    |       |      |
|------------------------------------|-------|------|
| Material Retained on 37.5 mm Sieve | %     | 0    |
| Material Retained on 20.0 mm Sieve | %     | 4    |
| Particle Density - Assumed         | Mg/m³ | 2.66 |
| As received Water Content          | %     | 14.4 |
| Maximum Dry Density                | Mg/m³ | 1.73 |

|                       |   |    |
|-----------------------|---|----|
| Optimum Water Content | % | 19 |
|-----------------------|---|----|

Note: BS 1377-2:2022, cl 11.3

Remarks:

Signed:

Katarzyna  
Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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**TEST CERTIFICATE****DETERMINATION OF DRY DENSITY/WATER  
CONTENT RELATIONSHIP COMPACTION METHOD  
USING 2.5 KG RAMMER**

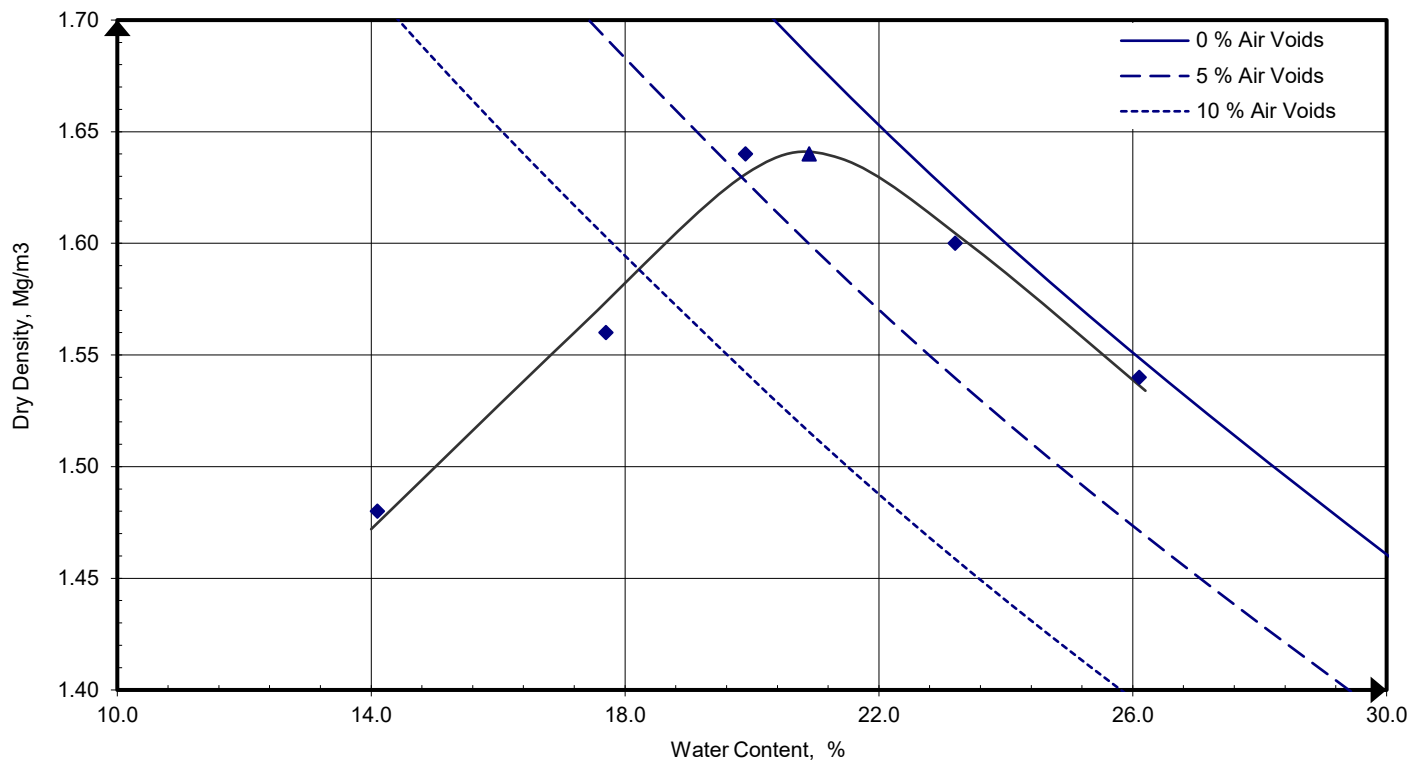
Tested in Accordance with: BS 1377-2: 2022, cl.11

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639697  
Hole No.: TP116  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 2.00  
Depth Base [m]: 2.50  
Sample Type: B

|                      |      |      |      |      |      |
|----------------------|------|------|------|------|------|
| Compaction Point No. | 1    | 2    | 3    | 4    | 5    |
| Water Content %      | 14.1 | 17.7 | 19.9 | 23.2 | 26.1 |
| Dry Density Mg/m³    | 1.48 | 1.56 | 1.64 | 1.60 | 1.54 |

|              |                      |
|--------------|----------------------|
| Grading zone | 1                    |
| 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 - Assumed Mg/m³     | 2.60 |
| As received Water Content %          | 15.5 |
| Maximum Dry Density Mg/m³            | 1.64 |

|                         |    |
|-------------------------|----|
| Optimum Water Content % | 21 |
|-------------------------|----|

Note: BS 1377-2:2022, cl 11.3

Remarks:

Signed:

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Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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**TEST CERTIFICATE****DETERMINATION OF DRY DENSITY/WATER  
CONTENT RELATIONSHIP COMPACTION METHOD  
USING 2.5 KG RAMMER**

Tested in Accordance with: BS 1377-2: 2022, cl.11

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

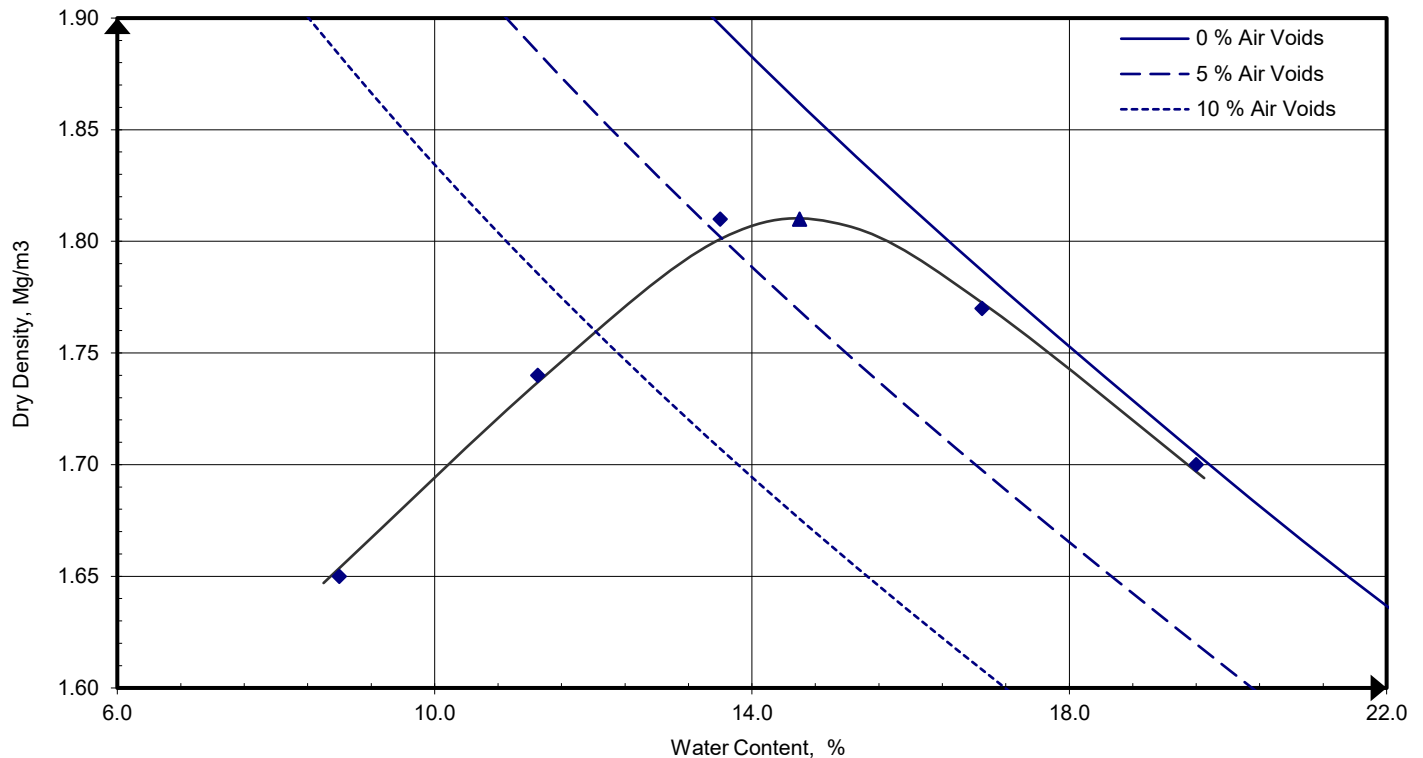
Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**

Laboratory Reference: 639698  
Hole No.: TP118  
Sample Reference: Not Given  
Sample Description: Orangish brown slightly gravelly slight sandy CLAY  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 0.50  
Depth Base [m]: 1.00  
Sample Type: B



|                      |       |      |      |      |      |      |
|----------------------|-------|------|------|------|------|------|
| Compaction Point No. | 1     | 2    | 3    | 4    | 5    |      |
| Water Content        | %     | 8.8  | 11.3 | 13.6 | 16.9 | 19.6 |
| Dry Density          | Mg/m³ | 1.65 | 1.74 | 1.81 | 1.77 | 1.70 |

|              |                      |
|--------------|----------------------|
| Grading zone | 4                    |
| Mould Type   | CBR                  |
| Samples Used | Single sample tested |

|                                    |       |      |
|------------------------------------|-------|------|
| Material Retained on 37.5 mm Sieve | %     | 1    |
| Material Retained on 20.0 mm Sieve | %     | 5    |
| Particle Density - Assumed         | Mg/m³ | 2.56 |
| As received Water Content          | %     | 16.5 |
| Maximum Dry Density                | Mg/m³ | 1.81 |

|                       |   |    |
|-----------------------|---|----|
| Optimum Water Content | % | 15 |
|-----------------------|---|----|

Note: BS 1377-2:2022, CL 11.4

Remarks:

Signed:

Katarzyna  
Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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## TEST CERTIFICATE

### DETERMINATION OF DRY DENSITY/WATER CONTENT RELATIONSHIP COMPACTION METHOD USING 2.5 KG RAMMER

Tested in Accordance with: BS 1377-2: 2022, cl.11

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

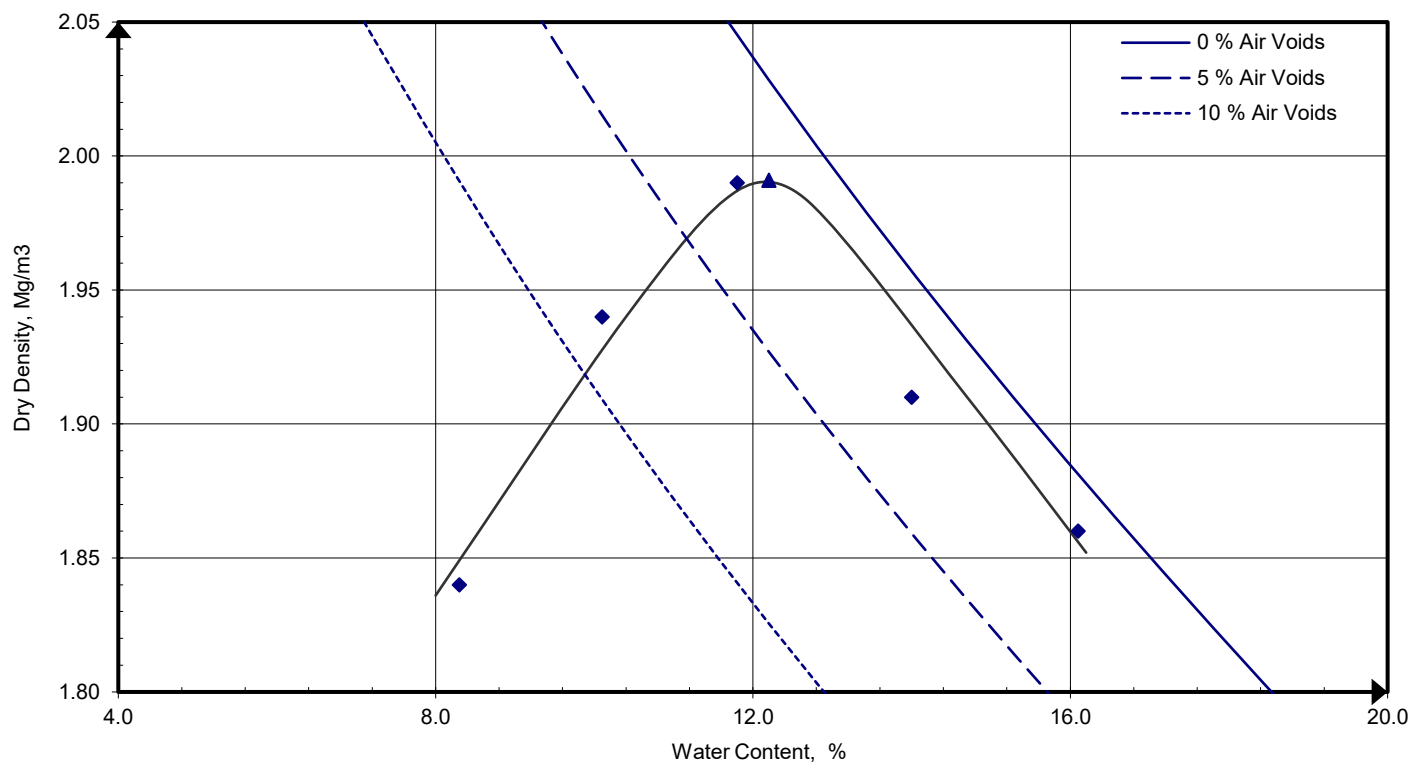
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

#### Test Results:

Laboratory Reference: 639700  
Hole No.: TP119  
Sample Reference: Not Given  
Sample Description: Brown CLAY  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.30  
Depth Base [m]: 1.50  
Sample Type: B



| Compaction Point No. | 1     | 2    | 3    | 4    | 5    |      |
|----------------------|-------|------|------|------|------|------|
| Water Content        | %     | 8.3  | 10.1 | 11.8 | 14.0 | 16.1 |
| Dry Density          | Mg/m³ | 1.84 | 1.94 | 1.99 | 1.91 | 1.86 |

|              |                      |
|--------------|----------------------|
| Grading zone | 3                    |
| Mould Type   | CBR                  |
| Samples Used | Single sample tested |

|                                    |       |      |
|------------------------------------|-------|------|
| Material Retained on 37.5 mm Sieve | %     | 0    |
| Material Retained on 20.0 mm Sieve | %     | 20   |
| Particle Density - Assumed         | Mg/m³ | 2.70 |
| As received Water Content          | %     | 16.1 |
| Maximum Dry Density                | Mg/m³ | 1.99 |

|                       |   |    |
|-----------------------|---|----|
| Optimum Water Content | % | 12 |
|-----------------------|---|----|

Note: BS 1377-2:2022, CL 11.4

Remarks:

Signed:

Katarzyna  
Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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**TEST CERTIFICATE****DETERMINATION OF DRY DENSITY/WATER  
CONTENT RELATIONSHIP COMPACTION METHOD  
USING 2.5 KG RAMMER**

Tested in Accordance with: BS 1377-2: 2022, cl.11

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

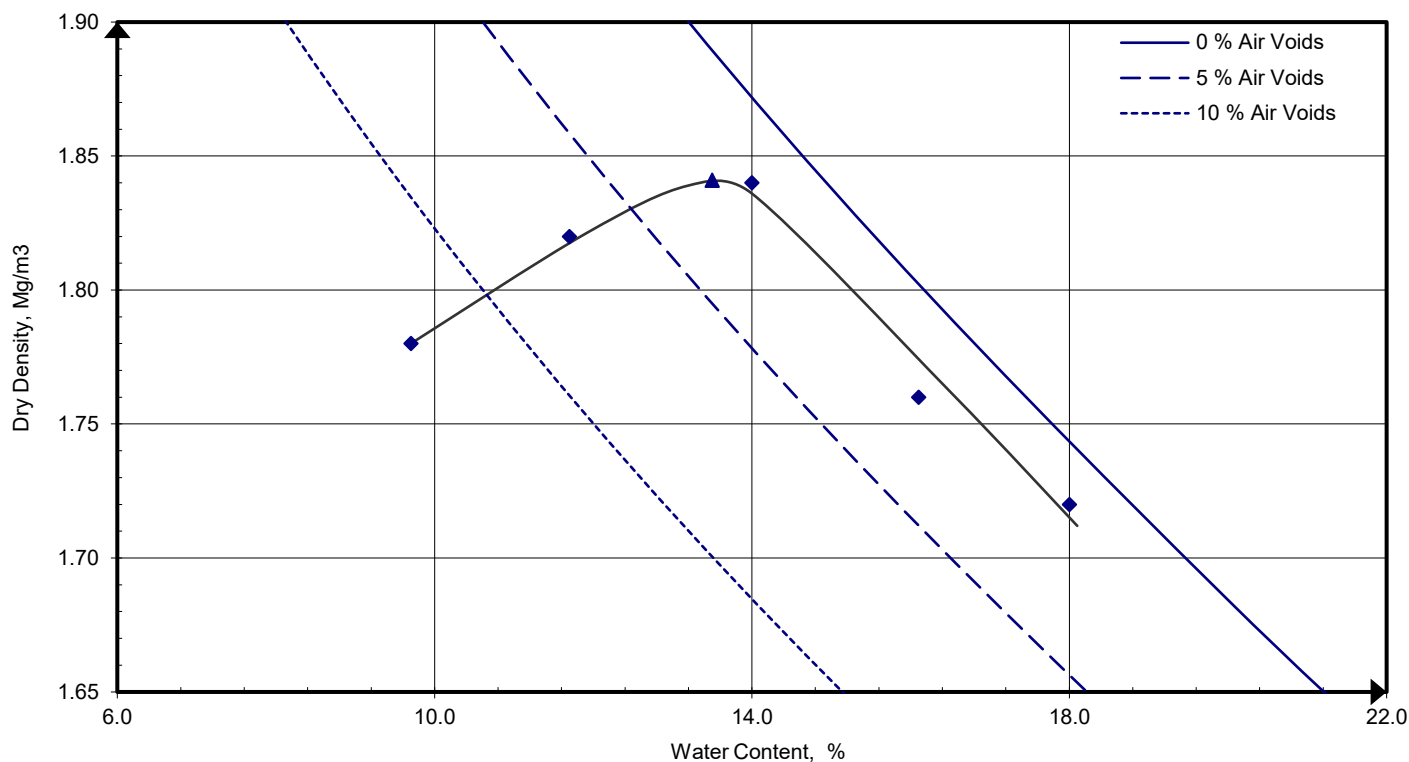
Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**

Laboratory Reference: 639701  
Hole No.: TP120  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly sandy CLAY  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 0.80  
Depth Base [m]: 1.00  
Sample Type: B



|                      |       |      |      |      |      |      |
|----------------------|-------|------|------|------|------|------|
| Compaction Point No. |       | 1    | 2    | 3    | 4    | 5    |
| Water Content        | %     | 9.7  | 11.7 | 14.0 | 16.1 | 18.0 |
| Dry Density          | Mg/m³ | 1.78 | 1.82 | 1.84 | 1.76 | 1.72 |

|              |                      |
|--------------|----------------------|
| Grading zone | 3                    |
| Mould Type   | CBR                  |
| Samples Used | Single sample tested |

|                                    |       |      |
|------------------------------------|-------|------|
| Material Retained on 37.5 mm Sieve | %     | 0    |
| Material Retained on 20.0 mm Sieve | %     | 11   |
| Particle Density - Assumed         | Mg/m³ | 2.54 |
| As received Water Content          | %     | 5.6  |
| Maximum Dry Density                | Mg/m³ | 1.84 |

|                       |   |    |
|-----------------------|---|----|
| Optimum Water Content | % | 14 |
|-----------------------|---|----|

Note: BS 1377-2:2022, CL 11.4

Remarks:

Signed:

Katarzyna  
Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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**TEST CERTIFICATE****DETERMINATION OF DRY DENSITY/WATER  
CONTENT RELATIONSHIP COMPACTION METHOD  
USING 2.5 KG RAMMER**

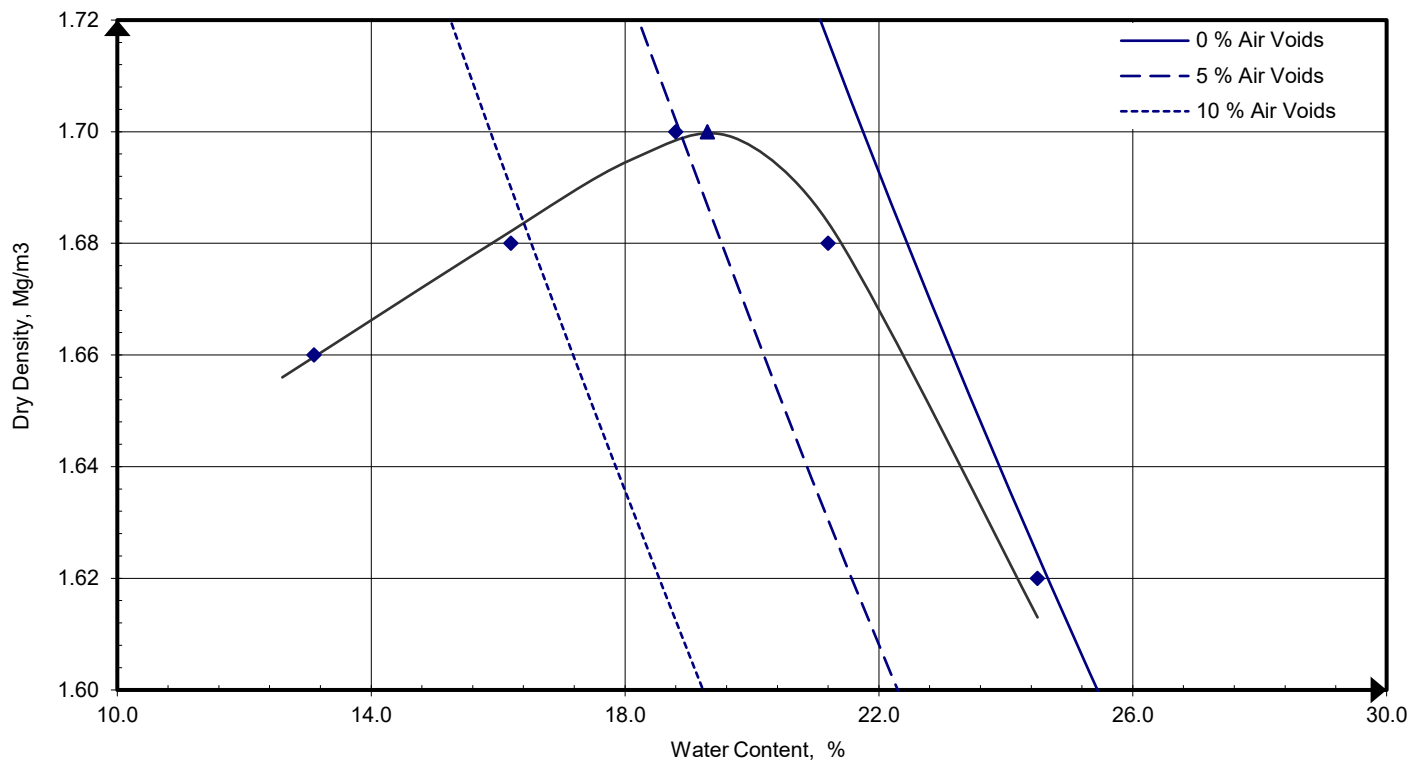
Tested in Accordance with: BS 1377-2: 2022, cl.11

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB

Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NEContact: Alex Tabb  
Site Address: MarkfieldClient Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

**Test Results:**Laboratory Reference: 639703  
Hole No.: TP121  
Sample Reference: Not Given  
Sample Description: Reddish brown slightly sandy CLAY  
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 2.50  
Depth Base [m]: 3.00  
Sample Type: B

|                      |       |      |      |      |      |      |
|----------------------|-------|------|------|------|------|------|
| Compaction Point No. |       | 1    | 2    | 3    | 4    | 5    |
| Water Content        | %     | 13.1 | 16.2 | 18.8 | 21.2 | 24.5 |
| Dry Density          | Mg/m³ | 1.66 | 1.68 | 1.70 | 1.68 | 1.62 |

|              |                      |
|--------------|----------------------|
| Grading zone | 1                    |
| 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 - Assumed         | Mg/m³ | 2.70 |
| As received Water Content          | %     | 19.1 |
| Maximum Dry Density                | Mg/m³ | 1.70 |

|                       |   |    |
|-----------------------|---|----|
| Optimum Water Content | % | 19 |
|-----------------------|---|----|

Note: BS 1377-2:2022, cl 11.3

Remarks:

Signed:

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Geotechnical Reporting Team Leader  
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 1377-2:2022 Cl. 15

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 639699  
Hole No.: TP119  
Sample Reference: Not Given  
Sample Description: Brown gravelly CLAY

Depth Top [m]: 0.10  
Depth Base [m]: 0.17  
Sample Type: B

### Specimen Preparation:

Condition Remoulded  
Details Recompacted with specified standard effort using 2.5kg rammer

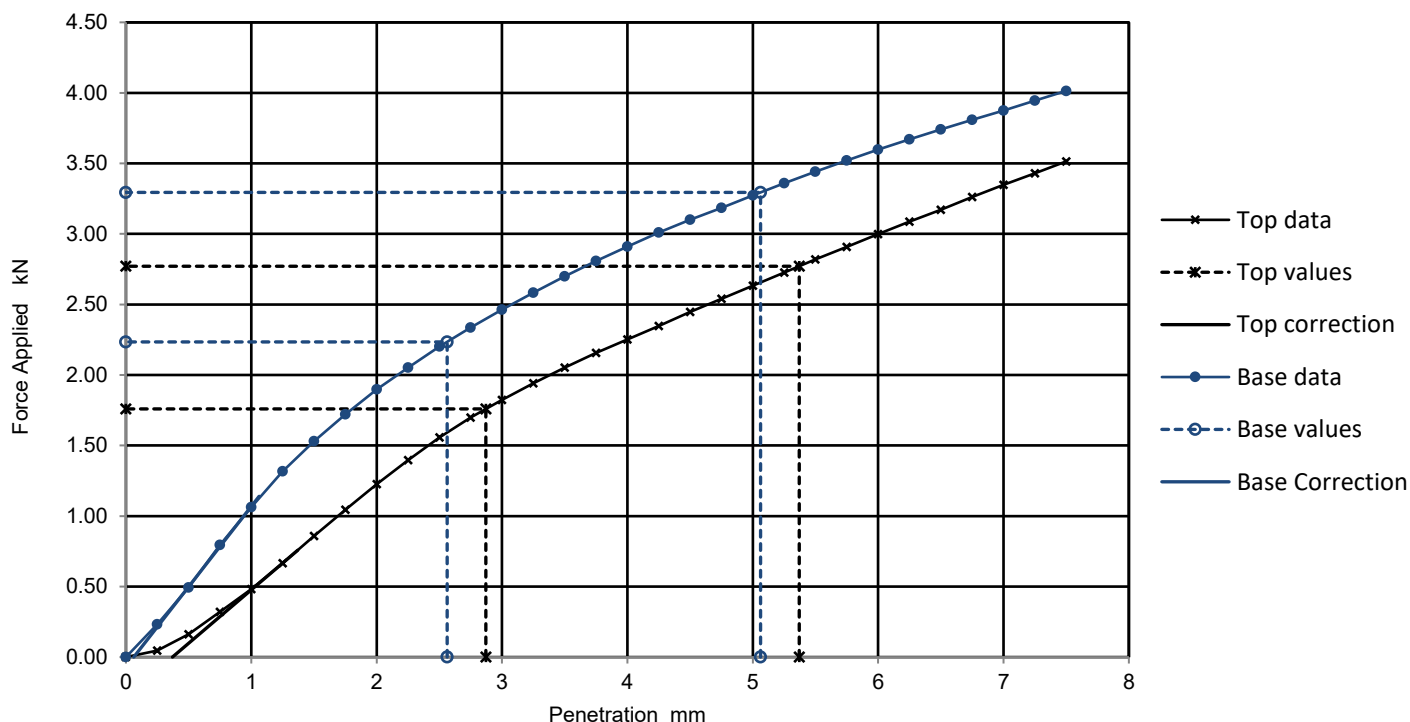
Soaking details Not soaked  
Period of soaking days  
Time to surface days  
Amount of swell recorded mm  
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 9 %

Initial Specimen details Bulk density 1.65 Mg/m3  
Dry density 1.44 Mg/m3  
Water content 15 %

Surcharge applied 8 kg  
4.9 kPa

Force v Penetration Plots



### Results

TOP  
BASE

| Curve correction applied | CBR Values, % |     |         |         |
|--------------------------|---------------|-----|---------|---------|
|                          | 2.5mm         | 5mm | Highest | Average |
| Yes                      | 13            | 14  | 14      | 15      |
| Yes                      | 17            | 16  | 17      |         |

| Water Content % |
|-----------------|
| 15              |
| 14.4            |

### Remarks:

Test/ Specimen specific remarks:

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
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 1377-2:2022 Cl. 15

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 639702  
Hole No.: TP121  
Sample Reference: Not Given  
Sample Description: Light brown slightly sandy CLAY

Depth Top [m]: 0.80  
Depth Base [m]: 1.00  
Sample Type: B

### Specimen Preparation:

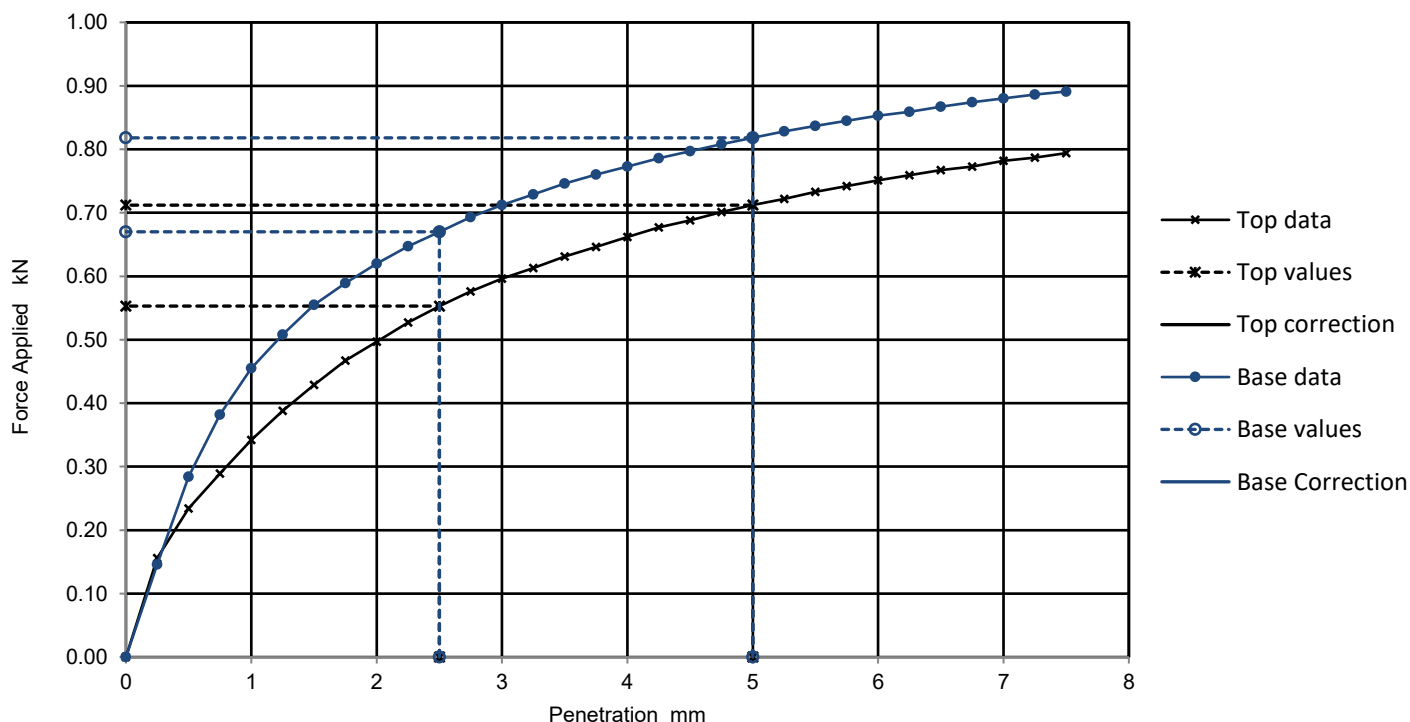
Condition Remoulded  
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked  
Period of soaking days  
Time to surface days  
Amount of swell recorded mm  
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 0 %

|                          |               |      |       |                   |     |     |
|--------------------------|---------------|------|-------|-------------------|-----|-----|
| Initial Specimen details | Bulk density  | 1.91 | Mg/m3 | Surcharge applied | 8   | kg  |
|                          | Dry density   | 1.48 | Mg/m3 |                   | 4.9 | kPa |
|                          | Water content | 29   | %     |                   |     |     |

Force v Penetration Plots



### Results

TOP  
BASE

| Curve correction applied | CBR Values, % |     |         |         |
|--------------------------|---------------|-----|---------|---------|
|                          | 2.5mm         | 5mm | Highest | Average |
| No                       | 4.2           | 3.6 | 4.2     | 4.6     |
| No                       | 5.1           | 4.1 | 5.1     |         |

| Water Content % |
|-----------------|
| 29.6            |
| 29.8            |

### Remarks:

Test/ Specimen specific remarks:

### Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## UNCONFINED COMPRESSIVE STRENGTH OF SOIL

Tested in Accordance with: BS EN ISO 17892-7: 2018

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

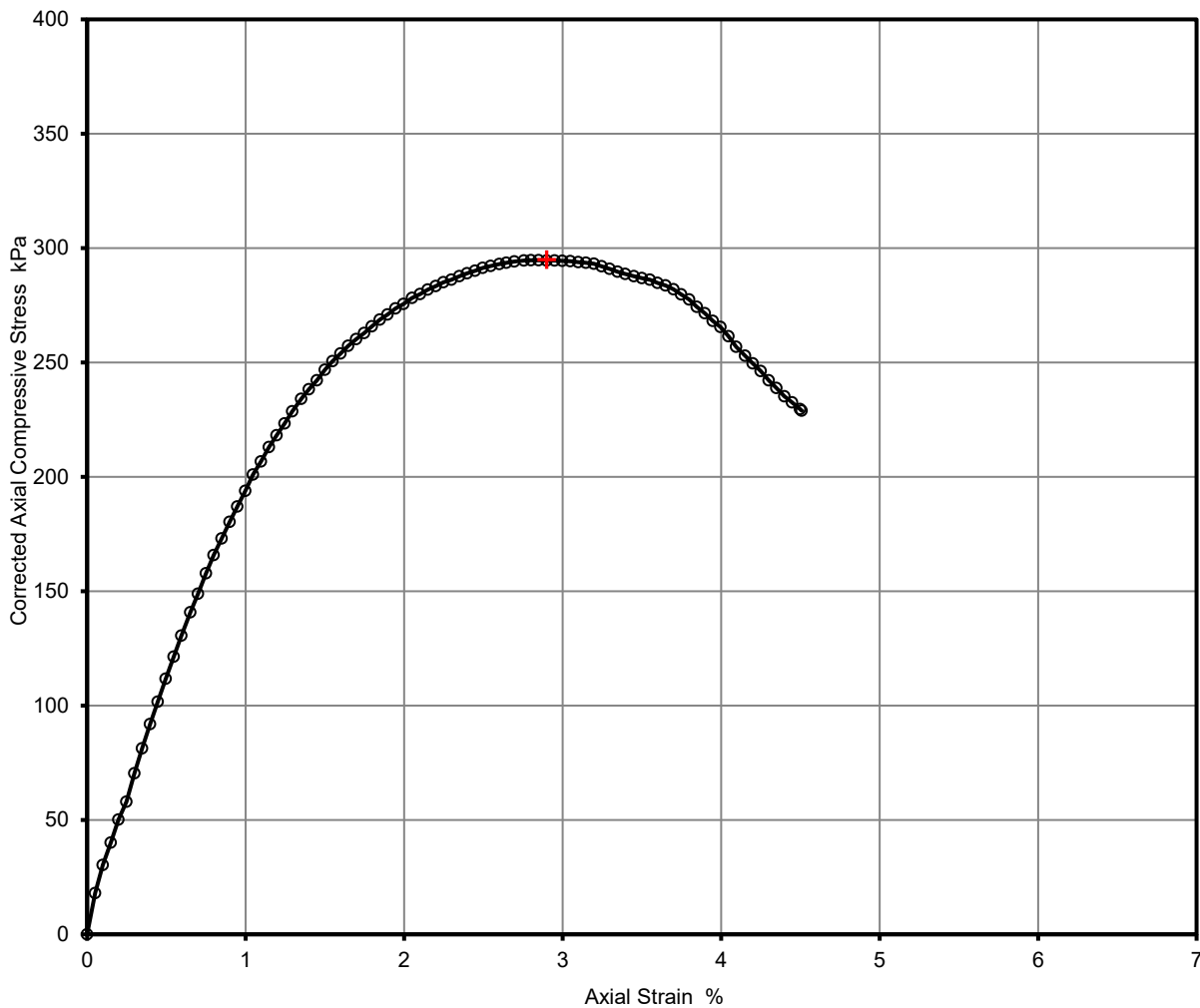
### Test Results:

Laboratory Reference: 639713  
Hole No.: RH108  
Sample Reference: Not Given  
Sample Description: Brown CLAY

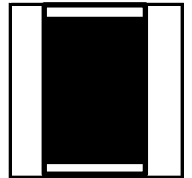
Depth Top [m]: 6.80  
Depth Base [m]: 6.90  
Sample Type: C

|               |       |                                 |         |       |
|---------------|-------|---------------------------------|---------|-------|
| Test Number   | 1     | Rate of Strain                  | 1.0     | %/min |
| Length        | 181.4 | At failure                      | 2.9     | %     |
| Diameter      | 84.5  | Axial Strain                    | 295     | kPa   |
| Bulk Density  | 2.05  | Unconfined Compressive Strength | Brittle |       |
| Water content | 21.1  | Mode of Failure                 |         |       |
| Dry Density   | 1.69  |                                 |         |       |

### Axial Compressive Stress v Axial Strain



Position within sample



Note: Axial compressive stress corrected for area change, and membrane effects (if used)

Remarks:

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
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Site Address: Markfield

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

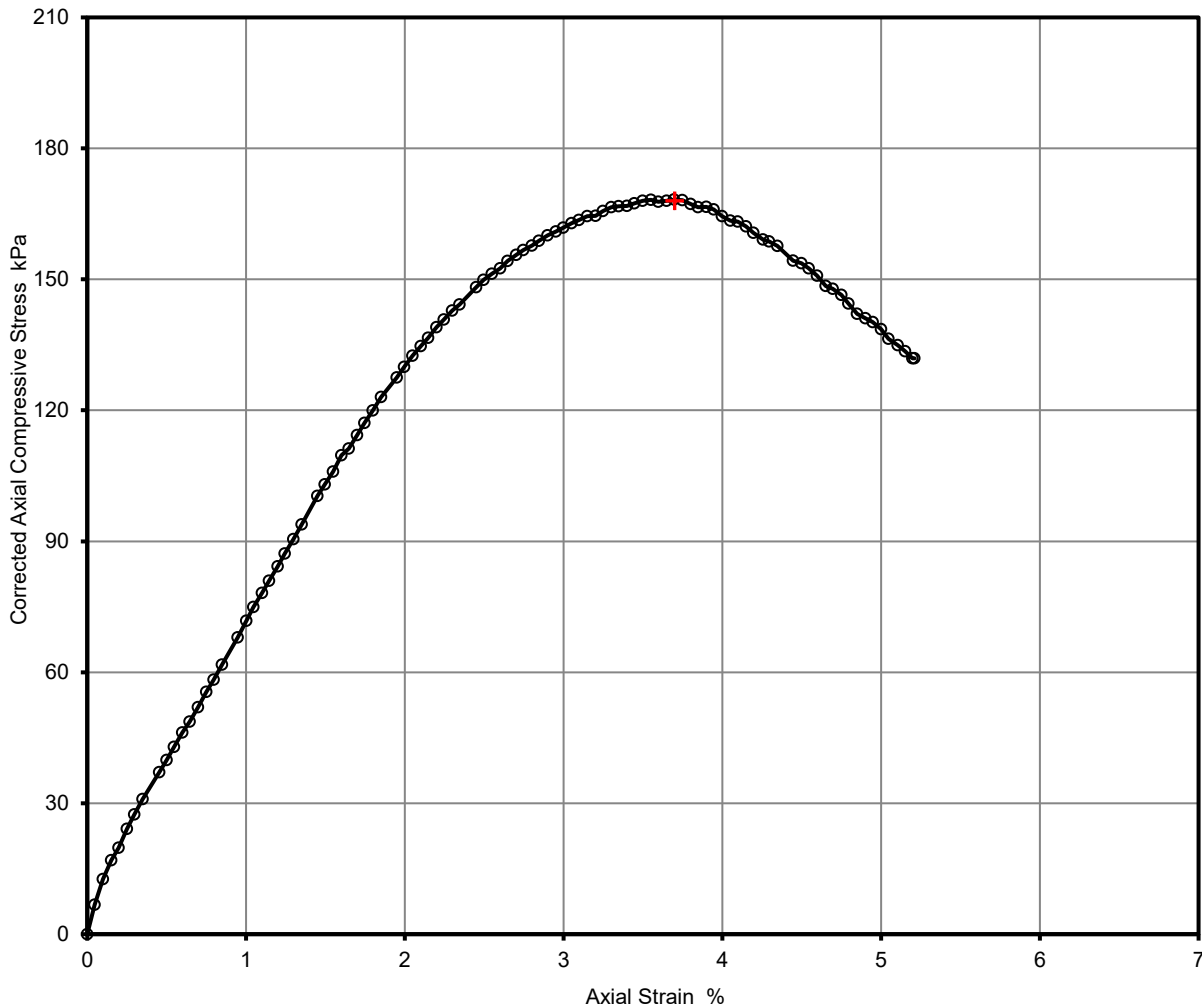
### Test Results:

Laboratory Reference: 639714  
Hole No.: RH108  
Sample Reference: Not Given  
Sample Description: Brown CLAY

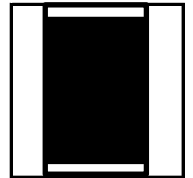
Depth Top [m]: 8.60  
Depth Base [m]: 8.75  
Sample Type: C

|               |       |                                 |         |       |
|---------------|-------|---------------------------------|---------|-------|
| Test Number   | 1     | Rate of Strain                  | 1.0     | %/min |
| Length        | 151.8 | At failure                      | 3.7     | %     |
| Diameter      | 87.1  | Axial Strain                    | 168     | kPa   |
| Bulk Density  | 2.08  | Unconfined Compressive Strength | Brittle |       |
| Water content | 20.8  | Mode of Failure                 |         |       |
| Dry Density   | 1.72  |                                 |         |       |

### Axial Compressive Stress v Axial Strain



Position within sample



Note: Axial compressive stress corrected for area change, and membrane effects (if used)

Remarks: Sample is below recommended length to diameter ratio.

Signed:

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Geotechnical Reporting Team Leader  
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# TEST CERTIFICATE

## UNCONFINED COMPRESSIVE STRENGTH OF SOIL

Tested in Accordance with: BS EN ISO 17892-7: 2018

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

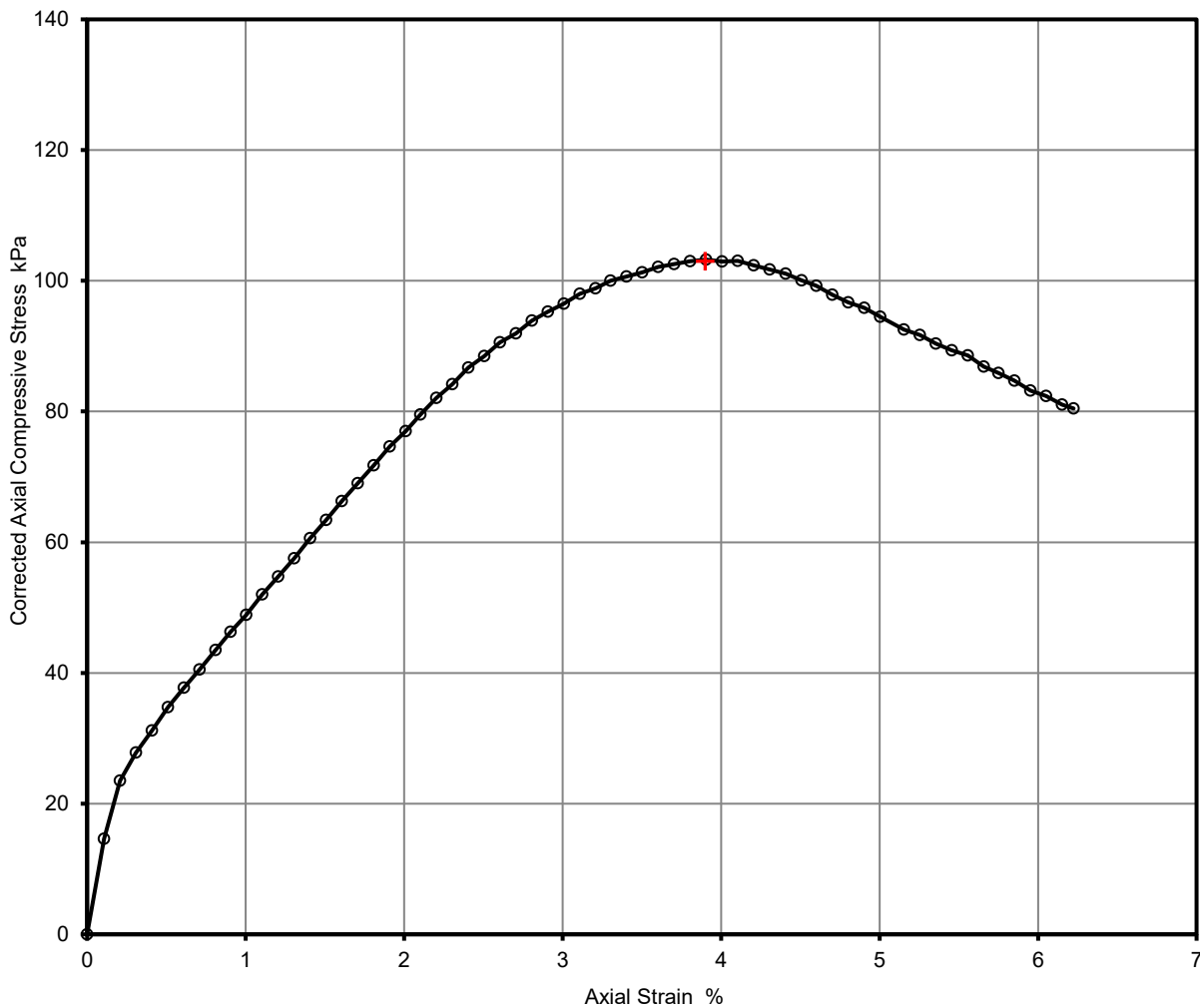
### Test Results:

Laboratory Reference: 639715  
Hole No.: RH107  
Sample Reference: Not Given  
Sample Description: Brown CLAY

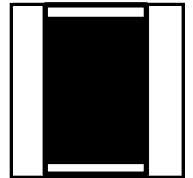
Depth Top [m]: 7.35  
Depth Base [m]: 7.50  
Sample Type: C

|               |       |                                 |         |       |
|---------------|-------|---------------------------------|---------|-------|
| Test Number   | 1     | Rate of Strain                  | 1.0     | %/min |
| Length        | 139.3 | At failure                      | 3.9     | %     |
| Diameter      | 81.9  | Axial Strain                    | 103     | kPa   |
| Bulk Density  | 2.06  | Unconfined Compressive Strength | Brittle |       |
| Water content | 19.7  | Mode of Failure                 |         |       |
| Dry Density   | 1.72  |                                 |         |       |

Axial Compressive Stress v Axial Strain



Position within sample



Note: Axial compressive stress corrected for area change, and membrane effects (if used)

Remarks: Sample is below recommended length to diameter ratio.

Signed:

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Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

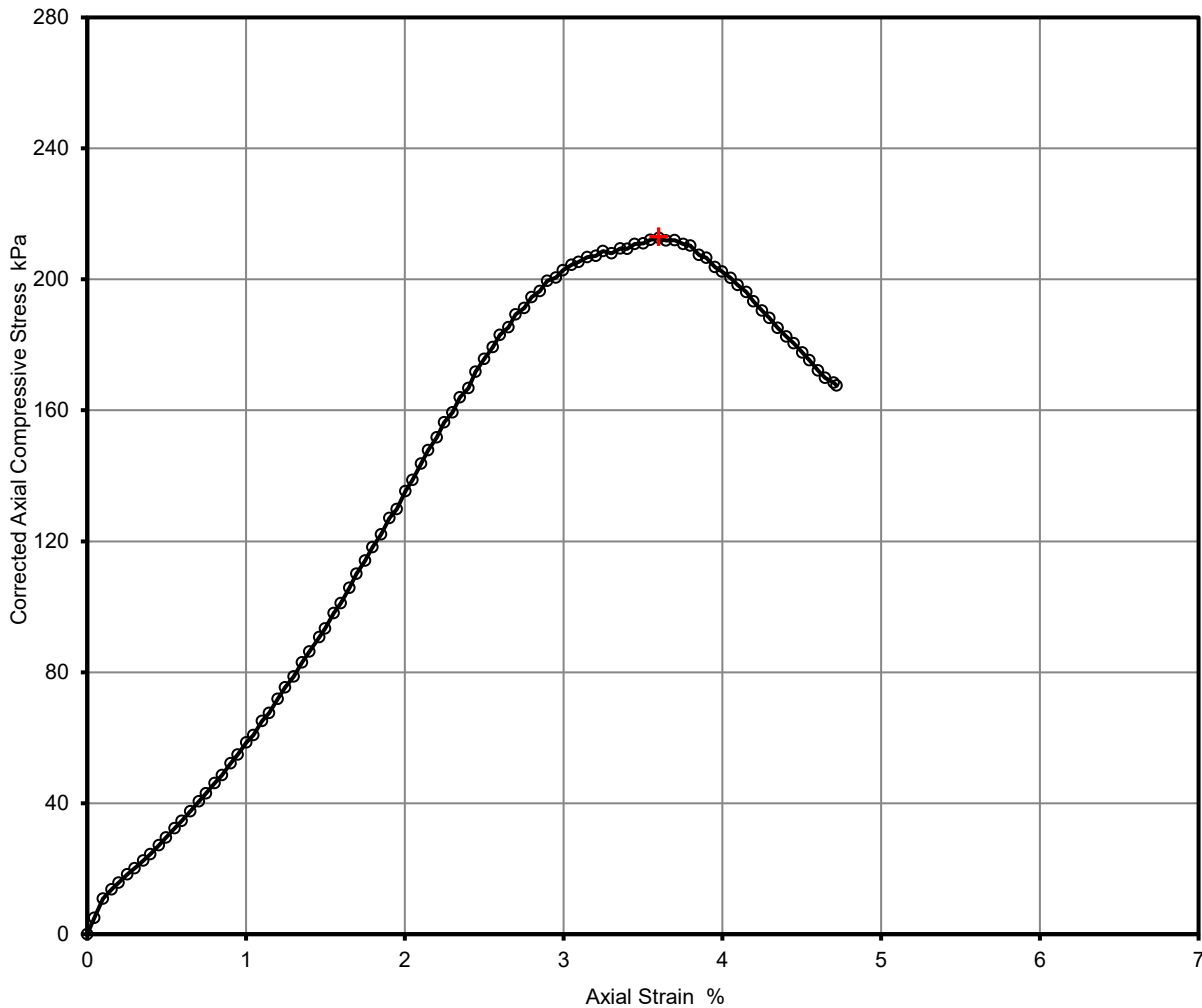
### Test Results:

Laboratory Reference: 639716  
Hole No.: RH107  
Sample Reference: Not Given  
Sample Description: Brown CLAY

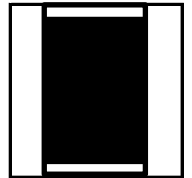
Depth Top [m]: 8.85  
Depth Base [m]: 9.00  
Sample Type: C

|               |       |                                 |         |       |
|---------------|-------|---------------------------------|---------|-------|
| Test Number   | 1     | Rate of Strain                  | 1.0     | %/min |
| Length        | 110.8 | At failure                      | 3.6     | %     |
| Diameter      | 84.7  | Axial Strain                    | 213     | kPa   |
| Bulk Density  | 2.21  | Unconfined Compressive Strength | Brittle |       |
| Water content | 16.3  | Mode of Failure                 |         |       |
| Dry Density   | 1.90  |                                 |         |       |

### Axial Compressive Stress v Axial Strain



Position within sample



Note: Axial compressive stress corrected for area change, and membrane effects (if used)

Remarks: Sample is below recommended length to diameter ratio.

Signed:

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Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

#### Test Results:

Laboratory Reference: 639717  
Hole No.: RH109  
Sample Reference: Not Given  
Sample Description: Brown CLAY

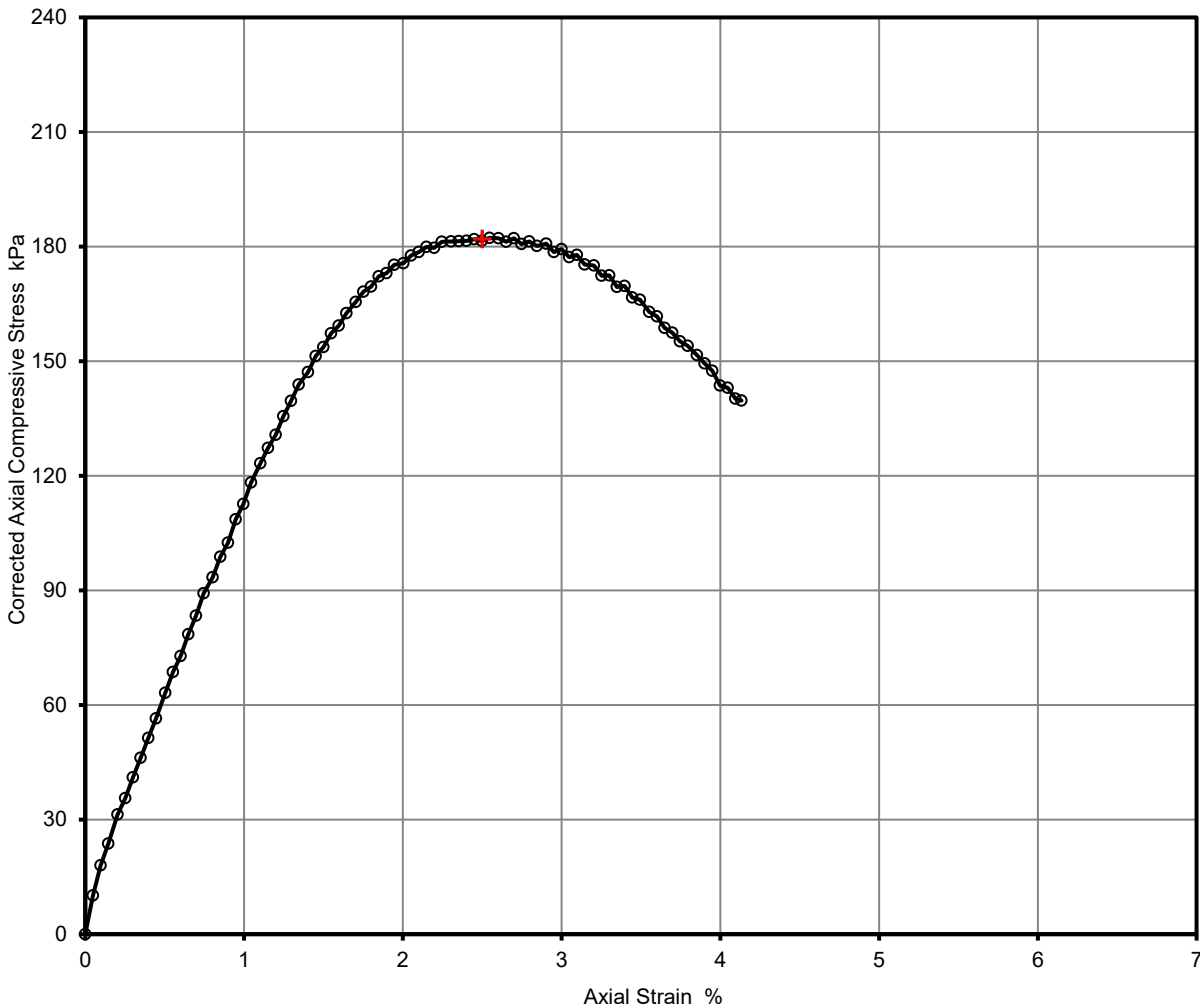
Depth Top [m]: 8.62  
Depth Base [m]: 8.78  
Sample Type: C

|               |                        |
|---------------|------------------------|
| Test Number   | 1                      |
| Length        | 103.3 mm               |
| Diameter      | 84.5 mm                |
| Bulk Density  | 2.06 Mg/m <sup>3</sup> |
| Water content | 20.2 %                 |
| Dry Density   | 1.71 Mg/m <sup>3</sup> |

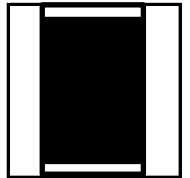
Rate of Strain  
At failure  
Axial Strain  
Unconfined Compressive Strength  
Mode of Failure

|         |       |
|---------|-------|
| 1.0     | %/min |
| 2.5     | %     |
| 182     | kPa   |
| Brittle |       |

Axial Compressive Stress v Axial Strain



Position within sample



Note: Axial compressive stress corrected for area change, and membrane effects (if used)

Remarks: Sample is below recommended length to diameter ratio.

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
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Site Address: Markfield

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

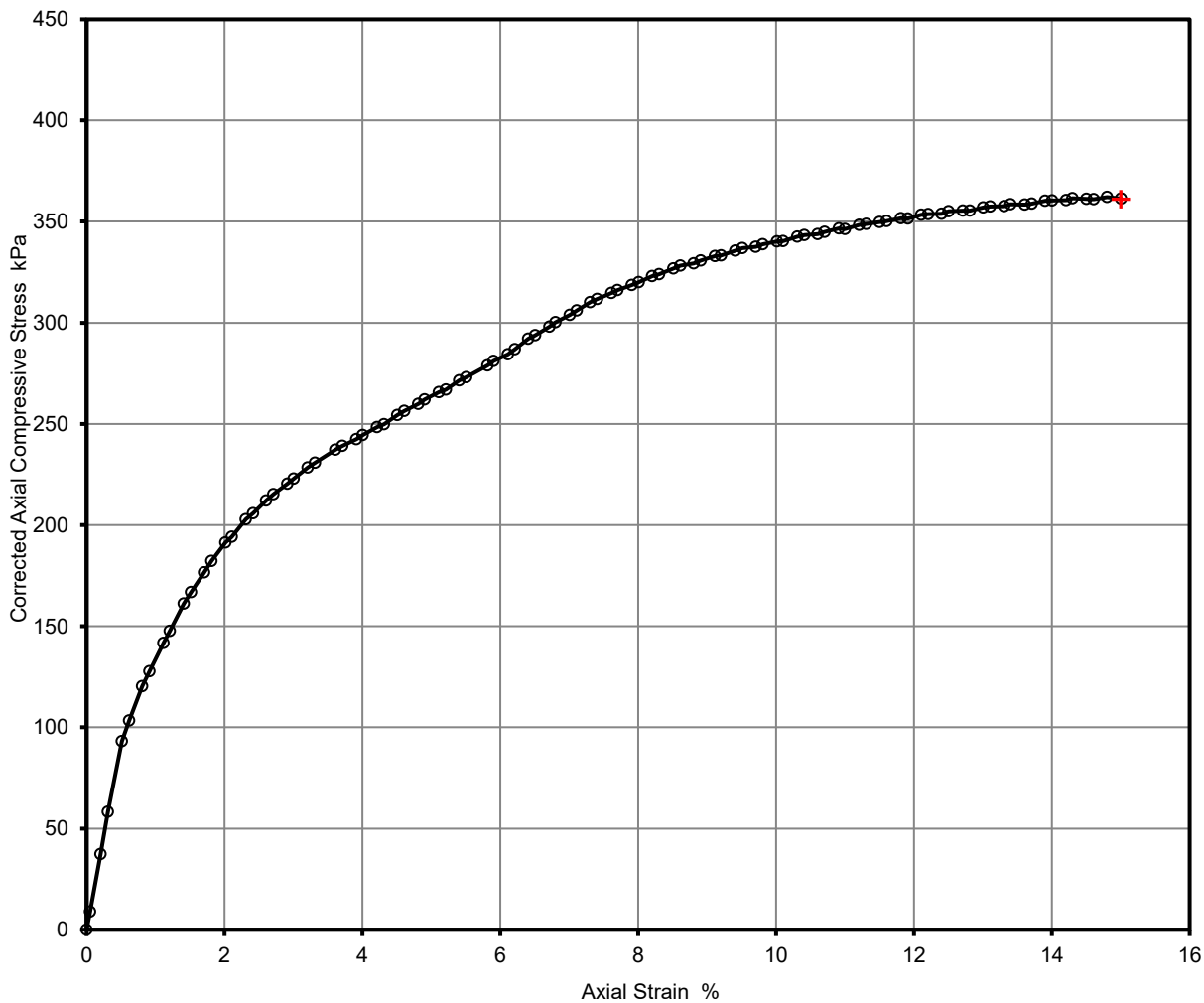
### Test Results:

Laboratory Reference: 639718  
Hole No.: RH109  
Sample Reference: Not Given  
Sample Description: Brown CLAY

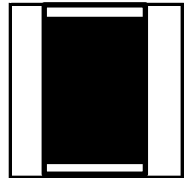
Depth Top [m]: 8.60  
Depth Base [m]: 8.72  
Sample Type: C

|               |      |                                 |          |       |
|---------------|------|---------------------------------|----------|-------|
| Test Number   | 1    | Rate of Strain                  | 1.0      | %/min |
| Length        | 77.9 | At failure                      | 15.0     | %     |
| Diameter      | 84.1 | Axial Strain                    | 361      | kPa   |
| Bulk Density  | 2.02 | Unconfined Compressive Strength | Compound |       |
| Water content | 18.5 | Mode of Failure                 |          |       |
| Dry Density   | 1.71 |                                 |          |       |

### Axial Compressive Stress v Axial Strain



Position within sample



Note: Axial compressive stress corrected for area change, and membrane effects (if used)

Remarks: Sample is below recommended length to diameter ratio.

Signed:

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Geotechnical Reporting Team Leader  
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Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 639719  
Hole No.: RH106  
Sample Reference: Not Given  
Sample Description: Brown CLAY

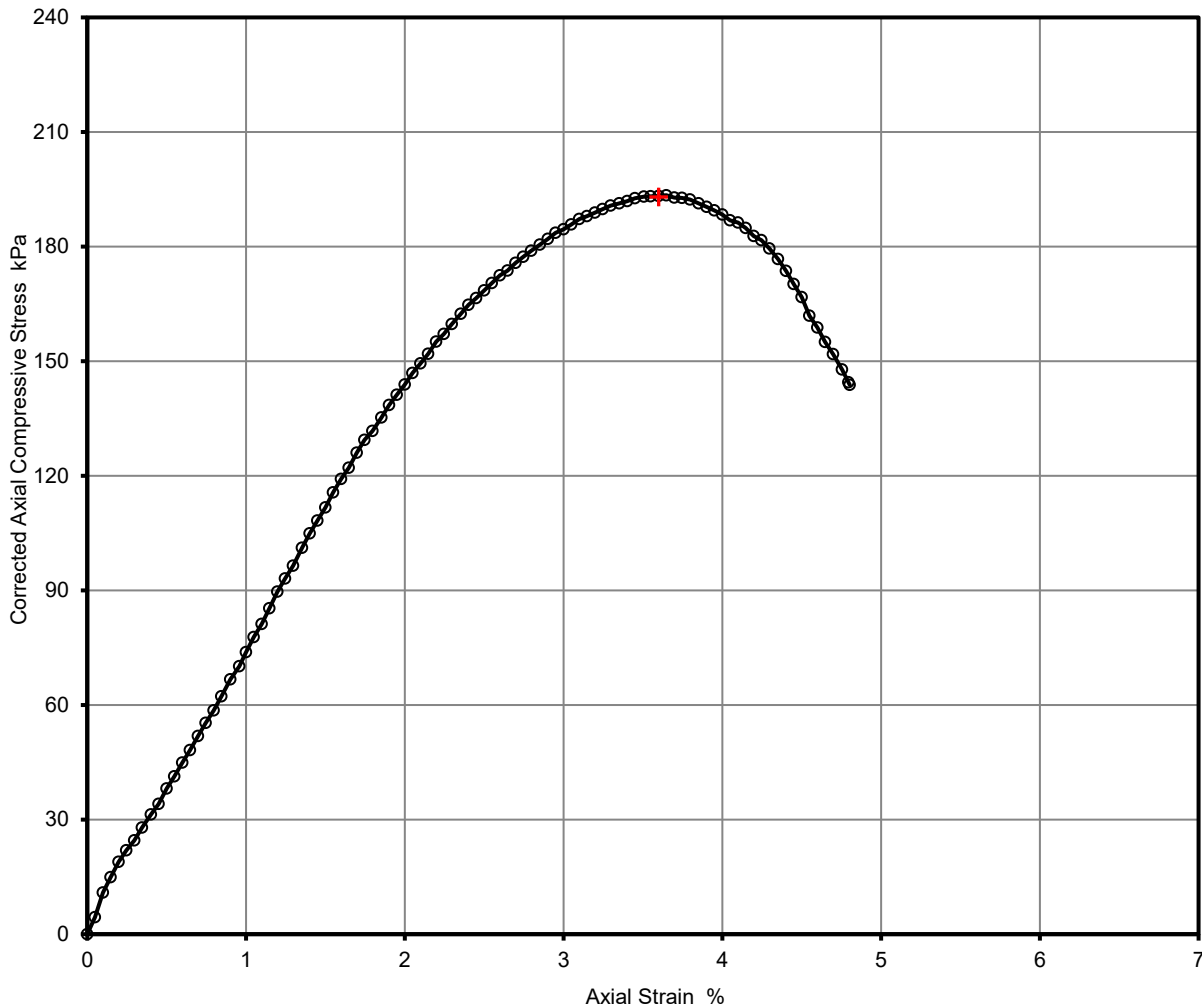
Depth Top [m]: 5.15  
Depth Base [m]: 5.30  
Sample Type: C

|               |            |
|---------------|------------|
| Test Number   | 1          |
| Length        | 142.0 mm   |
| Diameter      | 85.1 mm    |
| Bulk Density  | 2.07 Mg/m3 |
| Water content | 17.9 %     |
| Dry Density   | 1.75 Mg/m3 |

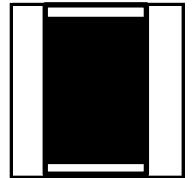
Rate of Strain  
At failure  
Axial Strain  
Unconfined Compressive Strength  
Mode of Failure

|         |       |
|---------|-------|
| 1.0     | %/min |
| 3.6     | %     |
| 193     | kPa   |
| Brittle |       |

### Axial Compressive Stress v Axial Strain



Position within sample



Note: Axial compressive stress corrected for area change, and membrane effects (if used)

Remarks: Sample is below recommended length to diameter ratio.

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
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Site Address: Markfield

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 639720  
Hole No.: RH103  
Sample Reference: Not Given  
Sample Description: Brown CLAY

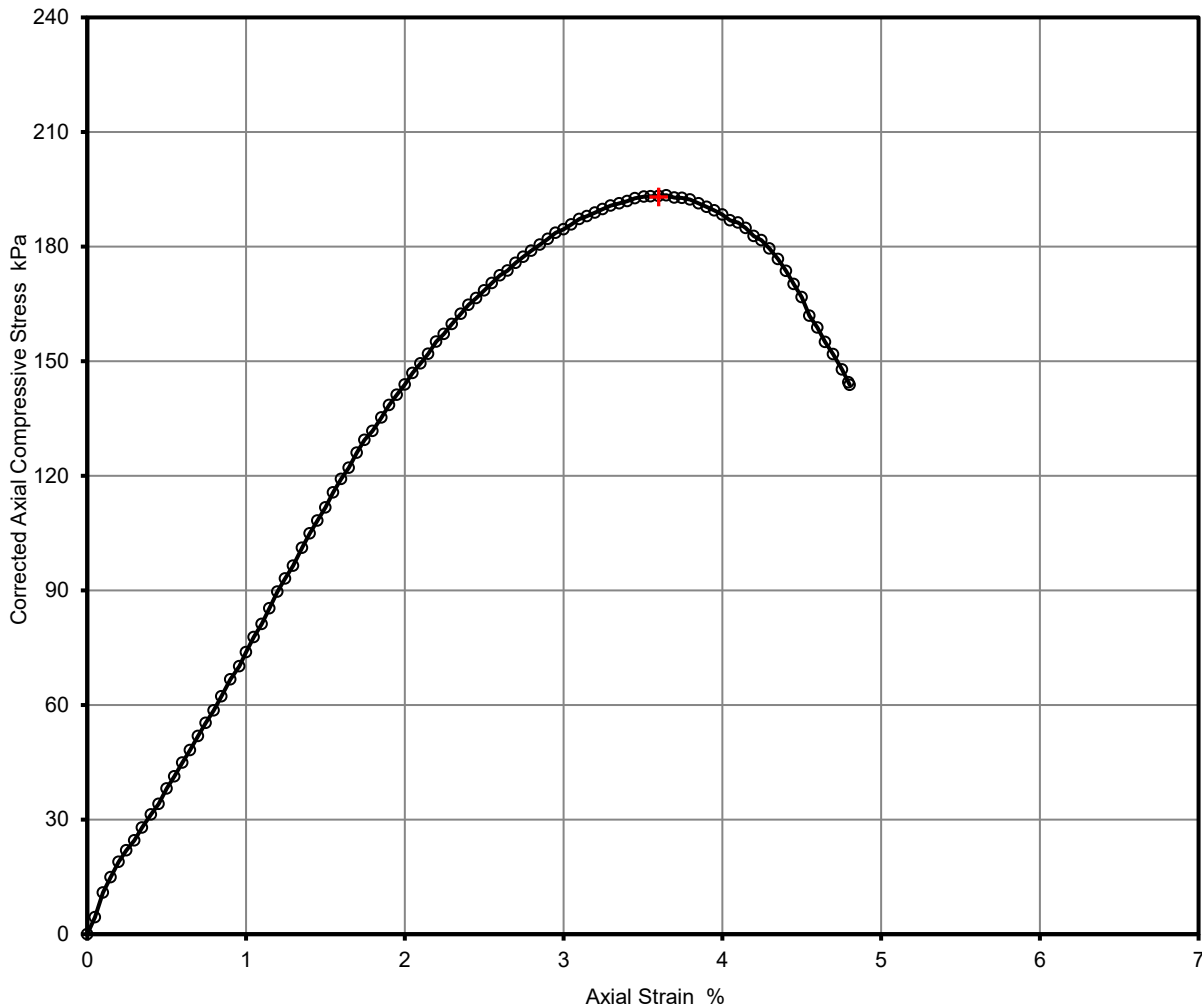
Depth Top [m]: 7.35  
Depth Base [m]: 7.50  
Sample Type: C

|               |            |
|---------------|------------|
| Test Number   | 1          |
| Length        | 142.0 mm   |
| Diameter      | 85.1 mm    |
| Bulk Density  | 2.07 Mg/m3 |
| Water content | 17.9 %     |
| Dry Density   | 1.75 Mg/m3 |

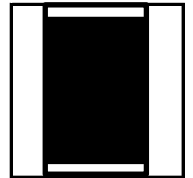
Rate of Strain  
At failure  
Axial Strain  
Unconfined Compressive Strength  
Mode of Failure

|         |       |
|---------|-------|
| 1.0     | %/min |
| 3.6     | %     |
| 193     | kPa   |
| Brittle |       |

### Axial Compressive Stress v Axial Strain



Position within sample



Note: Axial compressive stress corrected for area change, and membrane effects (if used)

Remarks: Sample is below recommended length to diameter ratio.

Signed:

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Environmental Science

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Contact: Alex Tabb  
Site Address: Markfield

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 25/07/2025  
Date Received: 31/07/2025  
Date Tested: 02/09/2025  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 639721  
Hole No.: RH103  
Sample Reference: Not Given  
Sample Description: Brown silty CLAY

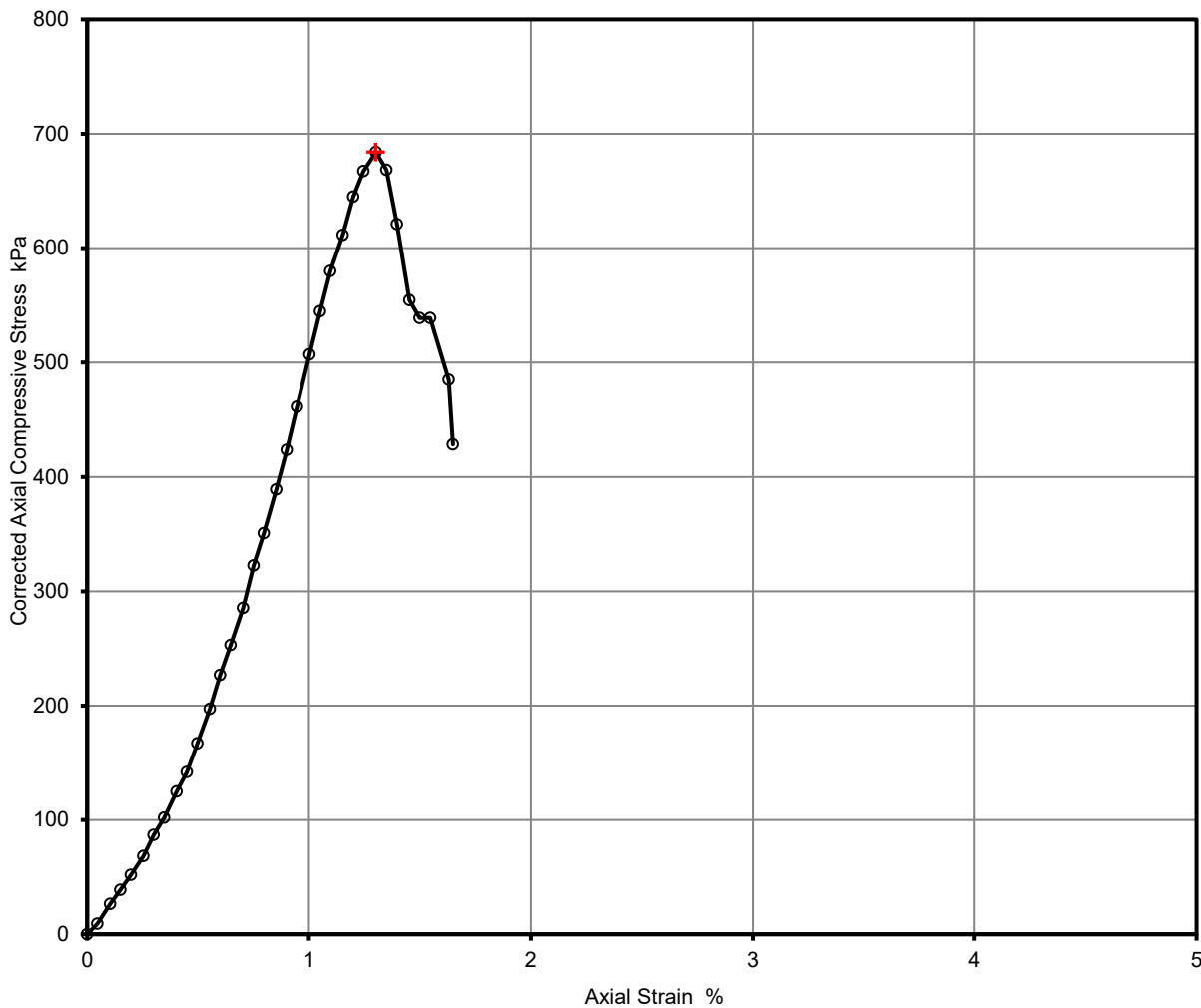
Depth Top [m]: 8.50  
Depth Base [m]: 8.60  
Sample Type: C

|               |            |
|---------------|------------|
| Test Number   | 1          |
| Length        | 106.7 mm   |
| Diameter      | 84.3 mm    |
| Bulk Density  | 2.12 Mg/m3 |
| Water content | 15.5 %     |
| Dry Density   | 1.83 Mg/m3 |

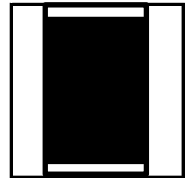
Rate of Strain  
At failure  
Axial Strain  
Unconfined Compressive Strength  
Mode of Failure

|         |       |
|---------|-------|
| 1.0     | %/min |
| 1.3     | %     |
| 684     | kPa   |
| Brittle |       |

### Axial Compressive Stress v Axial Strain



Position within sample



Note: Axial compressive stress corrected for area change, and membrane effects (if used)

Remarks: Sample is below recommended length to diameter ratio.

Signed:

Katarzyna Koziel

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Geotechnical Reporting Team Leader  
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# TEST CERTIFICATE

## DIRECT SHEAR TEST USING THE SHEARBOX

Tested in Accordance with: BS EN ISO 17892-10:2018,  
BS 1377-2 Cl. 25.2:2022

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 19/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 639686  
Hole No.: TP109  
Sample Reference: Not Given  
Sample Description: Light brown gravelly slightly sandy CLAY

Depth Top [m]: 1.00  
Depth Base [m]: 1.30  
Sample Type: B

Preparation Details Sample prepared from loose material

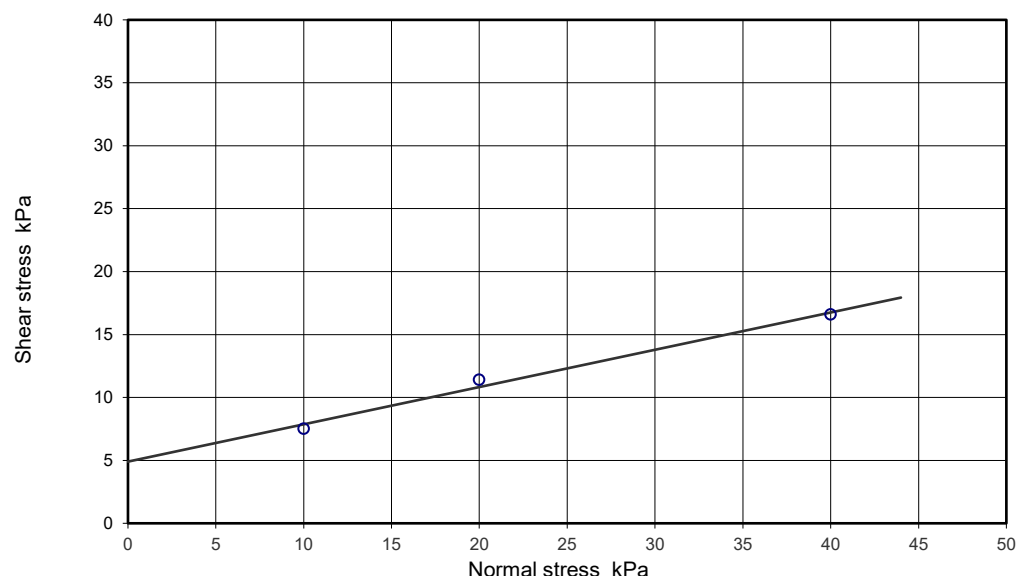
### Specimen Details

Test No.

|               |                                       | 1     | 2     | 3     |  |  |                   |
|---------------|---------------------------------------|-------|-------|-------|--|--|-------------------|
| Initial       | Height                                | 20.0  | 20.0  | 20.0  |  |  | mm                |
|               | Length                                | 60.1  | 60.1  | 60.1  |  |  | mm                |
|               | Breadth                               | 60.1  | 60.1  | 60.1  |  |  | mm                |
|               | Particle Density - (assumed)          | 2.65  | 2.65  | 2.65  |  |  | Mg/m <sup>3</sup> |
|               | Bulk Density                          | 1.65  | 1.65  | 1.65  |  |  | Mg/m <sup>3</sup> |
|               | Water Content                         | 15.1  | 15.1  | 15.1  |  |  | %                 |
|               | Dry density                           | 1.43  | 1.43  | 1.43  |  |  | Mg/m <sup>3</sup> |
|               | Voids ratio                           | 0.853 | 0.853 | 0.853 |  |  |                   |
| Consolidation | Degree of Saturation                  | 47    | 47    | 47    |  |  | %                 |
|               | Consolidation / Normal Stress applied | 10    | 20    | 40    |  |  | kPa               |
|               | Change in height during consolidation | 1.506 | 2.648 | 2.910 |  |  | mm                |
| After test    | Voids ratio after consolidation       | 0.713 | 0.608 | 0.583 |  |  |                   |
|               | Final Water content                   | 28.9  | 27.2  | 24.1  |  |  | %                 |

### Shearing stage(s)

|                      |                                            |       |       |       |  |  |        |
|----------------------|--------------------------------------------|-------|-------|-------|--|--|--------|
| Rate of displacement | Peak                                       | 0.010 | 0.010 | 0.010 |  |  | mm/min |
|                      | Residual                                   |       |       |       |  |  | mm/min |
| Peak values, (o)     | Relative horizontal displacement           | 8.84  | 8.65  | 8.47  |  |  | mm     |
|                      | Shear stress                               | 7.5   | 11.4  | 16.6  |  |  | kPa    |
|                      | Vertical Movement at peak shear stress     | 2.82  | 3.70  | 3.78  |  |  | mm     |
| Residual values, (x) | No. of traverses (including peak run)      | 1     | 1     | 1     |  |  |        |
|                      | Relative horizontal displacement           |       |       |       |  |  | mm     |
|                      | Shear stress                               |       |       |       |  |  | kPa    |
|                      | Vertical movement at residual shear stress |       |       |       |  |  | mm     |



Total test time 2 days

### Shear Strength Parameters

| Peak strength, (o) |         | Regression | Manual |
|--------------------|---------|------------|--------|
| c'                 | kPa     | 4.90       | -      |
| Ø'                 | degrees | 16.5       | -      |

### Residual strength, (x)

|     |         |              |   |
|-----|---------|--------------|---|
| c'R | kPa     | not assessed | - |
| Ø'R | degrees | not assessed | - |

Remarks:

Signed:

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Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd



# TEST CERTIFICATE

## DIRECT SHEAR TEST USING THE SHEARBOX

Tested in Accordance with: BS EN ISO 17892-10:2018,  
BS 1377-2 Cl. 25.2:2022

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

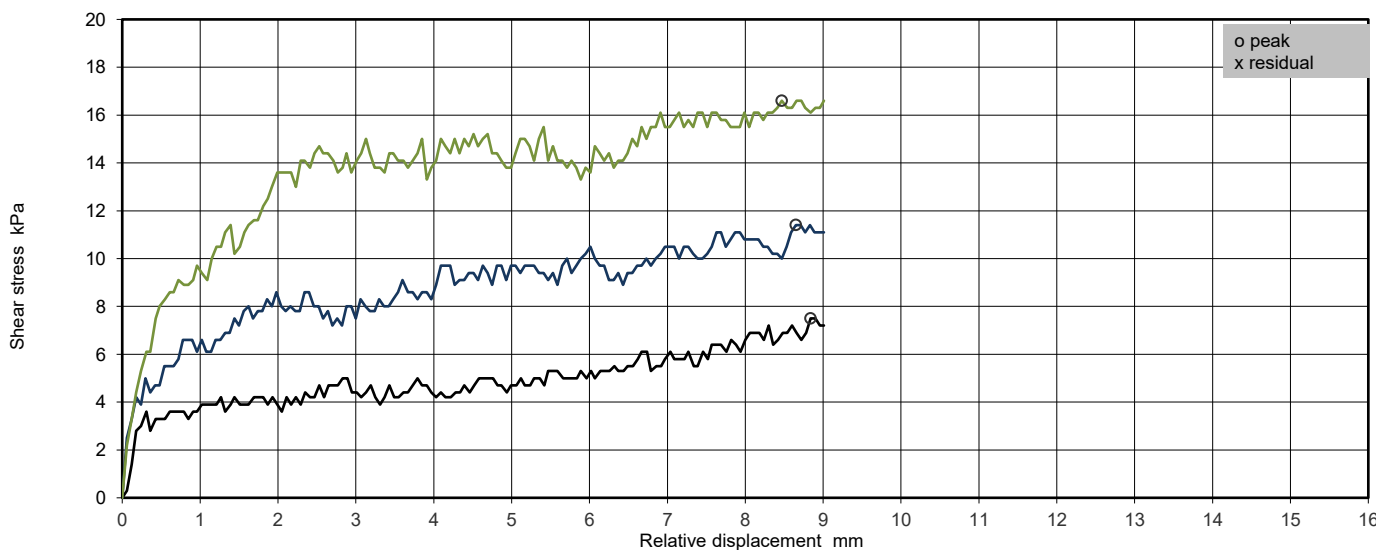
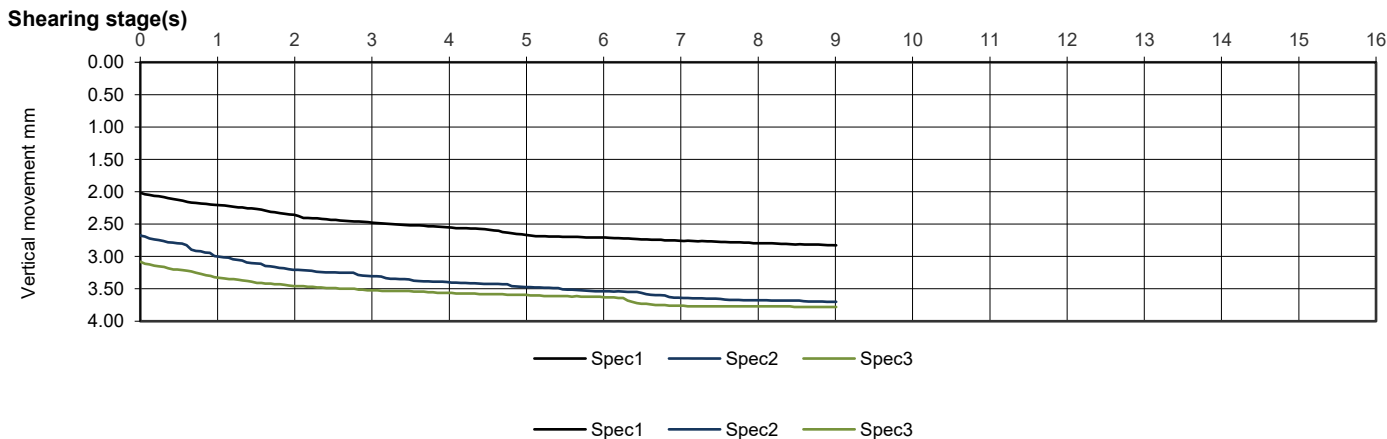
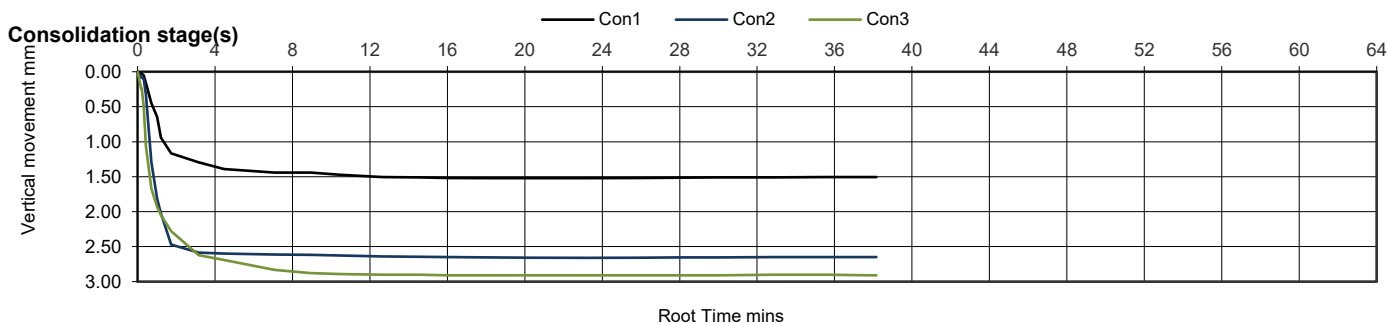
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 19/08/2025  
Sampled By: Not Given

### Test Results:

Laboratory Reference: 639686  
Hole No.: TP109  
Sample Reference: Not Given  
Sample Description: Light brown gravelly slightly sandy CLAY

Depth Top [m]: 1.00  
Depth Base [m]: 1.30  
Sample Type: B



Remarks:

Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

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# TEST CERTIFICATE

## DIRECT SHEAR TEST USING THE SHEARBOX

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BS 1377-2 Cl. 25.2:2022

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 24/07/2025  
Date Received: 31/07/2025  
Date Tested: 19/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 639694  
Hole No.: TP113  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 2.20  
Depth Base [m]: 2.60  
Sample Type: B

Preparation Details Sample carried out on lump

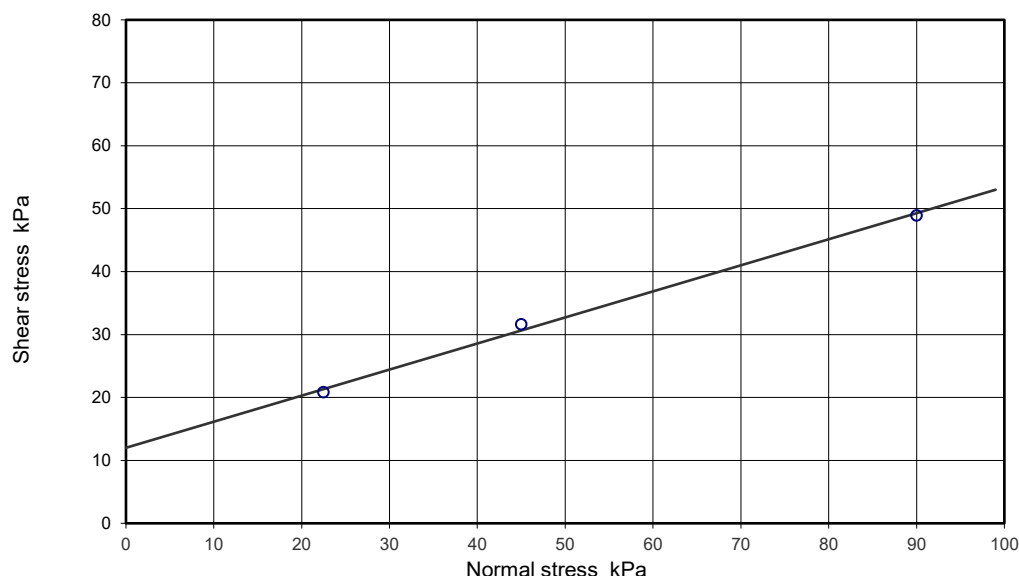
### Specimen Details

Test No.

|               |                                       | 1     | 2     | 3     |  |  |                   |
|---------------|---------------------------------------|-------|-------|-------|--|--|-------------------|
| Initial       | Height                                | 20.1  | 20.1  | 20.1  |  |  | mm                |
|               | Length                                | 60.0  | 60.0  | 60.0  |  |  | mm                |
|               | Breadth                               | 60.0  | 60.0  | 60.0  |  |  | mm                |
|               | Particle Density - (assumed)          | 2.65  | 2.65  | 2.65  |  |  | Mg/m <sup>3</sup> |
|               | Bulk Density                          | 1.89  | 1.89  | 1.89  |  |  | Mg/m <sup>3</sup> |
|               | Water Content                         | 25.1  | 25.1  | 25.1  |  |  | %                 |
|               | Dry density                           | 1.51  | 1.51  | 1.51  |  |  | Mg/m <sup>3</sup> |
|               | Voids ratio                           | 0.755 | 0.755 | 0.755 |  |  |                   |
| Consolidation | Degree of Saturation                  | 88    | 88    | 88    |  |  | %                 |
|               | Consolidation / Normal Stress applied | 22.5  | 45    | 90    |  |  | kPa               |
|               | Change in height during consolidation | 0.048 | 0.299 | 1.107 |  |  | mm                |
| After test    | Voids ratio after consolidation       | 0.751 | 0.729 | 0.658 |  |  |                   |
|               | Final Water content                   | 29.8  | 29.5  | 29.3  |  |  | %                 |

### Shearing stage(s)

|                      |                                            |       |       |       |  |  |        |
|----------------------|--------------------------------------------|-------|-------|-------|--|--|--------|
| Rate of displacement | Peak                                       | 0.014 | 0.014 | 0.014 |  |  | mm/min |
|                      | Residual                                   |       |       |       |  |  | mm/min |
| Peak values, (o)     | Relative horizontal displacement           | 1.09  | 1.51  | 1.92  |  |  | mm     |
|                      | Shear stress                               | 20.8  | 31.6  | 48.9  |  |  | kPa    |
|                      | Vertical Movement at peak shear stress     | 0.06  | 0.53  | 1.30  |  |  | mm     |
| Residual values, (x) | No. of traverses (including peak run)      | 1     | 1     | 1     |  |  |        |
|                      | Relative horizontal displacement           |       |       |       |  |  | mm     |
|                      | Shear stress                               |       |       |       |  |  | kPa    |
|                      | Vertical movement at residual shear stress |       |       |       |  |  | mm     |



Total test time 2 days

### Shear Strength Parameters

| Peak strength, (o) |         | Regression | Manual |
|--------------------|---------|------------|--------|
| c'                 | kPa     | 12.00      | -      |
| Ø'                 | degrees | 22.5       | -      |

### Residual strength, (x)

|     |         |              |   |
|-----|---------|--------------|---|
| c'R | kPa     | not assessed | - |
| Ø'R | degrees | not assessed | - |

Remarks:

Signed:

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Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd



# TEST CERTIFICATE

**DIRECT SHEAR TEST USING THE SHEARBOX**  
Tested in Accordance with: BS EN ISO 17892-10:2018,  
BS 1377-2 Cl. 25.2:2022

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

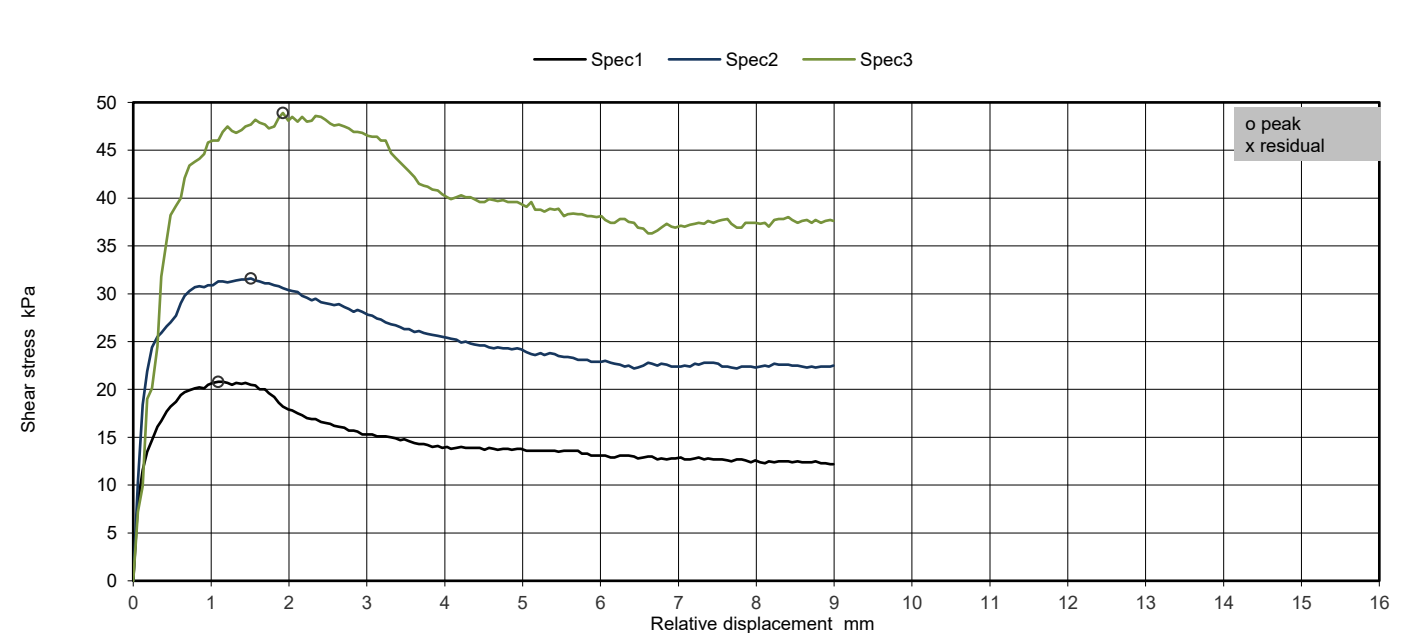
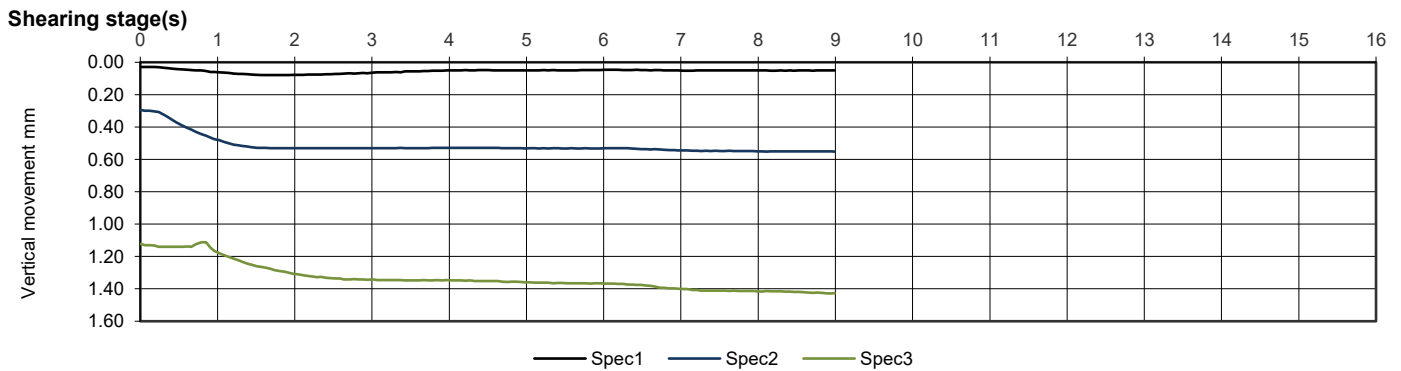
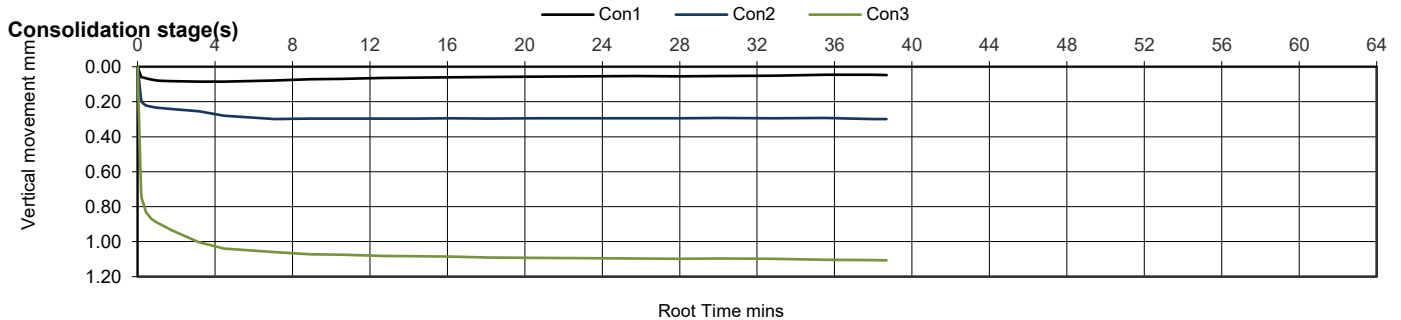
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 24/07/2025  
Date Received: 31/07/2025  
Date Tested: 19/08/2025  
Sampled By: Not Given

## Test Results:

Laboratory Reference: 639694  
Hole No.: TP113  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 2.20  
Depth Base [m]: 2.60  
Sample Type: B



Remarks:

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Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd



# TEST CERTIFICATE

**DIRECT SHEAR TEST USING THE SHEARBOX**  
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BS 1377-2 Cl. 25.2:2022

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 19/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

## Test Results:

Laboratory Reference: 639701  
Hole No.: TP120  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly sandy CLAY

Depth Top [m]: 0.80  
Depth Base [m]: 1.00  
Sample Type: B

Preparation Details Sample prepared from loose material

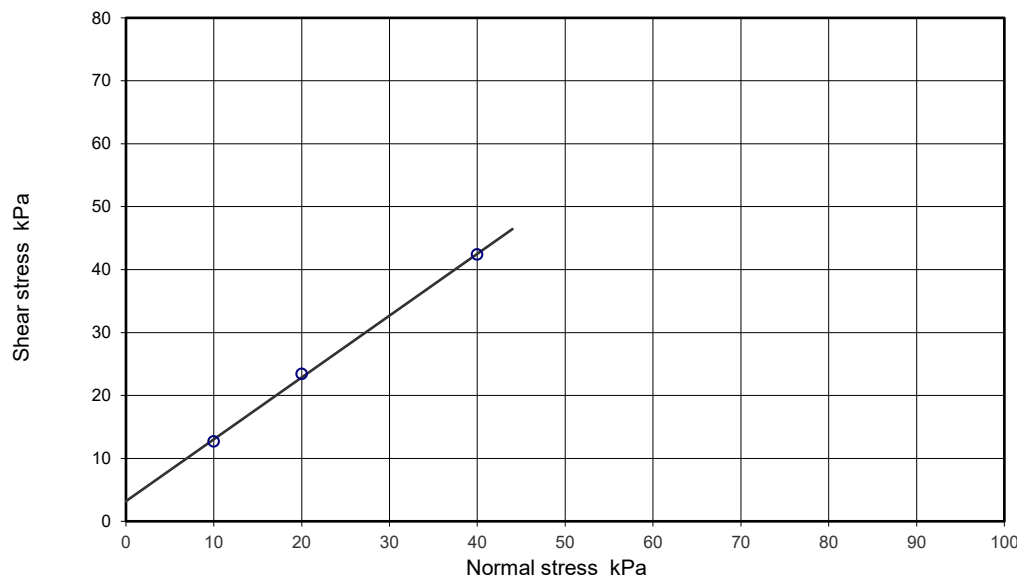
## Specimen Details

Test No.

|               |                                       | 1     | 2     | 3     |  |  |                   |
|---------------|---------------------------------------|-------|-------|-------|--|--|-------------------|
| Initial       | Height                                | 20.1  | 20.1  | 20.1  |  |  | mm                |
|               | Length                                | 60.0  | 60.0  | 60.0  |  |  | mm                |
|               | Breadth                               | 60.0  | 60.0  | 60.0  |  |  | mm                |
|               | Particle Density - (assumed)          | 2.65  | 2.65  | 2.65  |  |  | Mg/m <sup>3</sup> |
|               | Bulk Density                          | 1.56  | 1.56  | 1.56  |  |  | Mg/m <sup>3</sup> |
|               | Water Content                         | 7.3   | 7.3   | 7.3   |  |  | %                 |
|               | Dry density                           | 1.45  | 1.45  | 1.45  |  |  | Mg/m <sup>3</sup> |
|               | Voids ratio                           | 0.828 | 0.828 | 0.828 |  |  |                   |
| Consolidation | Degree of Saturation                  | 23    | 23    | 23    |  |  | %                 |
|               | Consolidation / Normal Stress applied | 10    | 20    | 40    |  |  | kPa               |
|               | Change in height during consolidation | 0.367 | 1.132 | 2.258 |  |  | mm                |
| After test    | Voids ratio after consolidation       | 0.795 | 0.725 | 0.623 |  |  |                   |
|               | Final Water content                   | 29.0  | 26.9  | 25.4  |  |  | %                 |

## Shearing stage(s)

|                      |                                            |       |       |       |  |  |        |
|----------------------|--------------------------------------------|-------|-------|-------|--|--|--------|
| Rate of displacement | Peak                                       | 0.004 | 0.004 | 0.004 |  |  | mm/min |
|                      | Residual                                   |       |       |       |  |  | mm/min |
| Peak values, (o)     | Relative horizontal displacement           | 7.02  | 6.73  | 7.86  |  |  | mm     |
|                      | Shear stress                               | 12.7  | 23.4  | 42.4  |  |  | kPa    |
|                      | Vertical Movement at peak shear stress     | 2.31  | 2.23  | 3.57  |  |  | mm     |
| Residual values, (x) | No. of traverses (including peak run)      | 1     | 1     | 1     |  |  |        |
|                      | Relative horizontal displacement           |       |       |       |  |  | mm     |
|                      | Shear stress                               |       |       |       |  |  | kPa    |
|                      | Vertical movement at residual shear stress |       |       |       |  |  | mm     |



Total test time 3 days

## Shear Strength Parameters

| Peak strength, (o) |         | Regression | Manual |
|--------------------|---------|------------|--------|
| c'                 | kPa     | 3.20       | -      |
| Ø'                 | degrees | 44.5       | -      |

## Residual strength, (x)

|     |         |              |   |
|-----|---------|--------------|---|
| c'R | kPa     | not assessed | - |
| Ø'R | degrees | not assessed | - |

Remarks:

Signed:

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Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd



# TEST CERTIFICATE

## DIRECT SHEAR TEST USING THE SHEARBOX

Tested in Accordance with: BS EN ISO 17892-10:2018,  
BS 1377-2 Cl. 25.2:2022

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

4041

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

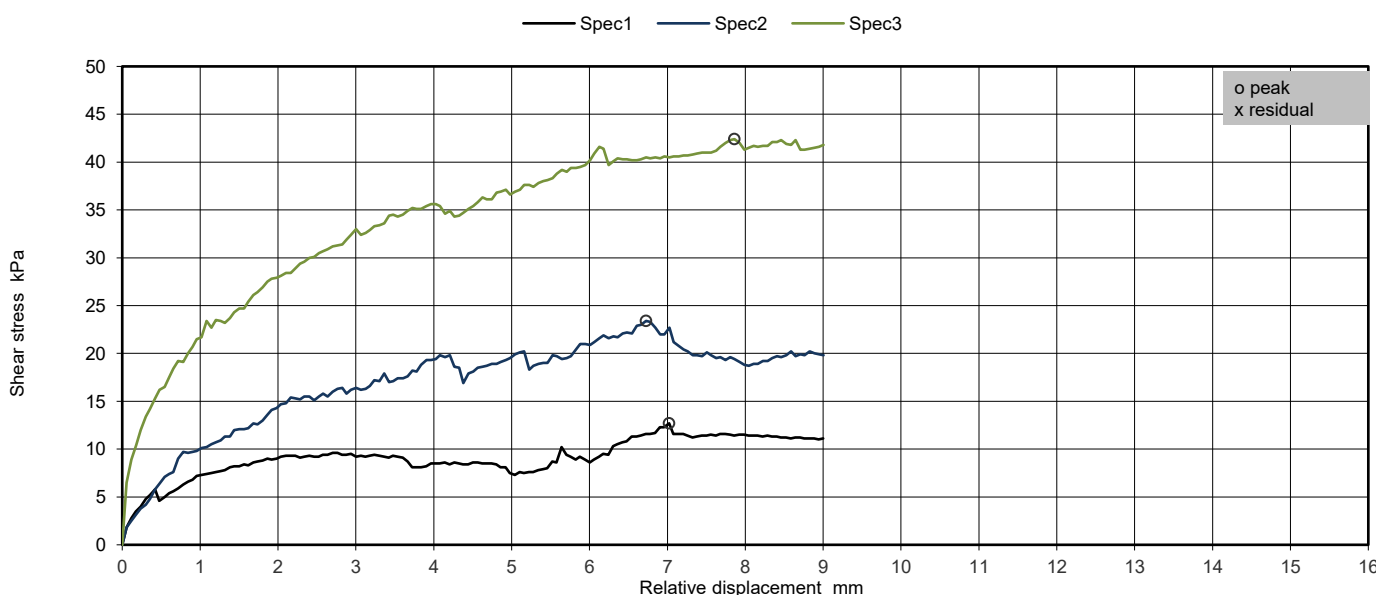
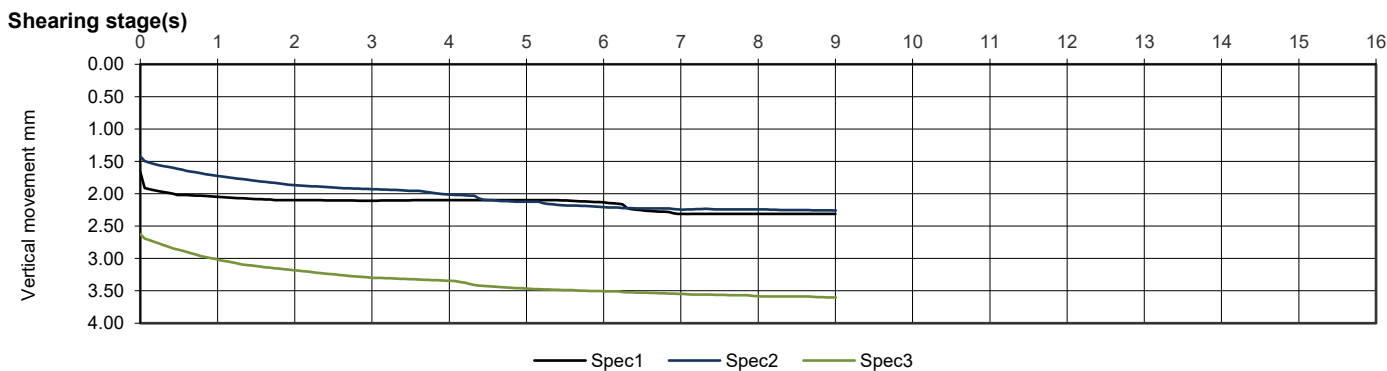
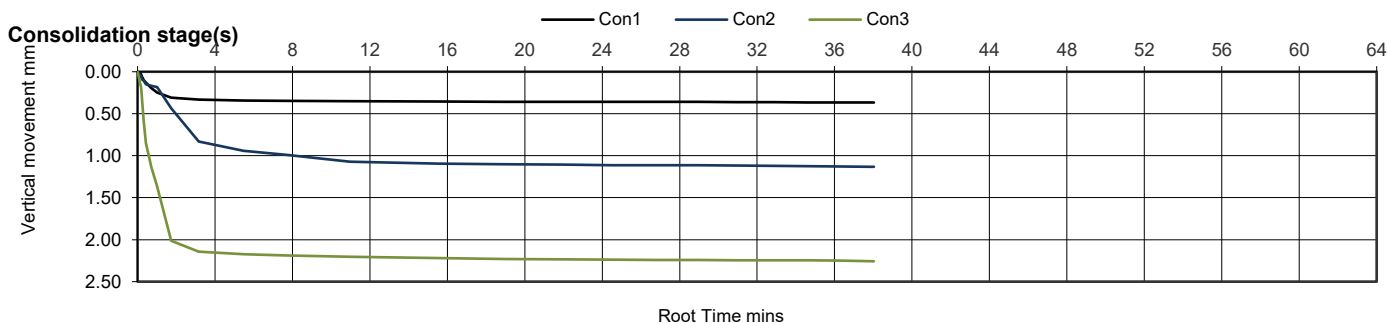
Client Reference: 4467  
Job Number: 25-041823-1  
Date Sampled: 23/07/2025  
Date Received: 31/07/2025  
Date Tested: 19/08/2025  
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 639701  
Hole No.: TP120  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly sandy CLAY

Depth Top [m]: 0.80  
Depth Base [m]: 1.00  
Sample Type: B



Remarks:

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Signed:

Katarzyna Koziel

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd



4041

**TEST CERTIFICATE****DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-2:2022 Cl. 15

i2 Analytical Ltd  
Unit 8 Harrowden Road  
Brackmills Industrial Estate  
Northampton NN4 7EB



Environmental Science

Client: GEO2 Remediation Ltd  
Client Address: Coniston House, Louisa Street,  
Idle, BD10 8NE

Contact: Alex Tabb  
Site Address: Markfield

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 4467  
Job Number: 25-043146-1  
Date Sampled: 23/07/2025  
Date Received: 07/08/2025  
Date Tested: 04/09/2025  
Sampled By: Not Given

**Test Results:**

Laboratory Reference: 646798  
Hole No.: TP122  
Sample Reference: Not Given  
Sample Description: Light brown slightly gravelly CLAY

Depth Top [m]: 1.00  
Depth Base [m]: 1.30  
Sample Type: B

**Specimen Preparation:**

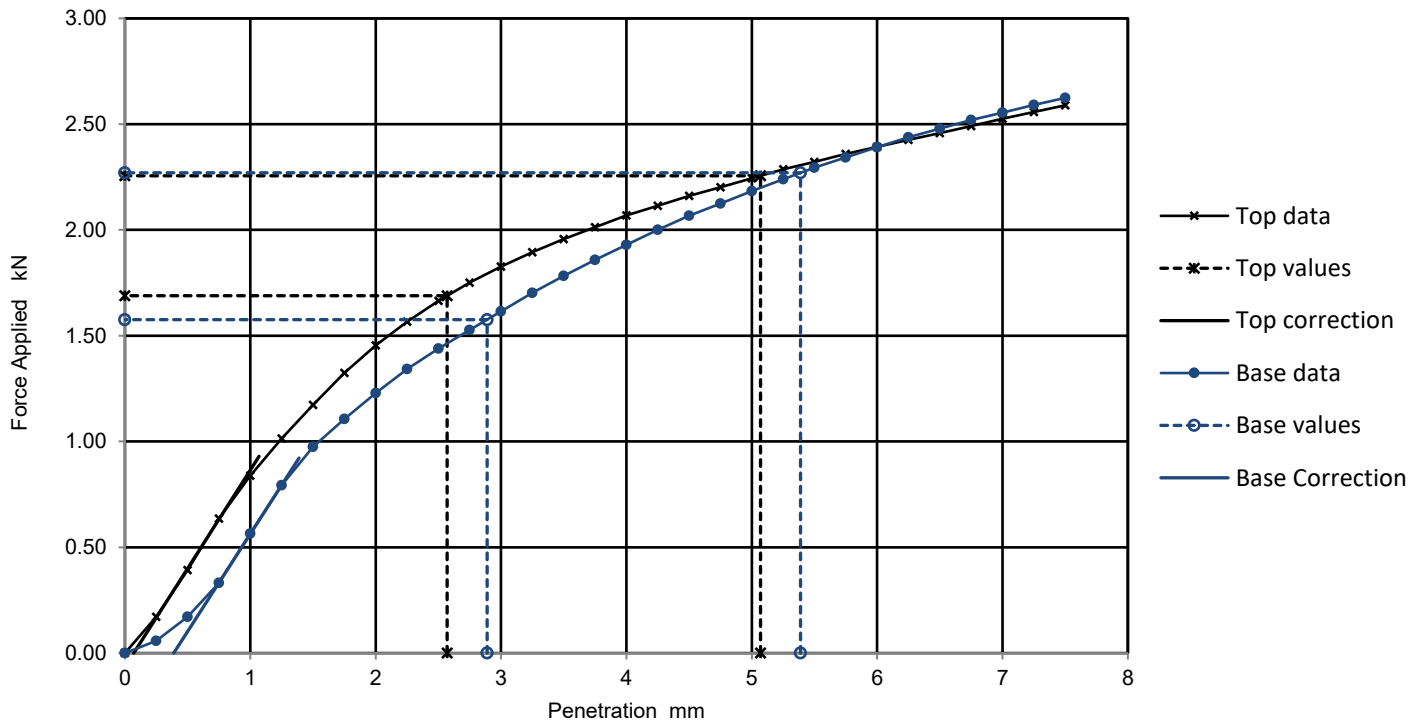
Condition Remoulded  
Details Recompacted with specified standard effort using 2.5kg rammer

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 13 %

Initial Specimen details Bulk density 2.01 Mg/m<sup>3</sup>  
Dry density 1.71 Mg/m<sup>3</sup>  
Water content 18 %

Surcharge applied 8 kg  
4.9 kPa

**Force v Penetration Plots****Results**

TOP  
BASE

| Curve correction applied | CBR Values, % |     |         |         |
|--------------------------|---------------|-----|---------|---------|
|                          | 2.5mm         | 5mm | Highest | Average |
| Yes                      | 13            | 11  | 13      | 12      |
| Yes                      | 12            | 11  | 12      |         |

| Water Content % |
|-----------------|
| 17.2            |
| 17.1            |

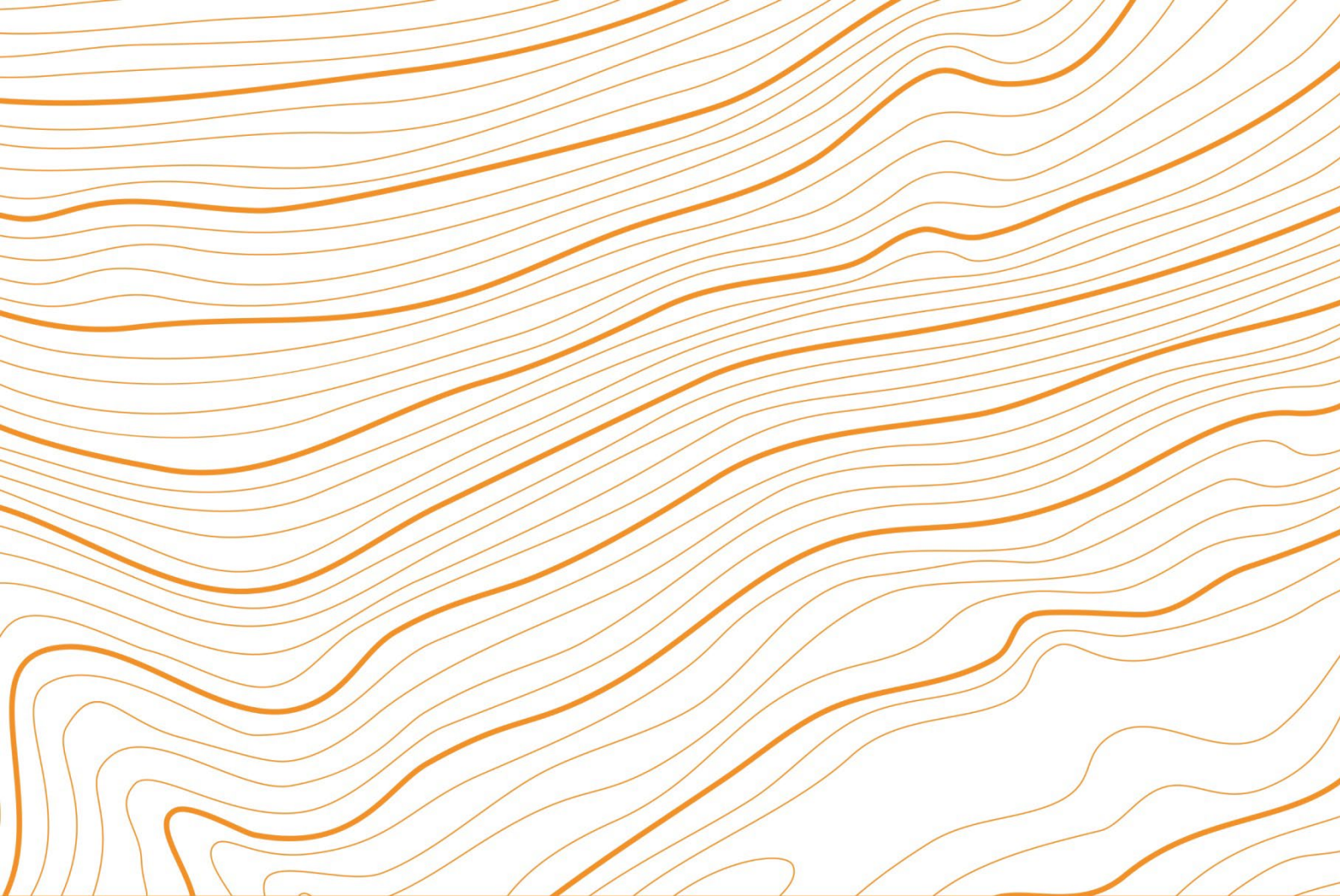
Remarks:

Test/ Specimen  
specific remarks:

Signed:

Katarzyna Koziel  
Geotechnical Reporting Team Leader  
for and on behalf of i2 Analytical Ltd

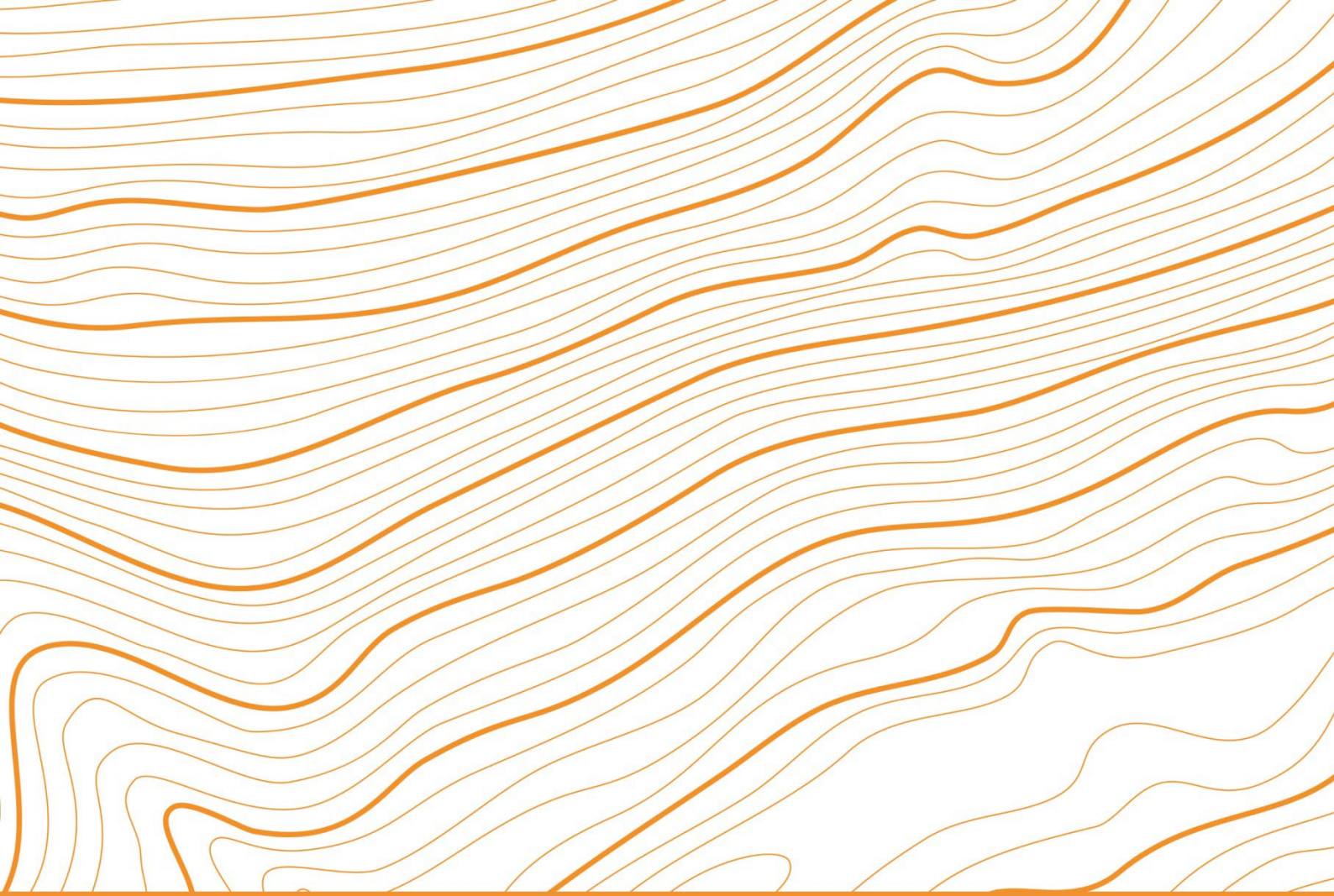
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**Appendix E – Monitoring Data**

[illegible]

[illegible]

A decorative header featuring a series of wavy, concentric orange lines on a white background, resembling a topographic map or contour lines.

## **Appendix F – Risk Assessment Terminology**

## Definitions and Classifications of Risk Assessment Terminology.

### Probability

Probability can be defined as the chance of a particular event occurring in a given period of time.

Descriptions of each of the four qualitative terms to be use in this report to describe the perceived probability of any identified pollutant linkage becoming realised are shown below in Table W.

| Term                   | Description                                                                                                                                                                                                                                                        |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>High Likelihood</b> | There is pollutant linkage and an event would appear very likely in the short-term and almost inevitable over the long-term, or there is evidence at the receptor of harm or pollution.                                                                            |
| <b>Likely</b>          | There is pollutant linkage and all the elements are present and in the right place which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short-term and likely over the long-term. |
| <b>Low Likelihood</b>  | There is pollutant linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a long period such an event would take place, and is less likely in the shorter term.                                |
| <b>Unlikely</b>        | There is pollutant linkage but circumstances are such that it is improbable that an event would occur even in the very long-term.                                                                                                                                  |

**Table W.** Description of Probability Classifications

## Severity

Severity (consequence) can be defined as the adverse effects (or harm) arising from a defined hazard, which impairs the quality of human health or the environment in the short or longer term.

Descriptions of each of the four qualitative terms to be use in this report to describe the perceived potential severity of any identified pollutant linkage becoming realised are shown below in Table X.

| Term          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Severe</b> | <p>Highly elevated concentrations <b>likely</b> to result in “significant harm” to human health as defined by the EPA 1990, Part 2A, if exposure occurs.</p> <p>Equivalent to <b>EA Category 1</b> pollution incident including persistent and/or extensive effects on water quality; leading to closure of a potable abstraction point; major impact on amenity value or major damage to agriculture or commerce.</p> <p>Major damage to aquatic or other ecosystems, which is likely to result in a substantial adverse change in its functioning or harm to a species of special interest that endangers the long-term maintenance of the population.</p> <p>Catastrophic damage to crops, buildings or property.</p> |
| <b>Medium</b> | <p>Elevated concentrations which could result in “significant harm” to human health as defined by the EPA 1990, Part 2A if exposure occurs.</p> <p>Equivalent to <b>EA Category 2</b> pollution incident including significant effect on water quality; notification required to abstractors; reduction in amenity value or significant damage to agriculture or commerce.</p> <p>Significant damage to aquatic or other ecosystems, which may result in a substantial adverse change in its functioning or harm to a species of special interest that may endanger the long-term maintenance of the population.</p> <p>Significant damage to crops, buildings or property.</p>                                          |
| <b>Mild</b>   | <p>Exposure to human health <b>unlikely</b> to lead to “significant harm”. Equivalent to <b>EA Category 3</b> pollution incident including minimal or short-lived effect on water quality; marginal effect on amenity value, agriculture or commerce.</p> <p>Minor or short-lived damage to aquatic or other ecosystems, which is unlikely to result in a substantial adverse change in its functioning or harm to a species of special interest that would endanger the long-term maintenance of the population.</p> <p>Minor damage to crops, buildings or property.</p>                                                                                                                                               |
| <b>Minor</b>  | <p>No measurable effect on humans.</p> <p>Equivalent to insubstantial pollution incident with no observed effect on water quality or ecosystems.</p> <p>Repairable effects of damage to buildings, structures and services.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

**Table X.** Description of Severity Classifications

Once the severity and probability of a pollutant linkage has been determined the risk can be assessed using the risk matrix shown overleaf on Table Y.

### Risk Matrix

By cross referencing the derived severity and probability in Table Y, below the perceived potential risk can be determined.

|             |                 | Severity            |                     |                     |                     |
|-------------|-----------------|---------------------|---------------------|---------------------|---------------------|
|             |                 | Severe              | Medium              | Mild                | Minor               |
| Probability | High Likelihood | Very High Risk      | High Risk           | Moderate Risk       | Moderate / Low Risk |
|             | Likely          | High Risk           | Moderate Risk       | Moderate / Low Risk | Low Risk            |
|             | Low Likelihood  | Moderate Risk       | Moderate / Low Risk | Low Risk            | Very Low Risk       |
|             | Unlikely        | Moderate / Low Risk | Low Risk            | Very Low Risk       | Very Low Risk       |

**Table Y.** Risk Assessment Matrix

The risk categories detailed above are defined below in the following Table Z.

| Term                  | Description                                                                                                                                                                                                                                              |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Very High Risk</b> | There is a high probability that significant harm could arise to a designated receptor from an identified hazard at the site without appropriate remedial action.                                                                                        |
| <b>High Risk</b>      | Significant harm is likely to arise to a designated receptor from an identified hazard at the site without appropriate remedial action.                                                                                                                  |
| <b>Moderate Risk</b>  | It is possible that without appropriate remedial action, harm could arise to a designated receptor but it is relatively unlikely that any such harm would be severe and if any harm were to occur, it is likely that such harm would be relatively mild. |
| <b>Low Risk</b>       | It is possible that significant harm could arise to a designated receptor from an identified hazard but it is likely that at worst this harm if realised would normally be mild.                                                                         |
| <b>Very Low Risk</b>  | There is a low possibility that harm could arise to a receptor. In the event of such harm being realised, it is not likely to be severe.                                                                                                                 |

**Table Z.** Definition of Risk