



Boom Power Ltd

PHASE 2 GROUND INVESTIGATION REPORT

Low Farm, Wakefield





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1 INTRODUCTION

1.1 AUTHORISATION

WSP Ltd was instructed by Boom Power Ltd (the Client) to undertake an intrusive ground investigation and subsequently prepare a interpretive Phase 2 Ground Investigation Report for the site off Wakefield Road, Grange Moor, Wakefield, WF4 4BB.

1.2 PURPOSE OF ASSESSMENT

Boom Power propose to develop the site to a Solar Photovoltaic Farm (SPF) and associated infrastructure on nine separate land parcels (Parcels 1-9), situated to both the north and south of Wakefield Road (Figure 1, **Appendix A**). A proposed Site Layout is provided in **Appendix B**.

This Phase 2 Geo-Environmental Assessment Report has been produced to support a discharge of conditions application for the SPF development; Condition 12 under application reference 2021/62/93644/E stipulates *“Development shall not commence until a Phase II Intrusive Site Investigation Report has been submitted to and approved in writing by the Local Planning Authority”*.

This report has been commissioned to characterise the land quality of the site prior to the potential development of the site into the SPF. The results of this Phase 2 Report will provide contaminated land assessments and preliminary geotechnical commentary to support the planning application and support preliminary development design.

1.3 BACKGROUND

WSP previously undertook a Preliminary Phase 1 Geo-Environmental Risk Assessment (PRA) and Preliminary Coal Mining Risk Assessment (CMRA) for the site (*WSP 2021, Low Farm Wakefield, Preliminary Phase 1 Geo-Environmental Risk Assessment and Preliminary Coal Mining Risk Assessment, July 2021*).

The report identified that site has been the subject of extensive opencast mining, primarily during the 20th Century. The report concluded that in consideration of the nature of the proposed development, the overall risk posed to human health from potential contaminants of concern (including asbestos) within soils on site ranged from between low and low to moderate. Due to historical mining activities on and near the site, risks from historical coal mining were also identified. Ground investigation (GI), proportionate to the nature of the development, was recommended to confirm the findings of the PRA.

Subsequent to the preparation of the PRA, and following on from discussions with the Coal Authority, WSP undertook a geo-environmental focused GI at the site which focused on assessing the risk to construction workers, whilst also providing an indication of potential waste classifications for soils which may require removal from site. Limited geotechnical ground investigation was allowed for and data has been gathered to inform preliminary geotechnical design.

1.4 SCOPE OF WORKS

The following scope of works has been completed:

- A total of 12 dynamic sampler boreholes to a maximum depth of 5.45m below ground level (bgl);
- A total of 30 machine-excavated trial pits to a maximum depth of 2.9m bgl;

- The installation of 50mm diameter ground gas and groundwater monitoring wells within select borehole locations (10 total);
- Collection of soil samples for chemical laboratory testing;
- Collection of soil samples for geotechnical laboratory testing; and
- One post-investigation ground gas and groundwater monitoring visit.

A generic quantitative risk assessment (GQRA) for human health has been prepared in general accordance with the principles set out in Environment Agency’s (EA) LCRM (referenced in Section 1.6).

A preliminary hazardous waste assessment based on the findings reported herein is also presented within Section 10.

A Site Location is provided as Figure 1 in **Appendix A**.

1.5 SOURCES OF INFORMATION

The following relevant sources of information were used in the production of this report and should be read in conjunction with the information summarised in Table 1-1 below.

Table 1-1 – Sources of Information

Source	Details
WSP Reports	WSP 2021, Low Farm Wakefield, Preliminary Phase 1 Geo-Environmental Risk Assessment and Preliminary Coal Mining Risk Assessment, June 2021 ref. 70078523.
Boom Power	Boom Power Ltd, Drawing B01 ‘Overall Layout’, V 5.2, Low Farm Solar Farm
Third Party Information	<p>Groundsure Insight Reports including historical Ordnance Survey mapping dated March 2021 (as reported in the WSP Phase 1 and Preliminary CMRA above):</p> <ul style="list-style-type: none"> • WSP - 7874473, 7874474 and 7874476 (Parcel 1); • WSP - 7874477, 7874478 and 7874480 (Parcels 2, 3, 7 and 8); • WSP - 7874481, 7874482 and 7874484 (Parcel 4); • WSP - 7874485, 7874486 and 7874488 (Parcels 5 and 6); • WSP - 7874414, 7874415 and 7874417 (Parcel 9); <p>Memoirs of the Geological Survey England & Wales Explanation of Sheet 77 The Geology of the Country around Huddersfield and Halifax by D.A Wray et al, 1930</p> <p>Coal Authority (CA) Consultants Coal Mining Report references:</p> <ul style="list-style-type: none"> • 51002535484001, 51002545485001, 51002545487001, 51002545462001 and 51002545483001, all dated 19/05/2020. <p>The following CA Mine Abandonment Plans: 17558, NE206, NE249, NE387, OC122, OC176.</p> <p>Zetica Pre-Desk Study Assessment (PDSA), as referenced and appended to the WSP Phase 1 and Preliminary CMRA.</p>
Public Information	British Geological Society (BGS) 1:50,000 Series Geological Map Sheet 77 Huddersfield, Solid and Drift, 2003;

	<p>BGS 1:10,560 Series, Maps 247SE Thornhill (Drift & Solid) and 261NE Flockton (Drift & Solid);</p> <p>BGS 'Geology of Britain' online viewer accessed 01 August 2024.</p> <p>BGS 'GeoIndex' online viewer accessed 01 August 2024.</p> <p>Coal Authority Interactive Map Viewer (CA) accessed 01 August 2024.</p>
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1.6 REGULATORY CONTEXT AND GUIDANCE

The assessment was undertaken in the legislative context of:

- Part 2A of The Environmental Protection Act (1990)
- The National Planning Policy Framework (2023)
- The Environmental Permitting (England & Wales) Regulations 2016.

The following good practice and statutory guidance was considered, and the assessment was undertaken in general accordance with:

- Environment Agency (EA). Land Contamination Risk Management (LCRM). October 2020, updated July 2023.
- Yorkshire and Lincolnshire Pollution Advisory Group (YALPAG). Development on Land Affected by Contamination. Technical Guidance for Developers, Landowners and Consultants. Version 11.2 – July 2023.
- NHBC 'Guidance for the Safe Development of Housing on Land Affected by Contamination', R&D66 (2008)
- CL: AIRE 'Good Practice for Risk Assessment for Coal Mine Gas Emissions', October 2021
- CIRIA 'Assessing Risks Posed by Hazardous Ground Gases to Buildings', C665 (2007)
- CIRA C552 'Contaminated Land Risk Assessment. A guide to good practice' (2001)
- British Standard 'Investigation of Potentially Contaminated Sites – Code of Practice', BS EN 10175:2011
- Defra 'Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance', PB13735 (2012)
- British Standard 'Guidance on Investigations for Ground Gas – Permanent Gases and Volatile Organic Compounds (VOCs)' BS 8576:2013
- British Standard 'Code of Practice for Ground Investigations', BS 5930:2015+A1:2020.
- British Standards Geotechnical investigation and testing – Sampling methods and groundwater measurements – Part 1: Technical principles for execution. BS EN ISO 22475-1:2006; and,
- British Standards Geotechnical investigation and testing – Identification and classification of soil – Part 1: Identification and description. BS EN ISO 14688-1:2002+A1:2013.

1.7 CONFIDENTIALITY STATEMENT AND LIMITATIONS

This report is addressed to and may be relied upon by Boom Power Ltd (the Client) and may not be relied upon or transferred to any other parties without the express written agreement of WSP.

This report should be read and used in full. No responsibility will be accepted where this report is used, either in its entirety or in part, by any other party. WSP cannot be held liable for third party information. Full details of the limitations are provided as **Appendix C**.

2 SITE SETTING

2.1 SITE LOCATION

The site details are summarised below in Table 2-1. A detailed parcel-by-parcel description of the site is provided in the Phase 1 PRA and CMRA (Table 1-1) and is summarised here on a site-wide basis for conciseness.

A Site Location is provided as Figure 1 in **Appendix A**.

Table 2-1 – Site Description & Current Use

Aspect	Details
Site Address (general)	Land to the north and south of Wakefield Road (A642) in Grange Moor, Wakefield, WF4 4BB
National Grid Reference	E: 424305, N: 416125 (approximate site centre)
Site Description, Area and Current Use	<p>The site comprises nine land parcels (Parcels 1-9) which cover a total area of approximately 85 hectares (ha). Parcels 1-3 and 7-9 are located north of Wakefield Road; Parcels 4-6 are located to the south.</p> <p>The Site Location is provided in Figure 1 in Appendix A.</p> <p>At the time of the ground investigation (June 2024), the site exists as undeveloped agricultural land and currently farmed as grassland.</p>
Site Setting and Surrounding Area	<p>The site is approximately 5km south of Dewsbury, 10km east of Huddersfield and 10km southwest of Wakefield.</p> <p>The individual site parcels are surrounded by a mixture of woodland areas. Each parcel broadly consists of a number of individual fields, bound by a mixture of hedgerows and fences. A number of residential properties and farm buildings exist close by, but outwith, the site parcels.</p>
Topography and Ground Cover	<p>Given the size of the site, topography is variable. The site varies between approximately 130m Above Ordnance Datum (AOD) (Parcel 8) and 205m AOD (Parcel 1), and the land generally falls to the north and north-east.</p> <p>An Exploratory Hole Location Plan, showing the Site Location, is provided as Figure 2 in Appendix A, with the elevation of each investigation location provided therein.</p>
Trees and Vegetation (including invasive species)	<p>Farmed grassland is present across each development parcel.</p> <p>The presence of Japanese Knotweed and Himalayan Balsam has been noted along the boundary of several parcels, as noted in the WSP Phase 1 PRA and CMRA (Table 1-1).</p>
Remnant Structures Evident on Site	<p>None known.</p> <p>The site has been the subject of historical opencast mining on site, across each development parcel with the exception of Parcel 6, 7 and 9. An 'Exploratory Hole Location Plan with Areas of Mapped Opencast Mining' is provided as Figure 3 in Appendix A.</p>

2.2 SITE HISTORICAL AND ENVIRONMENTAL SETTING

A full account of the site’s history and environmental setting is provided within the Phase 1 PRA and Preliminary CMRA (Table 1-1). A summary of the pertinent information is provided in Table 2-2.

Table 2-2 – Summary of Historical and Environmental Setting

Feature	Detail
Site History	<p>A detailed, parcel-by-parcel review of the site history is provided in the WSP Phase 1 PRA and CMRA (Table 1-1).</p> <p>Generally, the majority of the site parcels have been the subject of either sandstone quarrying or opencast coal mining during the late 19th century and throughout the 20th century. Since the cessation of opencast mining, it is believed the spoil was returned to ground on site and the site was then returned to agricultural use, which it has remained until the present day.</p>
Geology	<p>Made Ground is mapped to be present on site in areas of former opencast mining.</p> <p>Superficial deposits are mapped to be absent on site.</p> <p>Solid strata beneath the site are recorded to comprise massive sandstones, siltstone, mudstone, ironstone bands and coal seams of the Pennine Middle Coal Measures and Pennine Lower Coal Measures (PMCM and PLCM respectively).</p> <p>The PMCM is generally confined to the far east and southeast of the site.</p>
Mining	<p>The CA interactive map viewer shows the site is located within a Coal Mining Reporting Area. The majority of the site (except for the northern parts of Parcels 2 and 4) is indicated to be located within Development High Risk Areas (DHRAs) as defined by the CA. The DHRAs are associated with probable shallow underground coal mine workings (and associated mine entries) and past surface mine workings. Information on past coal mining activities on the site and coal mining related risk are discussed further in the WSP Phase 1 PRA and CMRA (Table 1-1).</p>
Hydrogeology	<p>Information included within the Groundsure Report indicates that the solid strata beneath the site are classified as a Secondary A Aquifer. This indicates that the underlying bedrock aquifer comprises predominantly permeable layers capable of supporting water supplies at a local rather than strategic scale and in some instances may form an important source of base flow to rivers.</p> <p>The site is not located within or near a groundwater source protection zone. No licensed groundwater abstractions are recorded on or within 2 km of the site.</p>
Hydrology	<p>No classified surface watercourses have been identified within any of the land parcels.</p> <p>A classified watercourse, mapped as Smithy Brook from source to River Calder, is located approximately 50m east and south of Parcels 5 and 6, flowing to the northeast. The Smithy Brook is within the Calder Lower catchment and classified as moderate quality with respect to ecology and failed with respect to chemistry, with an overall classification of moderate.</p> <p>Howroyd Beck, a tributary of Smithy Brook is mapped approximately 75m to the north of Parcels 2 & 3, flowing to the northeast and joining Smithy Brook approximately 1km to the northeast of Parcel 2.</p>

Feature	Detail
	<p>Two unnamed tributaries of Howroyd Beck are shown to emerge in Grange Wood along the northern boundary of Parcel 1, flowing in a north easterly direction to join Howroyd Beck.</p> <p>An unnamed watercourse, also a tributary of Smithy Brook emerges in Harry Royd Clough Wood to the immediate north of Parcel 7 and flows in a north easterly direction to join Smithy Brook approximately 750m north of Parcel 7.</p> <p>There are no licensed surface water abstractions listed on or within 500m of the site.</p>
Flood Risk	WSP review of the EA Flood Risk Map for Planning has identified that the site resides within Flood Zone 1 with a low probability of flooding from rivers and the sea.
Environmentally Sensitive Land Uses	<p>Parcel 4 is partially located within a Nitrate Vulnerable Zone (southern portion Parcel 4).</p> <p>An area of ancient woodland (Grange, Hepper and Denby Woods) is located off-site on the northern boundaries of Parcels 1 and 2. A second smaller area of ancient woodland (Harry Royd Clough Wood) is located off-site to the north-east and borders Parcels 2, 3, 7 and 8. It is noted that the Groundsure Report (as included in the Phase 1 PRA and CMRA) record both ancient woodland areas as being on site; however, these areas are likely related to off-site woodland and ancient woodland areas are not anticipated within the site boundaries.</p> <p>There are no Sites of Special Scientific Interest (SSSI) or Special Areas of Conservation (SAC) within 1km of the site.</p>
Ground Gas - Radon	All parcels are located within a radon affected area where the percentage of homes estimated to be affected by radon is between 1-3%, with the exception of Parcel 9 where the parcel is not within a Radon affected area.
Unexploded Ordnance Risk (UXO)	The site is at low risk of UXOs. A copy of the UXO PDSA is presented within the Phase 1 PRA and Preliminary CMRA.

3 INITIAL CONCEPTUAL SITE MODEL

3.1 INTRODUCTION

Based on the findings of the WSP Phase 1 PRA and Preliminary CMRA report (Table 1-1) an initial conceptual site model (CSM) was developed therein which is reproduced here.

The assessment followed a risk-based approach; with the potential environmental risk assessed qualitatively using the 'source-pathway-receptor' contaminant linkage concept introduced in the guidance documents (principally the EA's LCRM, 2020 updated April 2021).

Environmental risk can be defined as the combination of the consequence of a harmful effect and the probability of its occurrence. The existence of a contaminant linkage is primarily dependant on site usage and environmental conditions.

The environmental risk assessment has been carried out by identifying and evaluating the significance of the following:

- Potential sources of contamination: these include actual or potentially contaminating materials and activities, located either on or in the vicinity of the site;
- Potential receptors of contamination: these include site users, groundwater and surface waters; and,
- Potential pathways for contamination migration: these are the routes or mechanisms by which contaminants may migrate from the source to the receptor.

This CSM has been prepared based on the site being redeveloped for a SPF to comprise the installation of rows of solar photovoltaic panels and associated infrastructure (e.g. transformer hubs across each parcel and a substation within Parcel 9). Given the presence of a public right of way on site (Kirklees Way, running down the western boundary of Parcel 2), the proposed end-use is deemed public open space (POS).

The site currently comprises predominantly agricultural land, with some areas of woodland. The area has a significant coal mining legacy, both underground and opencast, as well as historical quarrying (sandstone). The key potential sources of contamination have been identified as the unknown nature of any backfill material used to backfill the opencast mines / quarries.

Construction and maintenance workers are included as potential human health receptors within this assessment; however it is noted that potential risks will be satisfactorily mitigated with appropriate work control procedures. These are legal requirements under the Construction, Design and Management (CDM) Regulation 2015 to ensure suitable health and safety controls are in place during construction works.

3.2 SUMMARY OF PLAUSIBLE CONTAMINANT LINKAGES

Table 3-1 provides an evaluation of the potential contaminant linkages that were considered to be plausible on the basis of the information available for the site.

A full list of the identified sources, pathways and receptors is provided in the WSP Phase 1 PRA and Preliminary CMRA.

The initial assessments presented are qualitative based on professional judgement following review of the available data and within the context of the proposed end-use. Those risk categories presented



(Very Low, Low, Low to Moderate, Moderate, High, Very High) follow guidance presented in CIRIA Publication C552, Contaminated Land Risk Assessment – A Guide to Good Practice (2001) and NHBC – Guidance for the Safe Development of Housing of Land Affected by Contamination (2008).

CIRIA and NHBC guidance states that risk levels should be based on an understanding of both the probability (likelihood) of a hazard occurring and the magnitude of the potential consequence (severity) of a hazard. CIRIA and NHBC guidance define the four levels of probability and severity with relation to contaminated land, as presented in **Appendix D**.



Table 3-1 – Initial Conceptual Site Model (from WSP Phase 1 PRA and Preliminary CMRA)

Source	Pathway	Receptor	Probability of Complete Linkage	Consequence if Linkage Present	Risk	Discussion of Pollutant Linkage
Asbestos, if present, within Made Ground (associated with backfilled quarries / opencast mining in Parcels 1, 2, 3, 4, 5 & 8, Denby Grange Colliery in Parcel 5, or limited general Made Ground.	Liberation followed by inhalation	Construction workers during redevelopment	Likely Reduced to unlikely with the use of appropriate PPE.	Medium	Moderate Reduced to Low with the use of appropriate PPE.	Backfilled opencast workings identified within Parcels 1, 2, 3, 4, 5 & 8, likely backfilled with colliery spoil, potential for backfill to also comprise Made Ground of unknown origin potentially associated with the colliery. Limited Made Ground has been identified at the surface within a number of parcels onsite. Opencast backfill material and general Made Ground may contain asbestos fibres that could be liberated during ground works. Appropriate work control procedures (such as the use of personal protective equipment (PPE)) would be required to control any exposure risk during the works, reducing the risk to Low.
		Neighbouring site users	Unlikely	Medium	Low	If asbestos is liberated during ground works, there is a potential for exposure, but this is considered low due to the distance of identified receptors from the site.
		Site end users and maintenance workers	Low	Medium	Low to moderate	Given the nature of the proposed development there is considered a



Source	Pathway	Receptor	Probability of Complete Linkage	Consequence if Linkage Present	Risk	Discussion of Pollutant Linkage
						<p>limited exposure pathway to site end users.</p> <p>Maintenance workers (groundworkers) may come into contact with opencast backfill / general Made ground. Risk of exposure can be reduced to low with the appropriate use of PPE.</p>
<p>Chemicals of concern within Made Ground associated with previous historical uses on site/ off-site such as:</p> <p>Agricultural usage of land across all parcels.</p> <p>Historical quarrying / opencast mining in Parcels 1, 2,3, 4, 5 & 8 and Denby Grange Colliery in Parcel 5</p> <p>Historical unspecified tanks located within 250m of the boundary of Parcels 1, 2, 3, 5, 6, 7 and 8)</p>	<p>Direct contact, ingestion, dust inhalation</p>	<p>Construction Workers (during redevelopment)</p>	<p>Likely</p> <p>Reduced to unlikely with the use of appropriate PPE.</p>	<p>Medium</p>	<p>Moderate</p> <p>Reduced to Low with the use of appropriate PPE.</p>	<p>Exposure of construction workers to contamination in soils and groundwater is possible during construction, particularly groundworkers. Measures to limit exposure (e.g. appropriate PPE) may be required and will reduce the probability of exposure to unlikely.</p>
		<p>Adjacent site users</p>	<p>Unlikely</p>	<p>Mild</p>	<p>Very Low</p>	<p>Adjacent site users unlikely to be exposed to chemical contamination during construction due to distance from site and limited exposure times. Following construction, no exposure pathways identified.</p>
		<p>Site end users and maintenance workers, including groundworkers (post development)</p>	<p>Unlikely (end users) Likely (maintenance workers).</p> <p>Reduced to unlikely with the use of appropriate PPE.</p>	<p>Medium</p>	<p>Low (end users)</p> <p>Moderate (maintenance workers).</p> <p>Reduced to Low with the use of appropriate PPE.</p>	<p>Given the nature of the proposed development there is considered a limited exposure pathway to site end users.</p> <p>Maintenance workers (groundworkers) may come into contact with opencast backfill / general Made ground. Risks</p>

Source	Pathway	Receptor	Probability of Complete Linkage	Consequence if Linkage Present	Risk	Discussion of Pollutant Linkage
						reduced to low with the appropriate use of PPE.
	Direct contact	Below ground buildings and services	Low	Mild	Low	<p>Presence of made ground may present aggressive ground conditions with respect to below ground concrete.</p> <p>Also potential for presence of contaminants which may have detrimental effect on services (principally potable water supply pipes), source areas, if present are likely to be localised. Potable water supply pipes are not to be installed as part of the development.</p>
	Leaching / mobilisation and migration	Controlled waters- Secondary A bedrock aquifer, Smithy Brook	Low Likelihood	Medium	Low to Moderate	<p>should chemicals of concern be present, they could be migrating through granular soils and rock to impact the underlying aquifer.</p> <p>Secondary Aquifer is considered medium sensitivity given coal mining legacy in the area and lack of potable groundwater abstractions within 1km of the site. Local groundwater is considered overall to be of poor quality given the coal mining legacy of the area. Any sources within the opencast backfill or general Made Ground on site are considered diminishing sources and are unlikely to be presenting a detrimental effect on the local groundwater quality.</p>



Source	Pathway	Receptor	Probability of Complete Linkage	Consequence if Linkage Present	Risk	Discussion of Pollutant Linkage
Hazardous ground gases arising from Made Ground / Historical coal mining	Accumulation in confined spaces followed by inhalation, asphyxiation, explosion	Construction workers	Low	Medium	Low to Moderate	<p>Given the likely age of the fill materials and the age of the workings beneath the site, the likelihood of significant gas generation is considered low but cannot be ruled out.</p> <p>Given the nature of the development there are limited confined spaces for ground gas to accumulate in, the majority of the development is therefore assigned a Low risk. However structures such as a substation building and storage buildings will be installed as part of the development, where structures are proposed a Moderate risk rating has been assigned.</p> <p>Potential risks during construction would be managed by working in accordance with appropriate Risk Assessments and Method Statements (RAMS) when working in confined spaces and used of appropriate PPE.</p>
		Neighbouring site users	Low	Medium	Low to Moderate	
		Site end users and maintenance workers	Likely (proposed occupied structures) Unlikely (majority of development)	Medium	Moderate (proposed occupied structures) Low (majority of development)	
Colliery Spoil within backfilled opencast workings presenting a risk of spontaneous combustion	Spontaneous combustion	Construction workers Site end users including maintenance workers Future structures	Unlikely	Medium	Low	<p>Spontaneous combustion of colliery spoil has the potential to occur where material with a high calorific content is present. Spontaneous combustion generally occurs within loosely tipped, highly aerated spoil heaps. The coal content (i.e. calorific content) of the opencast backfilled workings is currently unknown however it is considered likely to be</p>



Source	Pathway	Receptor	Probability of Complete Linkage	Consequence if Linkage Present	Risk	Discussion of Pollutant Linkage
						relatively well compacted (even if not formally engineered during placement). There are no known records of any instance of spontaneous combustion within the backfilled opencast workings. On the basis of the above the risk of spontaneous combustion is considered low.
Underground fires within mine workings	Leading to explosion	Construction workers Site end users including maintenance workers Future structures	Unlikely	Medium	Low	Given the nature of the proposed development and the depth of the mine workings it is considered unlikely that a source of ignition will be introduced as a result of the proposed development. There is no indication that there is a history of underground fires within the underground workings as such the risk of underground fires is considered Low.

4 GROUND INVESTIGATION AND ASSESSMENT RATIONALE

4.1 GROUND INVESTIGATION SCOPE

The ground investigation works were completed between the 24 and 29 of June 2024. One post-ground investigation ground gas and groundwater monitoring round was completed on 04 July 2024. The Site Location is provided in Figure 1 in **Appendix A**. An Exploratory Hole Location Plan is provided as Figure 2 in **Appendix A**. For full details of each exploratory hole location please refer to the Exploratory Hole Logs included as **Appendix E**.

The scope of the works of the investigation comprised the following:

- Service clearance and surveying of exploratory hole locations by a specialist subcontractor;
- Surveying co-ordinates and levelling at investigation locations (X,Y,Z);
- The advancement of hand dug service inspection pits to a depth of 1.30m bgl at all dynamic sampler (DS) borehole locations;
- The advancement of a total of 12 dynamic sampler boreholes (DS01 – DS12) to a maximum depth of 5.45m below ground level (bgl);
- The advancement of 30 machine-excavated trial pits (TP01 – TP30) to maximum depth of 2.90m bgl;
- The installation of single 50mm diameter monitoring standpipes in ten of the borehole locations;
- Backfilling and reinstatement of all other exploratory hole locations;
- Completion of one ground gas and groundwater monitoring visit; and
- Laboratory analysis of recovered soil samples (chemical and geotechnical).

4.2 GROUND INVESTIGATION LOCATION RATIONALE

Locations were placed across the site with the following considerations:

- General spatial coverage of investigation locations across each parcel and the wider site;
- DS borehole locations positioned in the location of proposed solar farm transformer ‘hubs’ across each parcel (where possible) and proposed substation location; and
- Both DS and TP locations in areas of mapped historical opencast workings, to investigate the ground conditions and retrieve soil samples in these locations.

4.3 GROUND INVESTIGATION METHODOLOGY

SOIL SAMPLING METHODOLOGY

Soil samples, comprising environmental, disturbed, and bulk samples were collected from both the Made Ground and shallow weathered bedrock deposits. Soil samples were collected using industry best practice methodology as outlined in BS 5930: 2015+A1: 2020 ‘Code of Practice for Ground Investigations’.

IN-SITU AND FIELD TESTING

Standard Penetration Tests (SPT) were carried out at regular intervals in all DS borehole locations to provide data on the in-situ density/strength of the strata.



The results of the SPT 'N values' are presented on the exploratory hole records (**Appendix E**).

Where suitable soil materials allowed, in-situ shear strength measurements were taken using a Hand Shear Vane (HSV).

Environmental soil samples were screened on site for the presence of volatile contamination using a photo-ionisation detector (PID). PID results are presented on the exploratory hole logs in **Appendix E**.

GROUND GAS AND GROUNDWATER MONITORING

One post-ground investigation gas and groundwater monitoring round was completed on 04 July 2024.

Gas and groundwater level monitoring results are presented as **Appendix F**.

Gas monitoring involved measuring initial and steady state concentrations of methane, carbon dioxide, oxygen, carbon monoxide and hydrogen sulphide, using a GFM435 gas analyser, along with the gas flow rate and atmospheric pressure at each monitoring location.

Groundwater levels and depth to the base of the boreholes were measured using an oil-water interface probe following the gas monitoring.

LABORATORY ANALYSIS

GEOTECHNICAL LABORATORY TESTING

Samples were collected and sent to Professional Soils Laboratory (PSL) (UKAS accredited) via ALS Environmental (UKAS and MCERTS) for geotechnical testing. All laboratory certificates are presented within **Appendix G**.

Samples were scheduled for testing as detailed in Table 4-1.

Table 4-1 – Summary of Geotechnical Laboratory Testing

Classification Test	No. of Samples Scheduled
Moisture content	26
Plasticity index (4 point) (Atterberg limits)	26
Particle size distribution (PSD) (wet/dry sieve)	12
PSD (sedimentation)	11
Compaction (2.5kg rammer)	9
Loss on Ignition (LOI)	12
Calorific Value	12

Classification Test	No. of Samples Scheduled
BRE SD1 Extended suite (S)	12

GEO-ENVIRONMENTAL LABORATORY TESTING

All samples were collected in accordance with current industry best practice and on-site sampling procedures were designed to minimise the potential for cross-contamination. Samples were collected in labelled containers and sent directly to ALS Environmental under a digital chain of custody. The samples were suitably preserved, and all testing was completed under relevant UKAS and MCERTS accreditations.

The chemical testing strategy was underpinned by the initial CSM and by on-site observations. Selected soil, leachate and groundwater samples were analysed as per Table 4-2.

Analysis was undertaken by WSP’s approved and chosen sub-contracted laboratory, ALS Environmental. All laboratory certificates are presented within **Appendix G**.

Table 4-2 - Summary of Geo-Environmental Testing

Determinant(s) Test	No. of samples scheduled
Soil	
pH	48
Soil Organic Matter (SOM)	47
Asbestos identification (further quantification if present)	43
Heavy metals (arsenic, barium, beryllium, boron, cadmium, chromium III, chromium VI, copper, lead, mercury, nickel, selenium, vanadium, zinc)	48
Polycyclic Aromatic Hydrocarbons (PAHs) (16 speciated)	48
Total Petroleum Hydrocarbons (TPH CWG) including BTEX, MTBE and TAME	21

5 GROUND CONDITIONS

5.1 SUMMARY OF ENCOUNTERED GROUND CONDITIONS

The exploratory hole locations logs are provided in **Appendix E**. A summary of the strata encountered during the ground investigation is provided in below in Table 5-1.

Table 5-1 - Summary of Encountered Ground Conditions

Stratum		Depth to Base of Stratum (mbgl)	Elevation of Base of Stratum (mAOD)	Thickness (m)	Typical Description(s)
Topsoil		0.15 to 0.40	203.18 to 132.68	0.15 to 0.40	Dark brown slightly gravelly CLAY with frequent rootlets. Gravel is angular to sub-angular fine to coarse mudstone.
Made Ground	Made Ground (Cohesive)	0.30 to 4.40 (5.00)	185.22 to 136.43	0.30 to 4.40 (5.00)	Firm to stiff greyish brown mottled orangish brown gravelly CLAY. Gravel is angular to sub-angular fine to coarse mudstone, sandstone, ironstone, siltstone, shale and rare coal.
	Made Ground (Granular)	1.95 to 1.95 (5.00)	159.97 to 159.97 (149.08)	0.35 to 0.35 (2.75)	Grey clayey gravel of angular to sub-angular mudstone, with rare sub-angular cobbles of mudstone.
Weathered Pennine Lower Coal Measures Formation (Bedrock)		Not proven (5.00)	Not proven (130.98)	Not proven (4.75)	<p>Firm to stiff orangish brown mottled bluish grey gravelly CLAY. Gravel of angular to sub-angular fine to coarse mudstone, siltstone and sandstone.</p> <p>With increasing depth, encountered as an intact MUDSTONE recovered as a clayey sandy GRAVEL of angular to subangular mudstone.</p> <p>Locally: Black fine to coarse angular to subangular GRAVEL of weathered coal.</p>

Brackets indicate maximum unproven depth.

Stratum	Depth to Base of Stratum (mbgl)	Elevation of Base of Stratum (mAOD)	Thickness (m)	Typical Description(s)
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NB: The full exploratory hole logs (**Appendix E**) should be viewed for detail of materials encountered at each discrete exploratory location.

5.2 CONTAMINATION OBSERVATIONS

No visual or olfactory evidence of contamination was noted during the investigation or the post-investigation monitoring. Additionally, no elevated PID concentrations were recorded during sampling, with all readings <0.1 ppm; PID results are presented on the exploratory hole logs in **Appendix E**.

5.3 GROUNDWATER LEVEL SUMMARY

Two groundwater strikes were recorded during the investigation, with a seepage at TP01 (1.00m bgl) and a steady flow at DS09 (1.35m bgl). No other groundwater was encountered during the ground investigation.

One groundwater level monitoring round has been undertaken following the ground investigation.

Recorded groundwater levels at each location have been found to be variable across the site. Table 5-2 presents a summary of recorded groundwater levels during the single monitoring event. Full monitoring records are presented in **Appendix F**.

Table 5-2 - Summary of Groundwater Levels Recorded During Monitoring Period

Exploratory Hole	Elevation of Screen Top (mAOD)	Elevation of Screen Base (mAOD)	Geology of Response Zone	Groundwater Level recorded (mAOD)
DS01	197.32	193.32	MG	193.36
DS02	175.83	171.83	MG	Dry
DS03	172.02	168.32	MG	168.65
DS05	153.08	149.08	MG	Dry
DS06	160.92	159.92	MG	Dry
DS08	183.92	181.92	PLCM	Dry
DS09	175.46	174.36	PLCM	174.76
DS10	137.93	134.93	PLCM	Dry
DS11	152.00	148.00	PLCM	148.80

Exploratory Hole	Elevation of Screen Top (mAOD)	Elevation of Screen Base (mAOD)	Geology of Response Zone	Groundwater Level recorded (mAOD)
DS12	149.90	146.30	PLCM	146.63

During the one round of groundwater monitoring undertaken, resting groundwater within the wells set within the PLCM bedrock have been recorded between a minimum of 146.63 mAOD (DS12) and a maximum of 174.76 mAOD (DS09). Resting groundwater set within wells set within the Made Ground ranged between a minimum of 168.65 mAOD (DS03) and 193.36 mAOD (DS01).

It should be noted that where groundwater has been recorded, the thickness of the water column has not been significant and generally confined to the base of the monitoring well. This may suggest an accumulation of minor groundwater seepages into the well, rather than a continuous groundwater body at this depth.

Further commentary on recorded groundwater levels is provided in Section 6.5.

6 GROUND MODEL

A preliminary ground model, based on the findings of the ground investigation, the site topography and the site history, is summarised below.

6.1 MADE GROUND

Made Ground has been encountered across the site and has been encountered on every parcel, with the exception of Parcel 6, 7 and 9. The locations in which Made Ground has been identified, in general, shows a good correlation to the location of mapped opencast coal workings (as derived from Coal Authority abandonment records). An 'Exploratory Hole Location Plan with Areas of Mapped Opencast Mining' overlay is provided as Figure 3 in **Appendix A**.

Made Ground has been encountered from ground level to proven depths ranging between 0.15m bgl (168.60 mAOD (TP15), 149.64 mAOD (TP29) and 4.40m bgl (168.62 mAOD, DS03). The depth of the Made Ground was unproven in the following locations, which generally corresponded to mapped locations of historical opencast mining:

- Dynamic Sampler boreholes: DS01 (>5.00m) and DS02 (>5.00m).
- Trial Pits: TP07 (>2.30m), TP08 (>2.30m), TP09 (>2.30m), TP13 (>2.00m), TP17 (>2.20m), TP19 (>2.00m), TP20 (>2.50m), TP26 (>2.00m) and TP27 (>2.20m).

A Made Ground Topsoil was identified at all 23 locations in which Made Ground was identified, representing an organic soil used as a growing medium for recent agricultural activities. Thicknesses of the Made Ground Topsoil generally ranged between 0.2 – 0.4m.

The Made Ground has been primarily encountered as a cohesive soil, with some minor granular layers. Where cohesive, the Made Ground was typically described as a firm to stiff greyish brown mottled orangish brown gravelly clay, with gravel inclusions of angular to sub-angular fine to coarse mudstone, sandstone, ironstone, siltstone, shale and rare coal. Occasional cobbles of sub-angular sandstone and mudstone were also encountered. Where encountered as a granular soil, the Made Ground was typically described as a grey clayey gravel of angular to sub-angular mudstone, with rare sub-angular cobbles of mudstone. At one location (TP20), a layer of red (burnt) shale was encountered between 1.00-1.90m bgl described as a red clayey gravel of red shale.

It is considered that the Made Ground materials encountered are representative of material backfilled into former opencast workings following the cessation of mining. The Made Ground materials identified correspond to expectations for backfilled opencast workings, with materials comprising a mixture of bedrock materials (mudstone, sandstone, siltstone), shale, minor inclusions and residual coal, etc. in a heterogenous mixture.

6.2 TOPSOIL

Natural Topsoil was encountered at 19 discrete investigation locations. Topsoil was present in locations where Made Ground was not present, and was present from ground level to depths between 0.15m bgl (142.56 mAOD, DS04) and 0.4m bgl (153.46 mAOD, TP22). Where identified, Topsoil was generally described as a dark brown slightly gravelly clay with frequent rootlets, with gravel of angular to sub-angular fine to coarse mudstone.

6.3 SUPERFICIAL DEPOSITS

No superficial deposits were identified during the investigation. This concurs with the absence of superficial deposits on BGS mapping.

6.4 PENNINE LOWER COAL MEASURES

Weathered bedrock of the Pennine Lower Coal Measures (PLCM) was encountered at each location which proved the base of the Made Ground. The base of the stratum was not encountered but was proven to a maximum depth of 5.00m bgl (multiple DS locations), but the lowest proven elevation of the PLCM was at TP25 (130.98m AOD).

The stratum was generally initially weathered to a soil in its uppermost layers, recorded as a firm to stiff orangish brown mottled bluish grey gravelly clay, with gravel inclusions of angular to sub-angular fine to coarse mudstone, siltstone and sandstone. With increasing depth, the PLCM transitioned to an intact mudstone or sandstone, which was generally recovered in the investigation locations as a clayey sandy gravel of angular to subangular mudstone. Locally, thin seams of weathered coal were identified as black fine to coarse angular to subangular gravel of weathered coal (TP01 (0.4m), TP03 (0.3m), TP04 (0.2m)). Greater thicknesses of intact coal seams were identified at TP21 (1.0m) and DS09 (1.15m). All of the locations in which weathered natural coal seams were identified, plot outside the mapped locations of historical opencast mining (Figure 3, **Appendix A**).

6.5 SUMMARY OF GROUNDWATER LEVELS

It is noted that one groundwater monitoring round has been completed. For this reason and given the shallow well installations (max. 5m bgl), limited detailed information can be interpreted for the local site hydrogeological conditions.

Only two groundwater strikes were recorded during the investigation, with seepage at TP01 (1.00m bgl) and a steady flow at DS09 (1.35m bgl). The two seepages were recorded within, or within a similar depth to coal seams identified, indicating potential groundwater presence within coal seams that are still present beneath the site.

During the post-investigation monitoring, five of the ten monitoring locations were dry and absent of any groundwater, and the wells which did have groundwater did not have a significant groundwater column recorded. This would suggest the groundwater identified is representative of minor perched pockets of groundwater from the Made Ground / PLCM seeping into the wells, rather than representing a significant groundwater column, which will likely lie at greater depths.

6.6 COMBUSTIBILITY

Where combustible material exists below ground, there is the potential that fire could ignite and propagate.

In this instance, a preliminary assessment of material combustibility is considered relevant due to the combination of the proven local geology (PLCM and PMCM, with coal seams), site history (extensive historical opencast mining and backfilling of workings) and the proposed future SPF development.

For spontaneous combustion to occur there must be the following three separate elements to be simultaneously present¹; substance with sufficient caloric value to support combustion, a supply of oxygen and an ignition source. As the site was subject to extensive opencast mining and subsequent backfilling, material was likely placed in a controlled manner the potential for there to be significant voids within the fill material giving rise to a ready source of oxygen is considered low. Given the nature of the material encountered, it is not considered likely to present a high potential for self-heating from chemical oxidation of residual coal waste. Based on the above, the potential for there being a risk of spontaneous combustion is considered low. This section therefore focusses on the combustible nature of the material rather than assessing the risks of spontaneous combustion.

METHODOLOGY

Whilst a definitive method to evaluate the combustibility of soil beneath a site has not been accepted, consideration of a number of soil properties can be used as an initial screening of potentially combustible materials.

Two properties have been considered herein:

- Calorific value (measurement of the heat of combustion); and
- Loss on ignition (indicator of the amount of organic matter).

Calorific Value

The Fire Research Station (FRS) (Department of the Environment, November 1987) indicates the following thresholds of calorific values for evaluation of combustibility (based upon laboratory conditions):

- <2 MJ/kg: Highly unlikely to be combustible / unlikely to burn.
- 3-4 MJ/kg: Smouldering can propagate.
- >10 MJ/kg: Likely to be combustible / almost certainly capable of sustaining smouldering.

As reference points, dry coal has a calorific value of c. 20 MJ/kg, whilst a typical loamy soil is c. 1.7 MJ/kg.

Loss on Ignition

The following indicative thresholds are given for loss on ignition, for evaluation of combustibility hazards (Beever, 1985):

- >50% LOI is normally considered to present a potential hazard.
- <10-20% considered of minor significance.

¹ CIRIA. (2019). *Abandoned Mine Workings Manual* .

RESULTS

Soil samples were selected from a range of exploratory holes and depths (Made Ground and PLCM) across the site and were subject to calorific value and loss on ignition testing. The data evaluation is summarised in **Table 6-1**.

Table 6-1 - Summary of Combustibility Assessment

Property	Number of Samples Tested	Laboratory Measured Value			Indicative Threshold	Number of Samples Above / Below Indicative Threshold
		Minimum	Average	Maximum		
Gross Calorific Value	12	0.52 MJ/kg	6.04 MJ/kg	17.2 MJ/kg	<2 MJ/kg	6
					2-3 MJ/kg	0
					3-4 MJ/kg	1
					4-10 MJ/kg	1
					>10 MJ/kg	4
Loss on Ignition	12	4.55%	21.85%	59.5%	<20%	7
					20%-50%	4
					>50%	1

Four of the 12 samples tested were identified with gross calorific values in excess of 10 MJ/kg, as follows:

- DS09 (0.6m) – recorded as intact coal seam (PLCM)
- TP21 (1.1m) – recorded as intact coal seam (PLCM)
- TP22 (0.5m) – recorded as gravelly clay of mudstone and coal (PLCM)
- TP26 (0.4m) – recorded as sandy clay (Made Ground).

One of the 12 samples tested were identified with loss on ignition greater than 50% (TP21, 1.1m).

DISCUSSION

Four Made Ground samples identified calorific values >10 MJ/kg, highlighting potential combustibility hazards. A further single soil sample was identified calorific values with the potential for smouldering to propagate. The loss on ignition data suggested one sample represents a combustibility hazard.

Both the calorific value and loss on ignition methods are also recognised as being indicative and not providing definitive conclusions on combustibility hazards.

Although substances with sufficient caloric value to support combustion have been identified, it is noted that both a supply of oxygen and an ignition source are not deemed likely at this stage given the SPF development proposals (buried soils i.e., no available oxygen, and no significant earthworks expected). Additionally, although a significant body of shallow groundwater has not been identified, soils are noted to be somewhat damp from rainwater percolation through the soil profile.



During detailed design, further consideration of the combustibility hazards associated with the soils beneath the site would be prudent, especially where elevated gross calorific value and loss on ignition values have been recorded (Parcel 5, 6 and 8) or where intact coal seams have been identified at shallow depths (Parcel 1, Parcel 9, locally on Parcel 5).

Proposed services such as electric cables can be isolated by being laid within inert material. Concrete cable trenches or a similar inert fill may provide some separation, both from the direct heat of cables as an ignition source.

7 CONTAMINATION ASSESSMENT

7.1 INTRODUCTION

Legislation and guidance on the assessment of potentially contaminated sites acknowledges the need for a proportionate and consequently tiered risk-based approach. Our assessment herein represents a Generic Quantitative Risk Assessment (GQRA), being a comparison of site contaminant levels against Generic Assessment Criteria (GAC), including a qualitative assessment of risk using the source-pathway-receptor model. These GACs may be considered as delivering a conservative assessment of the available data. GACs have been calculated by WSP using the Environment Agency's Contaminated Land Exposure Assessment (CLEA) Workbook v1.071 to assess potential health risks associated with contaminants in soil. WSP's methodology for the derivation of GAC is presented in **Appendix H**.

7.2 HUMAN HEALTH GQRA

Based on the site's proposed end-use of a SPF, none of the standard CLEA exposure / end-use scenarios fit the proposed development. Given the presence of a public right of way on site (Kirklees Way, running down the western boundary of Parcel 2) plus the general open nature of the site, it has been deemed that a public open space (POS, parks) end-use best fits the nature of the proposed development. The POS end-use is considered a conservative and precautionary approach to the assessment.

The soil chemical data has been compared against GACs derived for a POS (parks) end use. A total of 47 Soil Organic Matter (SOM) results have been obtained as part of the investigation, across both Made Ground soils and natural (Topsoil and PLCM). Across the soils tested, SOM results ranged between 0.51% and 55.2 %, with an average (median) of 5.55% recorded across the samples screened. A value of 2.5% SOM has been adopted for GQRA, considered a more conservative approach than adopting 6% SOM for the screening assessment. WSP screened results are included within **Appendix I**.

SOIL ANALYSIS SCREENING

Soils were tested for a range of common contaminants as detailed in Table 4-2.

Of the samples screened, there are no exceedances of the GACs for POS (parks) end-use scenario.

C4SLs

Given the absence of any exceedances, a secondary tier of assessment of contaminant exceedances using the Category 4 Screening Levels (C4SLs) has not been completed. The C4SLs are deemed



more pragmatic, but still strongly precautionary threshold values and are values based upon a “low level of toxicological concern”².

ASBESTOS

A total of 43 soil samples were submitted for asbestos identification, with no samples returning positive testing results for asbestos fibres.

When isolated asbestos detections are recorded on a site, WSP notes that drawing conclusions with regards to the distribution, and assessing the associated risks, can be difficult due to the following issues:

- Asbestos does not always conform to a normal spatial distribution in comparison with chemical contaminants where concentrations generally diminish with distance from a central source area;
- In standard soil sampling, asbestos is either present or not in each soil sample; however, non-detection in one location doesn't preclude it from being in a location immediately adjacent;
- While statistical assessment can be suitable for a population of quantified contamination results, it is inadvisable to apply statistical assessment to a dataset of asbestos in soil results, again due to its tendency to not follow a normal spatial distribution as discussed above; and,
- Contemporary guidance is based on the premise that there is no “safe” exposure level with any exposure potentially increasing the receptor’s lifetime cancer risk. Consequently, a more conservative risk assessment approach is required; even on sites where no asbestos has been detected in recovered samples subsequent investigations and site operations can encounter asbestos materials particularly in Made Ground.

Given the heterogeneous nature of the Made Ground deposits, the presence of asbestos fibres within Made Ground in other areas of the site cannot be discounted and will need to be managed in situ or through an Asbestos Management Plan should there be any evidence of asbestos suspected or identified during any future below ground works.

A hazardous waste assessment is provided in **Appendix J** and discussed in Section 10. Additional waste classification and assessment may be required prior to any future redevelopment works, including the preparation of an Asbestos Management Plan prepared in accordance with the Control of Asbestos Regulations 2012.

² Contaminated Land: Applications in Real Environments (CL:AIRE) ‘Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination, ref. SP1010 dated 24th September 2014

7.3 GENERIC QUANTITATIVE RISK ASSESSMENT OF CONTROLLED WATERS

COMMENTARY

Given the nature of the proposed development, a controlled waters risk assessment in accordance with the principles of the EA 'Remedial Targets Methodology: Hydrogeological Risk Assessment for Land Contamination' 2006 and the 'prevent and limit' approach of the Water Framework Directive (2000/60/EC) has not been undertaken.

The scope of the investigation was chosen as appropriate and proportionate to the proposed development. As discussed with the local planning authority and the client, the investigation discounted the testing of soil leachate and the retrieval/testing of groundwater samples, given the below:

- Based on the environmental setting of the site, i.e., relatively low sensitivity of nearby controlled waters receptors;
- Distance to nearest potable water abstraction well (none within 1km of site);
- Coal mining legacy of the wider area and assumed poor local groundwater quality; and
- The proposed SPF development is unlikely to add any additional sources or pathways of contamination to the site.

With regards to understanding the potential risks to controlled waters receptors (namely the underlying Secondary A Aquifer in the PLCM/PMCM), the expected outline construction method is provided below:

Expected Outline Construction Method:

- No significant earthworks expected;
- Shallow metal driven piles for the solar panels;
- Shallow foundations for any transformer units and substation; and
- Minor excavations for service trenches etc.

Given the expected construction methods, it is deemed that groundwater is unlikely to be encountered during the construction phase. The ground investigation and post-investigation monitoring did not identify a significant groundwater body at shallow depths beneath the site, and groundwater appears confined to perched pockets within the Made Ground and PLCM. More significant groundwater may be present where shallow coal seams are still intact on site.

Risks to Controlled Waters receptors, as identified in the initial Conceptual Site Model, will be carried through to the updated Conceptual Site Model (Section 9).

8 GROUND GAS

8.1 GROUND GAS MONITORING RESULTS

Ground gas and groundwater level monitoring has been undertaken on one monitoring event, as summarised in Table 8-1 below. Full monitoring results are presented as **Appendix F**.

Table 8-1 – Summary of Monitoring Visit

Visit	Date	Atmospheric Pressure (Start)	Atmospheric Pressure (End)	Atmospheric Pressure Trend
Visit 1	04/07/2024	981	980	Falling

8.2 RISK ASSESSMENT

The ground gas risk assessment reported within this section provides an initial indication of the potential ground gas risk posed to future site users for a SPF development. Additional ground gas monitoring may be required as the design of the SPF progresses. Additional rounds of data in areas of proposed enclosed structures (e.g., transformer hubs, and substation buildings, as applicable) may be required to confirm the gas classification reported herein.

GROUND GAS DATA QUALITY

The partial or total flooding of monitoring wells with groundwater is understood to inhibit the amount of ground gas ingress into a monitoring well. During the one monitoring visit undertaken, none of the monitoring wells were partially or totally flooded with groundwater. Therefore, the ground gas data recorded is deemed reliable and representative of the ground gas regime at the site.

GAS SCREENING VALUES

Ground gas screening values (GSV) have been calculated based on the ground gas data collected in accordance with CIRIA C665 guidance. The GSV is calculated for each monitoring well as the maximum flow rate multiplied by the maximum methane or carbon concentration. Where flow rate and/ or methane/ carbon dioxide concentrations have been encountered below the limit of detection of the instrument, a value of 0.1l/hr and 0.1% have been used to calculate GSV, respectively. A summary of the ground gas data and calculated GSV are presented in **Table 8-2**.

Table 8-2 – Ground Gas Risk Assessment Summary

Exploratory Hole	Response Zone Strata & Depth (m bgl)	Maximum Steady Gas Flow * (l/hr)	Maximum CH ₄ (% v/v)	Maximum CO ₂ (% v/v)	Methane GSV (l/hr)	Carbon Dioxide GSV (l/hr)
DS01	1.00-5.00 (Made Ground)	0.30	0.10	1.40	0.0003	0.0042
DS02	1.00-5.00 (Made Ground)	0.40	0.10	2.80	0.0004	0.0112

Exploratory Hole	Response Zone Strata & Depth (m bgl)	Maximum Steady Gas Flow * (l/hr)	Maximum CH ₄ (% v/v)	Maximum CO ₂ (% v/v)	Methane GSV (l/hr)	Carbon Dioxide GSV (l/hr)
DS03	1.00-4.70 (Made Ground)	0.20	0.00 *	4.90	0.0002	0.0098
DS05	1.00-5.00 (Made Ground)	0.40	0.00 *	0.30	0.0004	0.0012
DS06	1.00-2.00 (Made Ground)	0.30	0.10	0.90	0.0003	0.0027
DS08	1.70-3.70 (PLCM)	0.40	0.10	3.00	0.0004	0.012
DS09	0.8-1.90 (PLCM)	0.30	0.20	2.70	0.0081	0.0054
DS10	1.00-4.00 (PLCM)	0.30	0.00 *	4.50	0.0003	0.0135
DS11	1.00-5.00 (PLCM)	0.30	0.10	1.10	0.0003	0.0033
DS12	1.00-4.60 (PLCM)	0.20	0.20	1.00	0.0004	0.002

* Where 0.0% gas has been recorded, the limit of detection (<0.1%) has been used to generate the GSV.

PLCM = Pennine Lower Coal Measures

GROUND GAS RISK ASSESSMENT SUMMARY

No elevated concentrations (>1 ppm) of carbon monoxide or hydrogen sulphide were recorded during the monitoring.

Depleted steady oxygen concentrations (< 18% v/v) were recorded in three monitoring wells. DS03, DS10 and DS11 recorded steady oxygen concentrations of 13.9% v/v, 14.4% v/v and 15.9% v/v respectively.

Maximum steady flow concentrations were generally low, and ranged between 0.2 l/hr (DS03, DS12) and 0.4 l/hr (DS02, DS05, DS08).

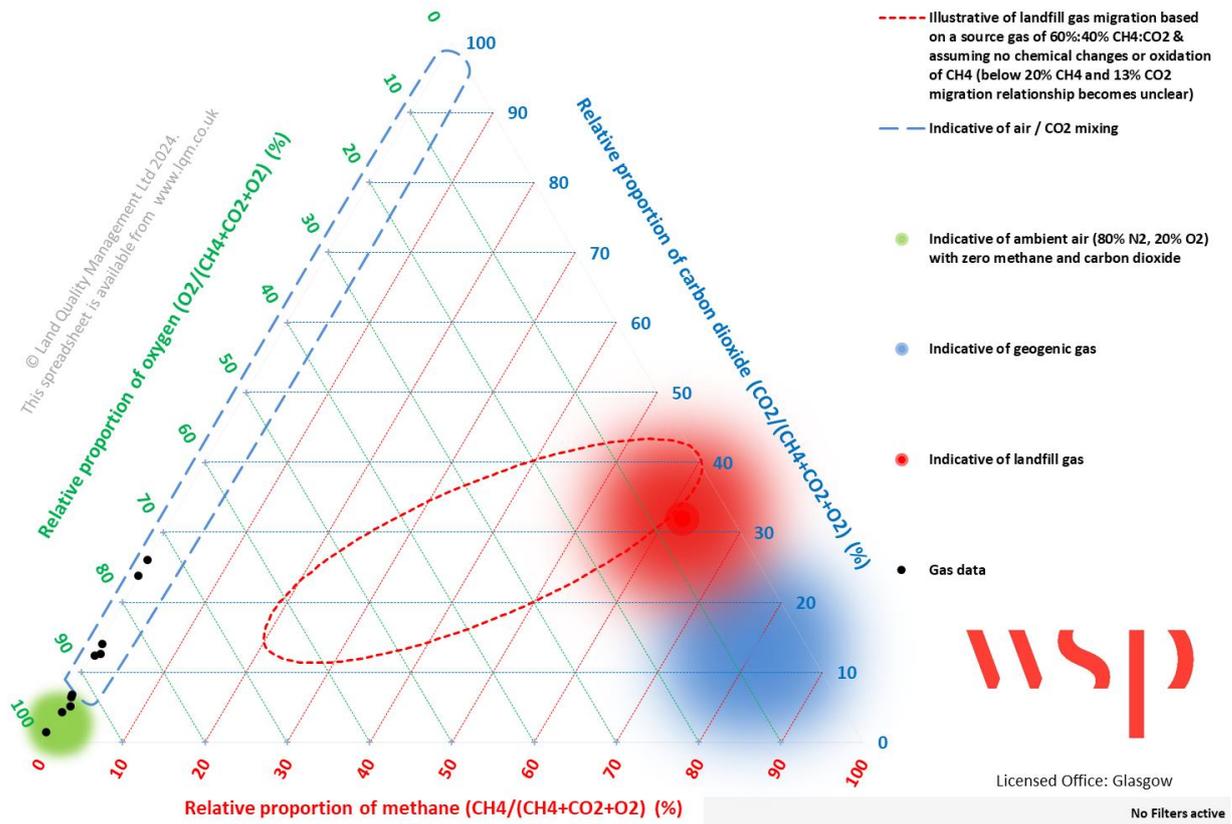
Gas screening values (calculated as the maximum gas concentration (% v/v) multiplied by the steady borehole flow rate (l/hr)) were calculated in line with CIRIA C665 guidance. Given the size of the site and the distances between each discrete monitoring well, it seems prudent to calculate the GSVs on a borehole-by-borehole basis.

A maximum methane GSV of 0.0081 l/hr was calculated (DS09), with a maximum carbon dioxide GSV of 0.0135 l/hr (DS10). The GSVs calculated would classify the site as Characteristic Situation 1 (CS1) on a preliminary basis, in accordance with CIRIA Report 665 (C665) 'Assessing risks posed by hazardous ground gases to buildings', whereby no enhanced ground gas protection measures would

be required for any new enclosed structures proposed on site. Further monitoring will be required for any new occupied structures, in order to be in line with CIRIA guidance.

Land Quality Management (LQM) ternary plots were used to further assess the ground gas on Site. These plots interpret ground gas monitoring results to identify if there is an elevated risk and help identify the provenance of a gas. The ternary plot for the Site is shown below in Figure 8-1.

Figure 8-1 - Ternary Plot of Relative Ground Gas Proportions



The plot above shows that the ground gas on site is indicative of air / CO₂ mixed and of ambient air, which shows that any methane and carbon dioxide encountered on Site is thought to be as a result of microbial respiration of organic matter in the soil.

The data set as a whole is further evidence that the Site would be characterised as indicative of CS1 based on the one monitoring event undertaken. However, it is noted that this assessment does not constitute a full ground gas risk assessment in accordance with CIRIA guidance.

The ground gas risk assessment reported within this section provides an initial indication of the potential ground gas risk posed to future site users for a SPF development. Additional ground gas monitoring may be required as the design of the SPF progresses. Additional rounds of data in areas of proposed enclosed structures (e.g., transformer hubs, and substation buildings, as applicable) may be required to confirm the CS1 classification.

9 REFINED CONCEPTUAL SITE MODEL

9.1 ASSUMPTIONS

Exact details of proposed construction method and detailed design are at this stage unknown. However, the outline construction methodology as describes in Section 7.3 has been assumed for risk assessment purposes. In summary, it is assumed that the construction of the SPF will involve the advancement of shallow driven piles for the solar panels, and shallow spread foundations for any new buildings on site (i.e., transformer hubs and the substation). No major earthworks are expected and are assumed to be limited to service trenches etc., where required.

The updated CSM and plausible contaminant linkages (Table 9-1) below includes the above assumptions, as well as a reasonable assumption that all construction related activities will adopt appropriate PPE, include appropriate risk assessment and method statements (RAMS) and adoption of clean hygiene practices. The findings below will need to be revised should these not be reasonable assumptions.

Based on the findings of the ground investigations undertaken at the site, as reported in the preceding sections, the CSM has been updated as follows.

9.2 CONTAMINATION SOURCES

The following potential sources of contamination have been identified at the site:

- Made Ground across the majority of the site (backfilled opencast workings) and associated risk from hazardous ground gases to construction workers (i.e., excavations) and maintenance workers (i.e., manhole chambers);

9.3 PATHWAYS

Based on the redevelopment of the site into the SPF, the potential viable contaminant pathways are considered to be:

Human Health

- Direct contact, ingestion or inhalation of soil bound contaminants/dust.

Controlled Waters

- Migration and leaching of soil bound contamination vertically and laterally into the underlying bedrock groundwater aquifer;
- Migration and leaching of soil bound contamination vertically and laterally into surface water; and
- Lateral migration of impacted groundwater to groundwater / surface water receptors.

Site Infrastructure

- Migration and accumulation of hazardous ground gases in enclosed spaces.
- Attack on buried structures from sulphate.

9.4 RECEPTORS

Based on the proposed SPF redevelopment, potential receptors are considered to be:

- Human Health – Construction workers and post construction maintenance workers (e.g., groundkeepers, maintenance workers);
- Human Health – Future transient site visitors (Public Open Space, the Kirklees Way footpath exists on site);
- Groundwater – Underlying Secondary A Aquifer (bedrock); and
- Surface Water (including ponds and unnamed drainage ditches present on site, Howroyd Beck, unnamed tributary of Smithy Brook and Smithy Brook)

9.5 PLAUSIBLE CONTAMINANT LINKAGES

Based on the risk ratings provided in CIRIA 552, Table 9-1 provides a revised evaluation of the potential contaminant linkages that were considered to be plausible for the future use of the Site. The CIRIA risk definitions and risk classification matrix are provided in **Appendix D**.

Table 9-1 – Summary of Plausible Contaminant Linkages (mitigation included in brackets)

Source	Pathway	Receptor	Probability of Complete Linkage	Consequence if Linkage Present	Risk	Discussion of Pollutant Linkage
Asbestos, within Made Ground (associated with backfilled quarries / opencast mining in Parcels 1, 2, 3, 4, 5 & 8, Denby Grange Colliery in Parcel 5, or limited general Made Ground)	Liberation followed by inhalation	Construction workers during redevelopment	Low Reduced to unlikely with the use of appropriate PPE.	Medium	Low / Moderate (Reduced to Low with the use of appropriate PPE).	<p>Although not identified in soil chemical testing, their still exists a risk of unidentified asbestos fibres on the site.</p> <p>Backfilled opencast workings have been proven within Parcels 1, 2, 3, 4, 5 & 8. Materials generally comprised colliery spoil material, but locally other Made Ground constituents could be present.</p> <p>No large-scale earthworks are expected (low dust / fibre generation potential).</p> <p>Appropriate work control procedures (such as the use of personal protective equipment (PPE)) would be required to control any exposure risk during the works, reducing the risk to Low.</p>
		Neighbouring site users	Unlikely	Mild	Very Low	<p>Although not identified in soil chemical testing, their still exists a risk of unidentified asbestos fibres on the site.</p> <p>No large-scale earthworks are expected (low dust / fibre generation potential., and therefore very low risk to neighbouring site users from airborne fibres.</p>



Source	Pathway	Receptor	Probability of Complete Linkage	Consequence if Linkage Present	Risk	Discussion of Pollutant Linkage
		Site end users and maintenance workers	Low	Medium	Low to moderate	<p>Given the nature of the proposed development there is considered a limited exposure pathway to site end users.</p> <p>Maintenance workers (groundworkers) may come into contact with opencast backfill / general Made ground. Probability of exposure can be reduced to unlikely with the appropriate use of PPE and the overall risk reduced to Low.</p>
Chemicals of concern within Made Ground (associated with backfilled quarries / opencast mining in Parcels 1, 2, 3, 4, 5 & 8, Denby Grange Colliery in Parcel 5, or limited general Made Ground)	Direct contact, ingestion, dust inhalation	Construction Workers (during redevelopment)	Low (Reduced to unlikely with the use of appropriate PPE)	Medium	Low / Moderate (Reduced to Low with the use of appropriate PPE)	No contaminants exceeding the POS assessment criteria have been identified. The risk is low / moderate which can be reduced to low with the use of appropriate PPE during construction.
		Site end users and maintenance workers, including groundworkers (post development)	Unlikely (end users) Low (maintenance workers). Reduced to unlikely with the use of	Medium	Low (end users) Moderate (maintenance workers). (Reduced to Low with the use of	No contaminants exceeding the POS assessment criteria have been identified. Given the nature of the proposed development there is considered a limited exposure pathway to site end users.



Source	Pathway	Receptor	Probability of Complete Linkage	Consequence if Linkage Present	Risk	Discussion of Pollutant Linkage
			appropriate PPE.		appropriate PPE)	Maintenance workers (groundworkers) may come into contact with opencast backfill / general Made Ground. Risks reduced to low with the appropriate use of PPE.
	Direct contact	Below ground buildings and services	Likely	Mild	Low	<p>Presence of PLCM and Made Ground (infilled opencast workings / colliery spoil) may present aggressive ground conditions with respect to below ground concrete.</p> <p>Sulphate testing has been undertaken. In both materials (Made Ground and PLCM), the majority of the results are classified as DS-1 AC-1, however two samples have been recorded as DS-1 AC-2z and one as DS-2 AC-5z. Further assessment of aggressive ground may be required as design progresses.</p>
	Leaching / mobilisation and migration	Controlled waters- Secondary A bedrock aquifer, Smithy Brook	Unlikely	Medium	Low	<p>No contamination exceeding the POS assessment criteria has been identified in the soil testing. Ground investigation has proven that soils are predominantly cohesive clays (Made Ground and Weathered PLCM) and therefore of low permeability. No shallow groundwater body has been identified.</p> <p>The probability of contaminated groundwater negatively impacting upon</p>



Source	Pathway	Receptor	Probability of Complete Linkage	Consequence if Linkage Present	Risk	Discussion of Pollutant Linkage
						local surface water / aquifers is considered unlikely and the risk is low. Additionally, local groundwater is likely of low chemical quality due to the historical coal mining legacy in the area.
Hazardous ground gases arising from Made Ground / Historical coal mining	Accumulation in confined spaces followed by inhalation, asphyxiation, explosion	Construction workers	Low	Medium	Low to Moderate	Ground gas monitoring has been undertaken on one round, an initial ground gas risk assessment has classified the site as CS1, whereby no ground gas protection measures are required. Detailed design is yet to be confirmed, but new enclosed structures on site are expected to be limited to the substation (Parcel 9) and any local transformer hubs (across individual parcels). Potential risks during construction would be managed by working in accordance with appropriate Risk Assessments and Method Statements (RAMS) when working in confined spaces and use of appropriate PPE.
		Neighbouring site users	Unlikely	Medium	Low	
		Site end users and maintenance workers	Low (proposed occupied structures) Unlikely (majority of development)	Medium	Low / Moderate (proposed occupied structures) Low (majority of development)	
Colliery Spoil within backfilled opencast workings presenting a risk of spontaneous combustion	Spontaneous combustion	Construction workers Site end users including maintenance workers	Unlikely	Medium	Low	Calorific value and LoI testing have been undertaken and an initial combustibility assessment has been undertaken. Although some values have been recorded which may indicate that soils beneath the site are combustible, it is concluded that the conditions for such a

Source	Pathway	Receptor	Probability of Complete Linkage	Consequence if Linkage Present	Risk	Discussion of Pollutant Linkage
		Future structures				<p>scenario to exist is unlikely, due to the lack of oxygen and an ignition source.</p> <p>The expected absence of any significant earthworks on site will further eliminate high calorific value soils being exposed to oxygen and/or an ignition source.</p> <p>Future construction practices e.g., lining any service trenches, electricity cables etc., with an inert imported material, will further mitigate the risk.</p>
Underground fires within mine workings	Leading to explosion	Construction workers Site end users including maintenance workers Future structures	Unlikely	Medium	Low	<p>Given the nature of the proposed development and the depth of the mine workings it is considered unlikely that a source of ignition will be introduced as a result of the proposed development.</p> <p>There is no indication that there is a history of underground fires within the underground workings as such the risk of underground fires is considered Low.</p>

10 MATERIALS MANAGEMENT AND WASTE

10.1 SOLAR FARM DESIGN AND CONSTRUCTION

As shown in **Appendix B**, the current SPF option shows the development of rows of solar panels, transformer hubs locally and a substation in the far east of the site (Parcel 9). At this stage, it is understood that the solar panels are likely to be founded on driven metal piles. The design of the transformer hubs and substation are unknown at this stage, but it is assumed that no major earthworks will be required, and any excavations will be limited to service trenches, etc.

As such, this section provides preliminary commentary on materials management associated with the SPF development at Low Farm, and more bespoke guidance may be required at a later date when detailed design is confirmed, and more details are available in relation to proposed excavations and potential off-site disposal.

10.2 MATERIALS MANAGEMENT

UK waste legislation (derived from Directive 2008/98/EC) states that any material which the producer discards or intends or is required to discard is classed as a waste. Therefore, in order for any material to be retained and re-used it has to be demonstrated that it is not a waste in accordance with the Definition of Waste: Development Industry Code of Practice (version 2, 2011). This guidance provides a means of demonstrating that a material is not a waste via a number of factors:

- Protection of Human Health and the Environment – The material to be re-used will not pose a risk to human health or the environment when it is re-used. This is assessed through the chemical testing which has been undertaken as part of this investigation;
- Suitability of Use without further treatment – The material is suitable for the intended use in its current form without any treatment;
- Certainty of Use – The holder of the material must be able to demonstrate that the material will actually be used and that the use is not just a probability, but a certainty. For example, if the materials are stockpiled with no pre-defined destination and use, they will be classed as a waste; and,
- Quantity of Material – Materials should only be used in the quantities required. The use of excessive quantities of material will indicate that it is being disposed of and would be classed as a waste.

To demonstrate that the factors outlined above have been satisfied it may be applicable for a Materials Management Plan (MMP) to be produced for any cut and fill activities to be undertaken for the construction of the SPF, if materials are to be re-used. The objectives relating to the use of the materials are set out in the MMP. The MMP formally marshals all the relevant information to demonstrate that all four factors outlined above will be met and includes a tracking system and contingency arrangements.



If a total of <1,000 tonnes of Made Ground is to be re-used as part of the redevelopment works, a U1 waste exemption could be registered in accordance with EA guidance³; the U1 exemption allows the waste producer to use suitable waste rather than virgin raw material or material that has ceased to be waste.

10.3 PRELIMINARY WASTE ASSESSMENT

Any materials which are surplus to requirement and require disposal will be considered a waste and should be characterised and disposed of under appropriate duty of care in accordance with Technical Guidance WM3: Waste Classification - Guidance on the classification and assessment of waste. If the development requires the disposal of significant volumes of material, it is considered that further targeted assessment is undertaken to determine the waste classification of those materials.

HAZARDOUS WASTE ASSESSMENT

In order to give a general indication of the likely waste disposal classification, a preliminary hazardous waste assessment has been completed based on the soils analysis results from the ground investigation. The preliminary assessment using HazWasteOnline has indicated that none of the 48 screened samples are classified as hazardous waste.

The results of the HazWasteOnline assessment are presented as **Appendix J**.

Should any soils require off-site disposal a further assessment of waste classification of the actual soils destined for disposal should be made by a competent person. Further chemical analysis (i.e., Waste Acceptance Criteria or WAC testing) may be required to fully characterise waste soils prior to disposal off site. The final waste classification will be subject to further assessment of the actual materials requiring off-site disposal and the permitting requirements of the receiving facility.

³ [U1 waste exemption: use of waste in construction - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

11 GEOTECHNICAL ASSESSMENT

The following geotechnical assessment is based on the current proposed end use of the site as a solar farm. This assessment should be reviewed if alternative development of the site is proposed in the future. Note, a coal mining risk assessment has been carried out prior to this report (WSP Phase 1 PRA and Preliminary CMRA, Table 1-1) and shallow mining risks are not considered further.

It is understood that site levels are not proposed to significantly change as part of the development. Therefore, no major earthworks are anticipated.

The assessment of the data and parameters presented are one interpretation of the test data. Other interpretations are possible and may be more applicable for specific locations or for specific design / analyses. The parameters / values presented should be reviewed as the scheme's geotechnical design progresses and be updated / modified as appropriate.

11.1 GEOTECHNICAL TESTING

A limited amount of in situ and laboratory geotechnical laboratory testing was undertaken as part of the ground investigation and the results are presented within the factual report.

Standard penetration tests (SPTs) were undertaken within both the natural and Made Ground strata, and plots of SPT 'N' values are presented in Plots 01 and 02 in **Appendix K**. Plot 1 shows a trend of increasing 'N' with depth (from N = 4 to N = >50), likely representative of a weathering profile from completely weathered to intact rock. Plot 2 for the Made Ground shows no clear trend with depth, with N values ranging between 2 and 12.

Moisture content testing of samples of cohesive Made Ground and cohesive WPLCM deposits record a wide range of values (from 8 to 35%), with a general trend of decreasing moisture content with depth (Plot 3 in Appendix K).

Atterberg testing of samples of Made Ground and WPLCM deposits show two clear groupings, the Made Ground plotting as intermediate to very high plasticity clay and the WPLCM as low plasticity clay.

11.2 ENGINEERING ASSESSMENT

Based on the findings of the ground investigation there are two distinct types of strata beneath the site, the relatively competent weathered Pennine Lower Coal Measures and the looser / weaker Made Ground used to backfill the former surface mining excavations. Due cognisance of the likely significantly different geotechnical performance of the two materials will be required when considering engineering solutions for the development (including the foundations for the solar panels). This should include consideration of the potential for ongoing settlement of the backfill.

Where present at or close to the surface, the weathered Pennine Lower Coal Measures should be suitable to support shallow spread foundations (e.g. for transformer hubs and the substation) provided that loads are not excessive. The use of shallow foundations within the areas of Made Ground is less certain and will be dependent on the foundation loads and serviceability limits of the equipment. This should be assessed during detailed design.



Given the potential variability of the Made Ground, it is considered that a CBR of <2.5% should be assumed at this stage for the design of access tracks, hard standings etc. This should be further assessed once the layout of the site is finalised, and specific testing undertaken following proof rolling of the formation.

A limited number of BRE pH and water-soluble sulphate tests were carried out within the Made Ground and Weathered Pennine Coal Measures. In both materials majority of the results are DS-1 AC-1, however three elevated results have been identified:

- DS-1 AC-2z at TP01 (1.00m) – within weathered PLCM;
- DS-1 AC-2z at TP09 (0.9-1.0m) – within Made Ground; and
- DS-2 AC-5z at DS09 (1.30m) – within weathered PLCM (coal) .

This should be further assessed once the layout of the site is finalised, and further testing undertaken to discern areas of aggressive ground.

12 CONCLUSIONS

12.1 GENERAL

A ground investigation has been undertaken at Low Farm, Wakefield, WF4 4BB, to provide a characterisation of the land quality at the site, and the risks posed to identified receptors for a potential redevelopment of the site into a solar photovoltaic farm (SPF).

Ground conditions encountered have confirmed the expected geology and have been found to comprise areas of either natural weathered bedrock (Coal Measures, comprising weathered mudstone, sandstone with limited bands of weathered coal) or Made Ground, believed to be spoiled/backfilled material associated with the former opencast coal workings on site). A review of ground investigation logs versus Coal Authority abandonment plans (as overlain in Figure 3, **Appendix A**) show a good correlation between areas of Made Ground and areas of mapped opencast.

Limited groundwater strikes were recorded during the investigation (localised to perched pockets in the Made Ground and PLCM), and limited groundwater has been recorded during the post-investigation monitoring visit. It is believed the groundwater body of the Secondary A Aquifer lies at greater depth.

12.2 CONTAMINATION

Soil contamination testing has been undertaken and has not revealed any significantly elevated concentrations of the contaminants screened, and the results do not exceed threshold criteria for Public Open Space (the conservative criteria adopted for the assessment). No asbestos has been detected across the samples screened.

Given the assessments undertaken herein and the nature of the proposed development, it is considered that no remediation is required.

12.3 GROUND GAS

Generally, low concentrations of methane (max. 0.2 % v/v), carbon dioxide (max. 4.9 % v/v) have been recorded within monitoring wells at the site, with one round of gas monitoring undertaken. No significant gas flow has been recorded.

The Gas Screening Values (GSVs) calculated would classify the site as Characteristic Situation 1 (CS1) on a preliminary basis, in accordance with CIRIA C665 guidance, whereby no enhanced ground gas protection measures would be required for any new enclosed structures proposed on site. No full ground gas risk assessment has been undertaken, and additional monitoring may be required for any new enclosed structures as part of the SPF development, to be in line with CIRIA guidance.

Risks presented by hazardous ground gases to construction and maintenance workers can be satisfactorily mitigated by the completion of task-specific risk assessments, which may necessitate mitigation measures such as respiratory protective equipment (RPE) or air monitoring within enclosed spaces (i.e., excavations, service chambers, etc.). It is recommended that this report is shared with designers and contractors for future works at the site.

12.4 RISK EVALUATION

Based on the conditions encountered during the investigation, risks to the key receptors are summarised below:

- **Risks to Controlled Waters:** The overall risk to controlled waters receptors is identified as **Low**. No elevated concentrations of screened contaminants have been identified in the soil contamination testing. The SPF development poses low risk to the identified receptors.
- **Risks during Construction:** The risk to construction and demolition workers is considered to be **Low**. No contaminants exceeding generic assessment criteria for a public open space (POS, parks) end-use have been recorded, and no asbestos has been recorded. Risks to construction workers can be satisfactorily mitigated by the completion of task-specific RAMS, adoption of appropriate PPE and clean hygiene practices, and production of an asbestos management plan will satisfactorily mitigate the risk to construction / maintenance workers.
- **Risks to Future Site Users:** The risk to future site users is considered to be **Low**. Future site users are limited to maintenance workers of the SPF development, and transient members of the public via the use of the Kirklees Way public footpath which traverses part of the site.

12.5 FURTHER WORK RECOMMENDATIONS / CONSIDERATIONS

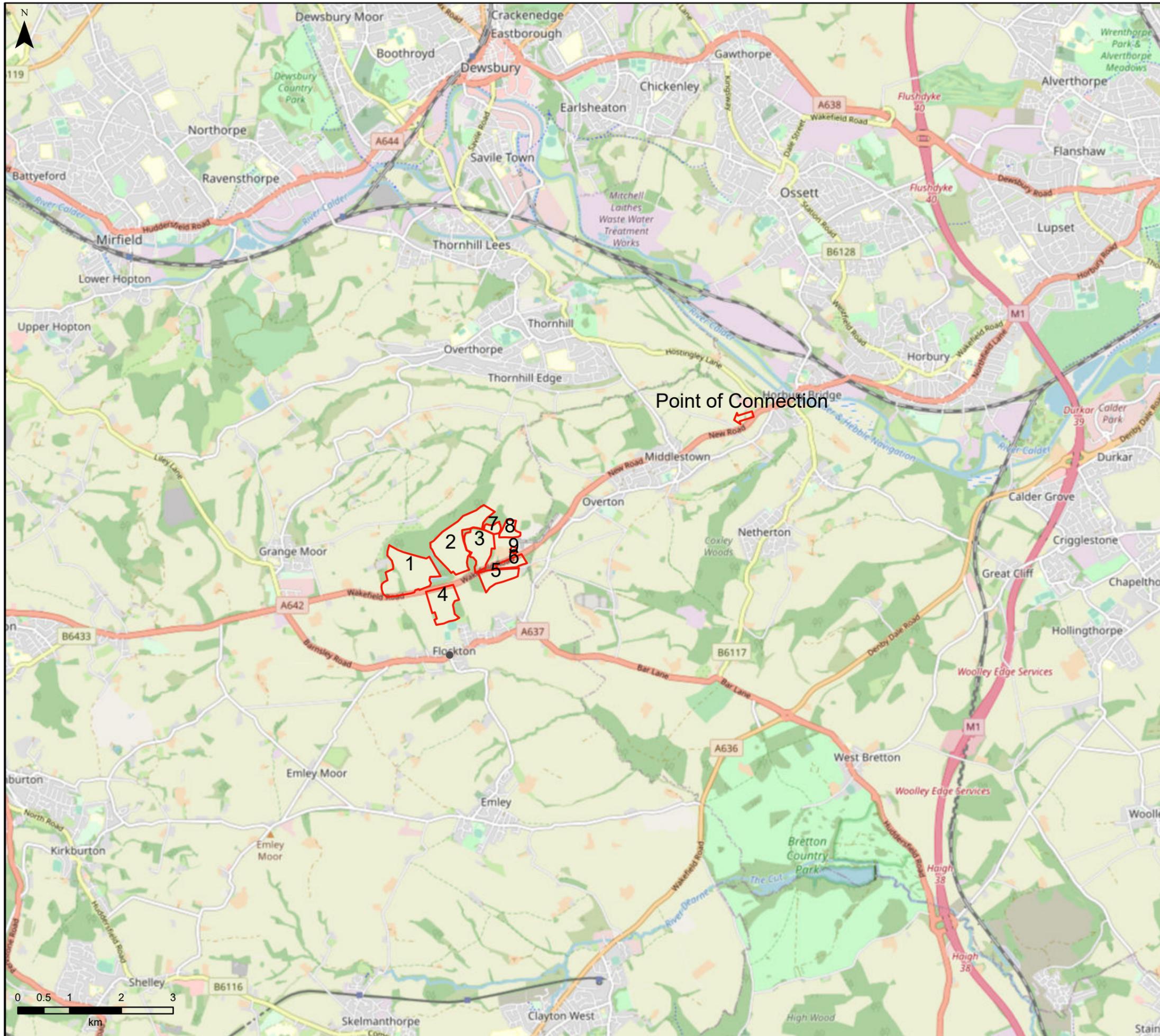
- Consideration of the geotechnical performance of the surface mining backfill for the support of the proposed development when the serviceability requirements of the development are known.
- Undertake thermal and resistivity testing for the design of metal foundations and cabling.
- Waste assessment identifies the materials analysed (Made Ground and weathered PLCM) to be classified as non-hazardous waste if it were to be disposed of off-site. Further testing and assessment of the materials intended to be disposed off site should be made, if required.
- Additional ground gas monitoring may be required as the design of the SPF progresses. Additional rounds of data in areas of proposed enclosed structures (e.g., transformer hubs, and substation buildings, as applicable) may be required to confirm the CS1 gas classification reported herein.
- During detailed design, further consideration of the combustibility hazards associated with the soils beneath the site would be prudent, especially where intact coal seams have been identified at shallow depths (Parcel 1, Parcel 9, locally on Parcel 5).
- A Materials Management Plan (MMP) may be produced, as required (i.e., based on proposed re-use volumes), to manage materials re-use at site. The MMP would set out the steps to be employed when handling, storing, placing and disposing of materials generated during any potential earthworks/groundworks activities during the project. This will form a key part of the development works and specify the quantity and quality of material which can be reused and/or removed from site.

WSP UK Ltd makes no warranties or guarantees, actual or implied, in relation to this report, or the ultimate commercial, technical, economic, or financial effect on the project to which it relates, and bears no responsibility or liability related to its use other than as set out in the contract under which it was supplied.

Appendix A

FIGURES





DO NOT SCALE

Information Classification:

INTERNAL

Information that is only intended for internal distribution among WSP employees, independent consultants, contractors, sub-contractors, clients and authorised third parties.

Legend :

Approx. Site Boundary

Figure 1 - Site Location Plan

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Author : ArcGIS Web AppBuilder

Scale : 1:72,224

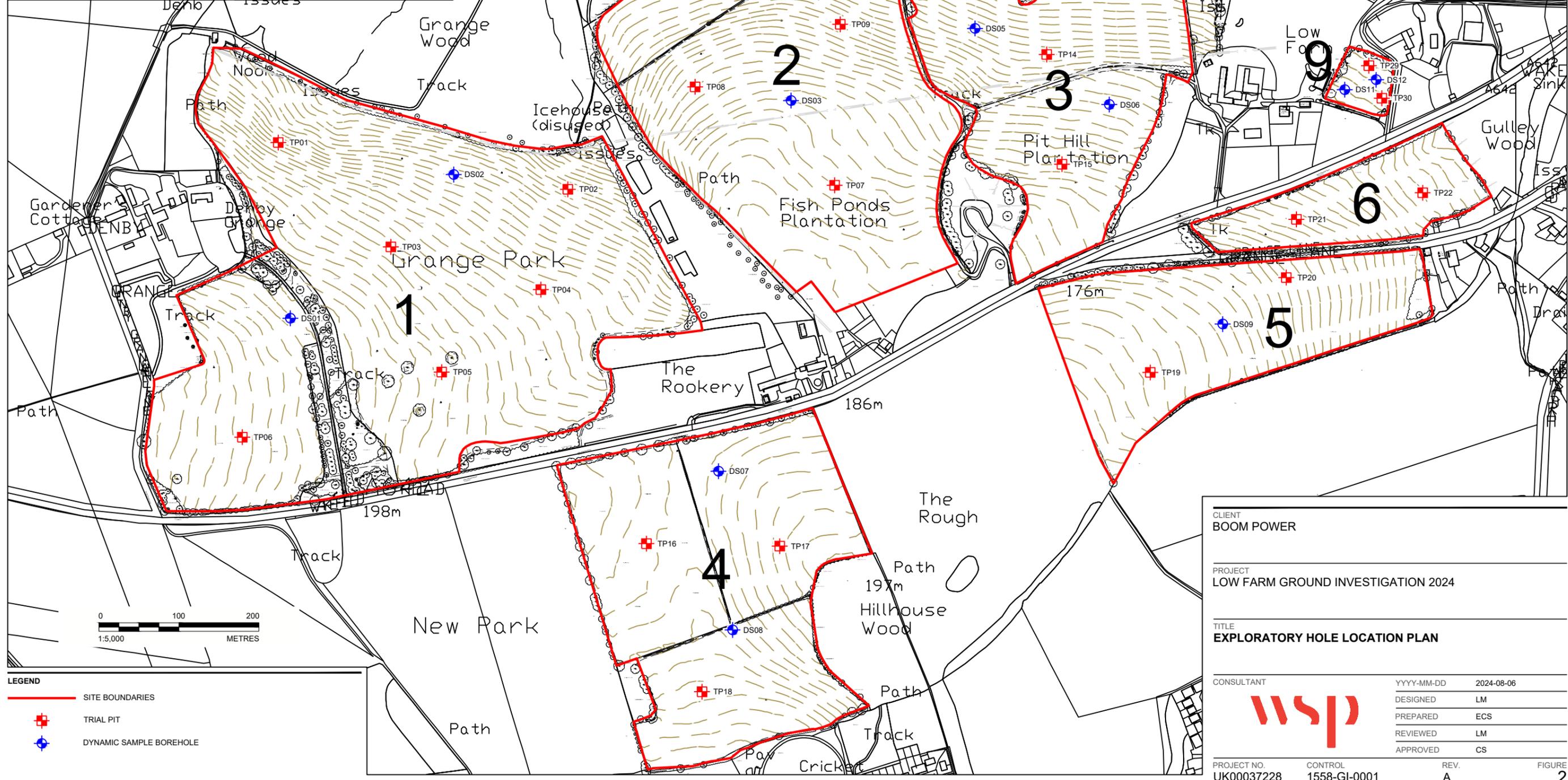
Layout : WSP A3 Landscape

Current Time : 24/06/2021 14:15



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POSITION	EASTING	NORTHING	ELEVATION
DS01	423469.944	415851.674	198.324
DS02	423673.914	416031.04	176.831
DS03	424095.042	416123.347	173.02
DS04	424333.85	416440.507	142.713
DS05	424324.788	416213.297	154.076
DS06	424492.432	416118.321	161.92
DS07	424004.456	415660.911	187.471
DS08	424022.018	415462.823	185.619
DS09	424633.95	415844.437	176.257
DS10	424752.746	416374.199	138.932
DS11	424786.375	416136.897	152.995
DS12	424825.607	416149.238	150.896
TP01	423454.93	416070.908	180.469
TP02	423816.459	416012.63	170.527
TP03	423595.35	415940.788	187.465
TP04	423782.749	415887.543	183.356
TP05	423658.877	415784.551	191.633
TP06	423409.995	415703.422	203.532
TP07	424149.468	416017.624	174.973
TP08	423975.382	416140.51	169.007
TP09	424156.406	416218.446	161.664
TP10	424156.108	416387.593	148.661
TP11	424391.992	416534.612	139.243
TP12	424321.466	416297.265	146.27
TP13	424520.807	416282.732	143.926
TP14	424414.306	416180.813	154.945
TP15	424433.297	416043.979	168.848
TP16	423914.484	415570.552	187.282
TP17	424080.891	415567.404	191.517
TP18	423983.991	415385.782	182.387
TP19	424543.627	415784.134	180.458
TP20	424713.349	415902.514	169.345
TP21	424726.04	415975.173	163.754
TP22	424883.645	416008.29	153.855
TP23	424520.449	416394.683	137.358
TP24	424629.659	416409.397	133.396
TP25	424722.913	416422.081	132.979
TP26	424798.52	416429.842	139.89
TP27	424688.248	416326.325	140.414
TP28	424819.922	416341.708	143.953
TP29	424816.527	416166.879	149.891
TP30	424832.686	416126.284	152.373



CLIENT	BOOM POWER		
PROJECT	LOW FARM GROUND INVESTIGATION 2024		
TITLE	EXPLORATORY HOLE LOCATION PLAN		
CONSULTANT	YYYY-MM-DD	2024-08-06	
	DESIGNED	LM	
	PREPARED	ECS	
	REVIEWED	LM	
	APPROVED	CS	
PROJECT NO.	CONTROL	REV.	FIGURE
UK00037228	1558-GI-0001	A	2

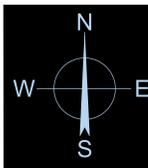
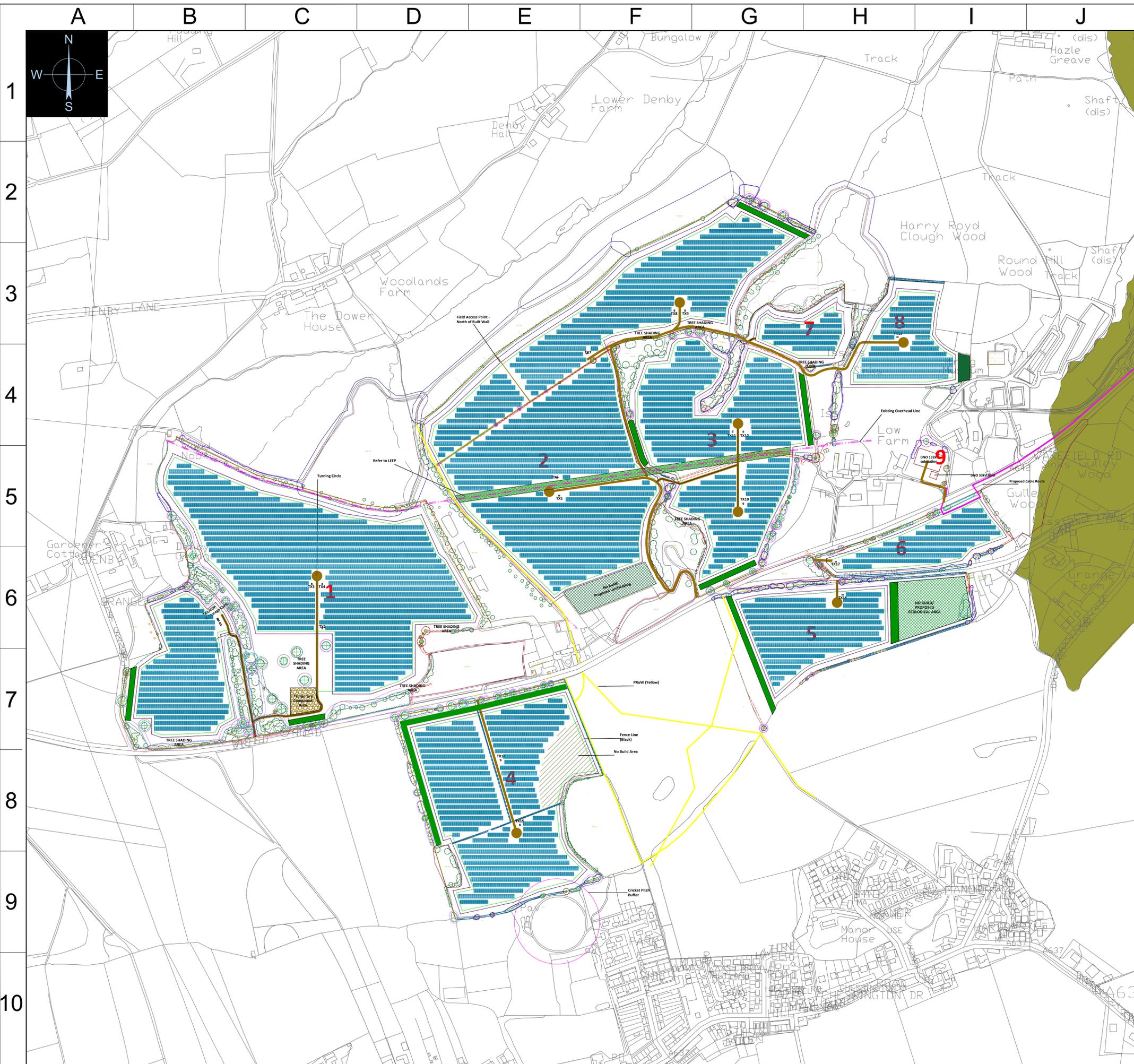
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25 mm IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ISO A3

Appendix B

PROPOSED DEVELOPMENT SITE LAYOUT





LOW FARM SOLAR FARM PROJECT INFOBOX

Lease Area	210.30 Acres
Site Area	186.10 Acres
Latitude	53°38'25.53" N
Longitude	1°38'00.80" W
Module Angle	15°
Shading Angle	27.34°
Pitch	10.547m
Row Distance	3.6m
Mounting System	TBD
Module Table 1 (Full)	3V - 30x3 (90 mod)
Table Pcs	1,039 Pcs
Module Table 2 (Third)	3V - 10x3 (30 mod)
Table Pcs	369 Pcs
Module Type 1	Trina TSM-NEG21C.20-680Wp
Module Pcs	104,580 Pcs
Module Dimensions	2384 x 1303 x 35mm
DC Combiner Boxes	N/A
Inverter Type	Huawei SUN2000 215KTL-H3
Inverter Pcs	249
String Configuration	30 modules / string 14 strings / inverter
No. of TX Stations	8
No. of CCTV Cameras	200
Connection	132kV POC
Front of Table Height	1000mm
Back of Table max Height	2800mm
TOTAL AC OUTPUT	49,800.000 kWp
TOTAL INSTALLED CAPACITY	71,114.400 kWp
Boom Power Ltd. Address	Project Address
Boom Power Ltd. Unit 5E Park Farm Chichester Road Arundel West Sussex BN18 0AG	Low Farm Wakefield Road Grange Moor Wakefield East Yorkshire WF4 4BB

Drawing Information			
V No	Revision Note	By	Date
5.2	Updated for maximum DC capacity	JT	19/08/2022

Drawing Information	
Scale	1:2500 @ A0
Stage	ISSUED FOR REVIEW
Drawing Name	Overall Layout
Drawing Number	B001
Designed By	Jason Turner
Sheet 1 of 1	



BUILD | OWN | OPERATE | MAINTAIN
BOOM-POWER.CO.UK

Appendix C

REPORT LIMITATIONS



REPORT LIMITATIONS - GROUND AND WATER

GENERAL

1. WSP UK Limited has prepared this report solely for the use of the Client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed and outlined in the body of the report.
2. Unless explicitly agreed otherwise, in writing, this report has been prepared under WSP UK Limited standard Terms and Conditions as included within our proposal to the Client.
3. Project specific appointment documents may be agreed at our discretion and a charge may be levied for both the time to review and finalise appointments documents and also for associated changes to the appointment terms. WSP UK Limited reserves the right to amend the fee should any changes to the appointment terms create an increase risk to WSP UK Limited.
4. The report needs to be considered in the light of the WSP UK Limited proposal and associated limitations of scope. The report needs to be read 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.

PHASE 1 GEO ENVIRONMENTAL AND PRELIMINARY RISK ASSESSMENTS

Coverage: *This section covers reports with the following titles or combination of titles: phase 1; desk top study; geo environmental assessment; development appraisal; preliminary environmental risk assessment; constraints report; due diligence report; geotechnical development review; environmental statement; environmental chapter; project scope summary report (PSSR), program environmental impact report (PEIR), geotechnical development risk register; and, baseline environmental assessment.*

5. The works undertaken to prepare this report comprised a study of available and easily documented information from a variety of sources (including the Client), together with (where appropriate) a brief walk over inspection of the Site and correspondence with relevant authorities and other interested parties. Due to the short timescales associated with these projects responses may not have been received from all parties. WSP UK Limited cannot be held responsible for any disclosures that are provided post production of our report and will not automatically update our report.
6. The opinions given in this report have been dictated by the finite data on which they are based and are relevant only for the purpose for which the report was commissioned. The information reviewed should not be considered exhaustive and has been accepted in good faith as providing true and representative data pertaining to site conditions. Should additional information become available which may affect the opinions expressed in this report, WSP UK Limited reserves the right to review such information and, if warranted, to modify the opinions accordingly.
7. It should be noted that any risks identified in this report are perceived risks based on the information reviewed. Actual risks can only be assessed following intrusive investigations of the site.
8. WSP UK Limited does not warrant work / data undertaken / provided by others.



REPORT LIMITATIONS - GROUND RISK AND REMEDIATION

INTRUSIVE INVESTIGATION REPORTS

Coverage: *The following report titles (or combination) may cover this category of work: geo environmental site investigation; geotechnical assessment; GIR (Ground Investigation reports); preliminary environmental and geotechnical risk assessment; and, geotechnical risk register.*

9. The investigation has been undertaken to provide information concerning either:
 - i. The type and degree of contamination present at the site in order to allow a generic quantitative risk assessment to be undertaken; or
 - ii. Information on the soil properties present at the site to allow for geotechnical development constraints to be considered.
10. The scope of the investigation was selected on the basis of the specific development and land use scenario proposed by the Client and may be inappropriate to another form of development or scheme. If the development layout was not known at the time of the investigation the report findings may need revisiting once the development layout is confirmed.
11. For contamination purposes, the objectives of the investigation are limited to establishing the risks associated with potential contamination sources with the potential to cause harm to human health, building materials, the environment (including adjacent land), or controlled waters.
12. For geotechnical investigations the purpose is to broadly consider potential development constraints associated with the physical property of the soils underlying the site within the context of the proposed future or continued use of the site, as stated within the report.
13. The amount of exploratory work, soil property testing and chemical testing undertaken has necessarily been restricted by various factors which may include accessibility, the presence of services; existing buildings; current site usage or short timescales. The exploratory holes completed assess only a small percentage of the area in relation to the overall size of the Site, and as such can only provide a general indication of conditions.
14. The number of sampling points and the methods of sampling and testing do not preclude the possible existence of contamination where concentrations may be significantly higher than those actually encountered or ground conditions that vary from those identified. In addition, there may be exceptional ground conditions elsewhere on the site which have not been disclosed by this investigation and which have therefore not been taken into account in this report.
15. The inspection, testing and monitoring records relate specifically to the investigation points and the timeframe that the works were undertaken. They will also be limited by the techniques employed. As part of this assessment, WSP UK Limited has used reasonable skill and care to extrapolate conditions between these points based upon assumptions to develop our interpretation and conclusions. The assumption made in forming our conclusions is that the ground and groundwater conditions (both chemically and physically) are the same as have been encountered during the works undertaken at the specific points of investigation. Conditions can change between investigation points and these interpretations should be considered indicative.
16. The risk assessment and opinions provided are based on currently available guidance relating to acceptable contamination concentrations; no liability can be accepted for the retrospective effects of any future changes or amendments to these values. Specific assumptions associated



REPORT LIMITATIONS - GROUND RISK AND REMEDIATION

with the WSP UK Limited risk assessment process have been outlined within the body or associated appendix of the report.

17. Additional investigations may be required in order to satisfy relevant planning conditions or to resolve any engineering and environmental issues.
18. Where soil contamination concentrations recorded as part of this investigation are used for commentary on potential waste classification of soils for disposal purposes, these should be classed as indicative only. Due consideration should be given to the variability of contaminant concentrations taken from targeted samples versus bulk excavated soils and the potential variability of contaminant concentrations between sampling locations. Where major waste disposal operations are considered, targeted waste classification investigations should be designed.
19. The results of the asbestos testing are factually reported and interpretation given as to how this relates to the previous use of the site, the types of ground encountered and site conceptualisation. This does not however constitute a formal asbestos assessment. These results should be treated cautiously and should not be relied upon to provide detailed and representative information on the delineation, type and extent of bulk ACMs and / or trace loose asbestos fibres within the soil matrix at the site.
20. If costs have been included in relation to additional site works, and / or site remediation works these must be considered as indicative only and must be confirmed by a qualified quantity surveyor.

EUROCODE 7: GEOTECHNICAL DESIGN

21. On 1st April 2010, BS EN 1997-1:2004 (Eurocode 7: Geotechnical Design – Part 1) became the mandatory baseline standard for geotechnical ground investigations.
22. In terms of geotechnical design for foundations, slopes, retaining walls and earthworks, EC7 sets guidance on design procedures including specific guidance on the numbers and spacings of boreholes for geotechnical design, there are limits to methods of ground investigation and the quality of data obtained and there are also prescriptive methods of assessing soil strengths and methods of design. Unless otherwise explicitly stated, the work has not been undertaken in accordance with EC7. A standard geotechnical interpretative report will not meet the requirements of the Geotechnical Design Report (GDR) under Eurocode 7. The GDR can only be prepared following confirmation of all structural loads and serviceability requirements. The report is likely to represent a Ground Investigation Report (GIR) under the Eurocode 7 guidance.

DETAILED QUANTITATIVE RISK ASSESSMENTS AND REMEDIAL STRATEGY REPORTS

23. These reports build upon previous report versions and associated notes. The scope of the investigation, further testing and monitoring and associated risk assessments were selected on the basis of the specific development and land use scenario proposed by the Client and may not be appropriate to another form of development or scheme layout. The risk assessment and opinions provided are based on currently available approaches in the generation of Site Specific Assessment Criteria relating to contamination concentrations and are not considered to represent a risk in a specific land use scenario to a specific receptor. No liability can be accepted for the retrospective effects of any future changes or amendments to these values, associated models or associated guidance.



REPORT LIMITATIONS - GROUND RISK AND REMEDIATION

24. The outputs of the Detailed Quantitative Risk Assessments are based upon WSP UK Limited manipulation of standard risk assessment models. These are our interpretation of the risk assessment criteria.
25. Prior to adoption on site they will need discussing and agreeing with the Regulatory Authorities prior to adoption on site. The regulatory discussion and engagement process may result in an alternative interpretation being determined and agreed. The process and timescales associated with the Regulatory Authority engagement are not within the control of WSP UK Limited. All costs and programmes presented as a result of this process should be validated by a quantity surveyor and should be presumed to be indicative.

GEOTECHNICAL DESIGN REPORT (GDR)

26. The GDR can only be prepared following confirmation of all structural loads and serviceability requirements. All the relevant information needs to be provided to allow for a GDR to be produced.

MONITORING (INCLUDING REMEDIATION MONITORING REPORTS)

27. These reports are factual in nature and comprise monitoring, normally groundwater and ground gas and data provided by contractors as part of an earthworks or remedial works.
28. The data is presented and will be compared with assessment criteria.

Appendix D

CIRIA C552 RISK DEFINITIONS



CIRIA C552 RISK ASSESSMENT

The identification of potential pollutant linkages is a key aspect of the evaluation of potentially contaminated land. An approach based on the UK CIRIA 552 report C552 (Contaminated Land Risk Assessment: A Guide to Good Practice, 2001) has been adopted within this report. The assessment considers which source – pathway – receptor pollutant linkages are likely to be plausible and potentially complete, and the potential risk they represent. For each of the pollutant linkages, an estimate of:

- the potential severity (consequence) of the risk, and
- the probability (likelihood) of the risk occurring

has been undertaken to assess the potential risk associated with a complete pollutant linkage.

Table 1 – Classification of consequence (CIRIA C552, 2001)

Classification	Category	Definition	Examples
Severe Short term (acute) risks only	Humans	Short term (acute) risk to human health likely to result in “significant harm” as defined by the Environmental Protection Act 1990, Part 2a	High concentrations of cyanide on the surface of an informal recreation area
	Controlled Waters	Short term risk of pollution of sensitive water resource	Major spillage of contaminants from site into controlled waters
	Property	Catastrophic damage to buildings / property	Explosion causing building collapse
	Ecological Systems	Short term risk to a particular ecosystem or organism forming part of such ecosystem	
Medium Chronic (long term) risks; ‘significant harm’	Humans	Chronic damage to human health (“significant harm” as defined in DEFRA, 2006)	Concentrations of a contaminant from a site exceed the generic or site-specific assessment criteria
	Controlled Waters	Pollution of sensitive water resources	Leaching of contaminants from a site into a Principal or Secondary A aquifer
	Ecological Systems	Significant change in a particular ecosystem or organism forming part of such ecosystem	Death of a species within a designated nature reserve
Mild Chronic (long term) risks; less sensitive receptors	Controlled Waters	Pollution of non-sensitive water resources	Pollution of non-classified surface watercourse
	Property	Significant damage to buildings, structures, crops and services (“significant harm” as defined in DEFRA, 2006) and damage to sensitive buildings / structures and services	Foundation damage to a building rendering it unsafe to occupy due to instability
	Ecological Systems	Damage to the environment	
Minor Chronic (long term) risk; mild	Humans	Non-permanent health effects to human health that are easily prevented by the use of PPE	Presence of contaminants at such concentrations that protective equipment is required during site works
	Property	Easily repairable effects of damage to buildings, structures and services	Discoloration of concrete
	Financial / Project	Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve	



Table 2 – Classification of probability (CIRIA C552, 2001)

Classification	Definition
High likelihood	There is a pollutant linkage and an event that either appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution.
Likely	There is a 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.
Low likelihood	There is a pollutant linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such an event would take place, and is less likely in the shorter term.
Unlikely	There is a pollutant linkage but circumstances are such that it is improbable that an event would occur even in the very long term.

Table 3 – Comparison of consequence against probability (CIRIA C552, 2001)

	Severe	Medium	Mild	Minor
High Likelihood	Very High Risk	High Risk	Moderate Risk	Low / Moderate Risk
Likely	High Risk	Moderate Risk	Low to Moderate Risk	Low Risk
Low Likelihood	Moderate Risk	Low / Moderate Risk	Low Risk	Very Low Risk
Unlikely	Low / Moderate Risk	Low Risk	Very Low Risk	Very Low Risk

Table 4 - Risk classification descriptions (CIRIA C552, 2001)

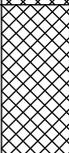
Risk Classification	Definition
Very high risk	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required.
High risk	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the longer term.
Moderate risk	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not undertaken already) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term.
Low risk	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very low risk	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.

Appendix E

EXPLORATORY HOLE LOGS



 WSP Telephone: Email:	WINDOW SAMPLE LOG		Hole No. DS01
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 27-06-24 End: 27-06-24
Contractor/Driller RP Drilling Ltd	Method/Plant Used Competitor Dart	Logged By Tom Turner	Co-Ordinates () E: 423469.94 N: 415851.67
			Ground Level (m) 198.324

SAMPLES & TESTS							STRATA					
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m ²)	P Pen (kN/m ²)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Dia / Backfill
0.50-0.50	ES		<0.1				197.97	0.35	Soft dark brown CLAY with abundant rootlets and roots. (MADE GROUND - TOPSOIL)		CMG	
							197.42	0.90	Soft grey gravelly slightly sandy CLAY. Gravel is angular to subangular fine and medium of mudstone. (MADE GROUND COHESIVE)		CMG	
1.30	(S)	1,1,0 1,1,0 N=2					196.67	1.65	Soft grey slightly gravelly CLAY with frequent coal. Gravel is angular to subangular medium and coarse of mudstone and sandstone. (MADE GROUND COHESIVE)		CMG	
2.00	(S)	1,1,0 1,1,0 N=2						(1.50)	Soft dark grey CLAY with frequent coal. Coal becoming less frequent from 2.45-2.9m. (MADE GROUND COHESIVE)		CMG	
2.00-2.00	ES											
3.00	(S)	1,0,1 1,1,1 N=4					195.17	3.15	Soft dark grey CLAY with frequent coal. Coal becoming less frequent from 2.45-2.9m. (MADE GROUND COHESIVE)		CMG	
4.00	(S)	2,1,2 1,2,3 N=8						(1.45)	Soft orangish brown slightly gravelly slightly sandy CLAY with occasional coal. Gravel is angular to subangular fine and medium of mudstone and sandstone. (MADE GROUND COHESIVE)		CMG	
							193.72	4.60				
5.00	(S)	2,1,1 2,1,2 N=6						(0.85)	Soft brown mottled grey and orangish brown slightly gravelly slightly sandy CLAY. Gravel is angular to subangular fine and medium of mudstone and sandstone. Occasional coal from 4.8m. (MADE GROUND COHESIVE)		CMG	
							192.87	5.45	Reached scheduled depth			

Hole Diameter			Run Information				Water Strikes					
Depth	Diameter (mm)	Remarks	Top (m)	Base (m)	Diam (mm)	Rec'v (m)	Date	Time	Strike	Minutes	Standing	Casing
							General Remarks					
Scale 1:37.5		Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.										

20 WSP WINDOW SAMPLE LOG - LOW FARM - OVERTON_V8.01.GPJ WSPTEMPLATE8.00.GDT_15/8/24

 WSP Telephone: Email:	WINDOW SAMPLE LOG		Hole No. DS02
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 27-06-24 End: 27-06-24
Contractor/Driller RP Drilling Ltd	Method/Plant Used Competitor Dart	Logged By Tom Turner	Co-Ordinates () E: 423673.91 N: 416031.04
			Ground Level (m) 176.831

SAMPLES & TESTS							STRATA					
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thick-ness)	Description	Legend	Geology	Dia Install / Backfill
0.15-0.15	ES		<0.1				176.53	0.30	Soft dark brown CLAY with abundant rootlets and roots. (MADE GROUND - TOPSOIL)		CMG	
							176.03	0.80	Firm light brown slightly gravelly slightly sandy CLAY. Gravel is angular to subangular fine and medium of mudstone and sandstone. (MADE GROUND COHESIVE)		CMG	
1.30	(S)	1.0,1 1,1,1 N=4							Soft light grey gravelly slightly sandy CLAY with occasional coal. Gravel is angular to subangular fine to coarse of mudstone. Becoming sandy at 4.75m. (MADE GROUND COHESIVE)			
2.00	(S)	1.2,1 1,1,1 N=4										
3.00	(S)	2.1,1 1,1,1 N=4						(4.65)			CMG	
4.00	(S)	2.1,1 1,2,1 N=6										
5.00	(S)	2.1,1 2.1,2 N=6					171.38	5.45	Reached scheduled depth			

Hole Diameter			Run Information				Water Strikes					
Depth	Diameter (mm)	Remarks	Top (m)	Base (m)	Diam (mm)	Rec'v (m)	Date	Time	Strike	Minutes	Standing	Casing
							General Remarks					
Scale 1:37.5			Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.									

20 WSP WINDOW SAMPLE LOG - LOW FARM - OVERTON_V8.01.GPJ WSPTEMPLATE8.00.GDT_15/8/24

 WSP Telephone: Email:	WINDOW SAMPLE LOG			Hole No. DS03
	Project Low Farm Ground Investigation			Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd			Date Start: 25-06-24 End: 25-06-24
Contractor/Driller RP Drilling Ltd	Method/Plant Used Competitor Dart	Logged By Tom Turner	Co-Ordinates () E: 424095.04 N: 416123.35	Ground Level (m) 173.020

SAMPLES & TESTS							STRATA					
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m ²)	P Pen (kN/m ²)	Water	Elev. (m)	Depth (Thick-ness)	Description	Legend	Geology	Dist. / Backfill
0.40-0.40	ES		<0.1				172.72	(0.30)	Soft dark brown slightly sandy CLAY with abundant rootlets and roots. (MADE GROUND - TOPSOIL)		CMG	
							172.12	(0.60)	Soft dark brown mottled light orangish brown and grey slightly gravelly CLAY. Gravel is angular to subangular fine to coarse of mudstone and sandstone. (MADE GROUND COHESIVE)		CMG	
1.30-1.30	D-SPT (S)	2.2.1 2.2.2 N=7					171.52	(0.60)	Soft light grey gravelly slightly sandy CLAY. Gravel is angular to subangular fine to coarse of mudstone. (MADE GROUND COHESIVE)		CMG	
							170.77	(0.75)	Soft dark brown and grey gravelly CLAY. Gravel is subangular to subrounded fine to coarse of mudstone and sandstone. (MADE GROUND COHESIVE)		CMG	
2.00-2.00	D-SPT (S)	2.1.2 1.2.2 N=7					169.52	(1.25)	Soft dark grey slightly gravelly CLAY with frequent coal. Gravel is angular to subangular fine to coarse of mudstone. (MADE GROUND COHESIVE)		CMG	
							169.22	(0.30)	Soft dark brown mottled orangish brown and grey slightly gravelly CLAY with frequent coal. Gravel is angular to subangular fine to coarse of mudstone. (MADE GROUND COHESIVE)		CMG	
3.00-3.00	D-SPT (S)	1.1.1 1.2.1 N=5					169.02	4.00	Soft light grey and grey slightly gravelly CLAY. Gravel is subangular to angular fine and medium of mudstone. (MADE GROUND COHESIVE)		CMG	
							168.62	(0.40)	Firm dark brown mottled orangish brown and grey slightly gravelly CLAY with frequent coal. Gravel is angular to subangular fine to coarse of mudstone. (MADE GROUND COHESIVE)		CMG	
4.00-4.00	D-SPT (S)	2.2.1 2.4.5 N=12					168.10	(0.52)	Light grey MUDSTONE. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
							168.10	4.92	Refusal			

20 WSP WINDOW SAMPLE LOG - OVERTON_V8.01.GPJ WSPTEMPLATE8.00.GDT_15/08/24

Hole Diameter			Run Information				Water Strikes					
Depth	Diameter (mm)	Remarks	Top (m)	Base (m)	Diam (mm)	Rec'v (m)	Date	Time	Strike	Minutes	Standing	Casing
							General Remarks					
Scale 1:37.5		Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.										

 WSP Telephone: Email:	WINDOW SAMPLE LOG			Hole No. DS04
	Project Low Farm Ground Investigation			Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd			Date Start: 25-06-24 End: 25-06-24
Contractor/Driller R.D. Drilling Ltd	Method/Plant Used Competitor Dart	Logged By Tom Turner	Co-Ordinates () E: 424333.85 N: 416440.51	Ground Level (m) 142.713

SAMPLES & TESTS							STRATA					
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m ²)	P Pen (kN/m ²)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Dist. / Backfill
0.90-0.90	ES		<0.1				142.56	0.15	Soft dark brown CLAY with frequent rootlets and roots. (TOPSOIL)		TS	
1.30-1.30	D-SPT (S)	2.4,2 3.2,3 N=10					141.21	1.50	Firm dark brown slightly gravelly slightly sandy CLAY with occasional cobbles. Gravel is angular to subangular fine to coarse of mudstone and sandstone. Gravel becoming less frequent at 0.65m. Clay becoming mottled orangish brown and grey at 1.05m. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM	
2.00-2.00	D-SPT (S)	3.2,3 4.5,6 N=18					141.11	1.60	Grey sandy slightly clayey angular to subangular fine to coarse GRAVEL of mudstone. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM	
2.50	(S)	25,50 N=50/ 50mm					140.76	1.95	Stiff greyish brown slightly sandy CLAY. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM	
							140.61	2.10	Orangish brown sandy angular to subangular fine to coarse GRAVEL of sandstone. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM	
							140.26	2.45	Stiff light brown slightly sandy CLAY. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM	
							140.11	2.60	Weathered SANDSTONE recovered as fine to coarse sand.		PLCM	
Refusal												

Hole Diameter			Run Information				Water Strikes					
Depth	Diameter (mm)	Remarks	Top (m)	Base (m)	Diam (mm)	Rec'v (m)	Date	Time	Strike	Minutes	Standing	Casing
							General Remarks					
Scale 1:37.5		Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.										

 WSP Telephone: Email:	WINDOW SAMPLE LOG		Hole No. DS05
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 25-06-24 End: 25-06-24
Contractor/Driller RP Drilling Ltd	Method/Plant Used Competitor Dart	Logged By Tom Turner	Co-Ordinates () E: 424324.79 N: 416213.30
			Ground Level (m) 154.076

SAMPLES & TESTS						STRATA						
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m ²)	P Pen (kN/m ²)	Water	Elev. (m)	Depth (Thick-ness)	Description	Legend	Geology	Dia / Backfill
0.20-0.20	ES		<0.1				153.78	0.30	Soft dark brown CLAY with abundant rootlets and roots. (MADE GROUND - TOPSOIL)		CMG	
							153.68	0.40	Firm dark brown mottled orangish brown and grey slightly gravelly CLAY. Gravel is angular to subangular fine to coarse of mudstone and sandstone. (MADE GROUND COHESIVE)		CMG	
							153.33	0.75	Firm light brown slightly gravelly slightly sandy CLAY. Gravel is angular to subangular fine to coarse of mudstone. (MADE GROUND COHESIVE)		CMG	
1.30-1.30	D-SPT (S)	1,0,1 2,2,3 N=8						(1.50)	Firm light grey gravelly slightly sandy CLAY with frequent coal. Gravel is angular to subangular fine to coarse of mudstone and sandstone. Becoming sandy at 1.75m. (MADE GROUND COHESIVE)		CMG	
2.00	(S)	1,2,1 1,1,1 N=4					151.83	2.25	Very loose grey sandy GRAVEL. Gravel is angular to subangular fine to coarse of mudstone. Becoming clayey at 2.85m. (MADE GROUND GRANULAR)			
2.20-2.20	ES											
3.00-3.00	D-SPT (S)	1,0,1 0,1,1 N=3										
4.00-4.00	D-SPT (S)	1,1,0 1,0,1 N=2						(3.20)				
5.00-5.00	D-SPT (S)	1,1,1 2,1,3 N=7					148.63	5.45	Reached scheduled depth			

Hole Diameter			Run Information				Water Strikes					
Depth	Diameter (mm)	Remarks	Top (m)	Base (m)	Diam (mm)	Rec'v (m)	Date	Time	Strike	Minutes	Standing	Casing
							General Remarks					
Scale 1:37.5		Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.										

20 WSP WINDOW SAMPLE LOG - LOW FARM - OVERTON_V8.01.GPJ WSPTEMPLATE8.00.GDT_15/8/24

 WSP Telephone: Email:	WINDOW SAMPLE LOG		Hole No. DS06
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 25-06-24 End: 26-06-24
Contractor/Driller RP Drilling Ltd	Method/Plant Used Competitor Dart	Logged By Tom Turner	Co-Ordinates () E: 424492.43 N: 416118.32
			Ground Level (m) 161.920

SAMPLES & TESTS							STRATA					
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m ²)	P Pen (kN/m ²)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Dist. / Backfill
0.80-0.80	ES		<0.1				161.72	0.20	Soft dark brown CLAY with abundant rootlets and roots. (MADE GROUND - TOPSOIL)		CMG	
								(0.60)	Firm brown mottled grey and orangish brown slightly gravelly CLAY. Gravel is angular to subangular fine and medium of mudstone. (MADE GROUND COHESIVE)		CMG	
							161.12	0.80	Firm dark grey gravelly CLAY with occasional cobbles of sandstone. Gravel is angular to subangular medium and coarse of mudstone. (MADE GROUND COHESIVE)		CMG	
1.30	(S)	2,1,1 1,2,2 N=6										
1.40-1.40	ES		<0.1				160.32	1.60	Brown gravelly slightly clayey fine and medium SAND with occasional cobbles of sandstone and occasional coal. Gravel is angular to subrounded fine and medium of mudstone and sandstone. (MADE GROUND GRANULAR)		GMG	
2.00-2.00	D-SPT (S)	2,1,28 22 N=50/ 95mm					159.97	1.95	Yellowish grey SANDSTONE recovered as medium and coarse sand. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
Refusal												

Hole Diameter			Run Information				Water Strikes					
Depth	Diameter (mm)	Remarks	Top (m)	Base (m)	Diam (mm)	Rec'v (m)	Date	Time	Strike	Minutes	Standing	Casing
General Remarks												
Scale 1:37.5		Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.										

 WSP Telephone: Email:	WINDOW SAMPLE LOG			Hole No. DS07
	Project Low Farm Ground Investigation			Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd			Date Start: 27-06-24 End: 27-06-24
Contractor/Driller RP Drilling Ltd	Method/Plant Used Competitor Dart	Logged By Tom Turner	Co-Ordinates () E: 424004.46 N: 415660.91	Ground Level (m) 187.471

SAMPLES & TESTS							STRATA					
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m ²)	P Pen (kN/m ²)	Water	Elev. (m)	Depth (Thick-ness)	Description	Legend	Geology	Dia Install / Backfill (mm)
							187.17	(0.30) 0.30	Soft dark brown CLAY with abundant rootlets and roots. (MADE GROUND - TOPSOIL)		CMG	
							186.92	0.55	Stiff brown mottled grey and orangish brown gravelly CLAY. Gravel is angular to subangular fine and medium of mudstone. (MADE GROUND COHESIVE)		CMG	
0.90-0.90	ES							(1.05)	Firm dark grey and black slightly gravelly CLAY. Gravel is angular to subangular fine to coarse of mudstone. Frequent coal at 1.15-1.4m and 1.5-1.55m. (MADE GROUND COHESIVE)		CMG	
1.30	(S)	1,2,2 1,2,3 N=8					185.87	1.60				
								(0.65)	Firm brown mottled black and orangish brown slightly sandy CLAY. (MADE GROUND COHESIVE)		CMG	
2.00	(S)	1,2,2 2,2,3 N=9					185.22	2.25				
								(0.35)	Stiff light brown slightly sandy CLAY. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
								(0.80)	Weathered SANDSTONE recovered as slightly clayey fine to coarse sand. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
3.00	(S)	5,6,9 8,22,11 N=50/ 245mm					184.08	3.40				
Refusal												

Hole Diameter			Run Information				Water Strikes					
Depth	Diameter (mm)	Remarks	Top (m)	Base (m)	Diam (mm)	Rec'v (m)	Date	Time	Strike	Minutes	Standing	Casing
							General Remarks					
Scale 1:37.5			Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.									

 WSP Telephone: Email:	WINDOW SAMPLE LOG		Hole No. DS08
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 27-06-24 End: 27-06-24
Contractor/Driller RP Drilling Ltd	Method/Plant Used Competitor Dart	Logged By Tom Turner	Co-Ordinates () E: 424022.02 N: 415462.82
			Ground Level (m) 185.619

SAMPLES & TESTS							STRATA					
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m ²)	P Pen (kN/m ²)	Water	Elev. (m)	Depth (Thick-ness)	Description	Legend	Geology	Dist. / Backfill
0.45-0.45	ES		<0.1				185.32	(0.30) 0.30	Soft dark brown CLAY with abundant rootlets and roots. (MADE GROUND - TOPSOIL)		CMG	
							185.07	0.55	Stiff light brown gravelly CLAY. Gravel is angular to subangular fine to coarse of mudstone. Occasional coal at 0.4m. (MADE GROUND COHESIVE)		CMG	
1.20-1.30 1.30	D (S)	1,2,1 2,3,2 N=8					(1.35)		Firm dark grey and black gravelly CLAY. Gravel is angular to subangular fine to coarse of mudstone. Brick inclusion at 1.5-1.7m. (MADE GROUND COHESIVE)		CMG	
2.00	(S)	1,2,1 3,2,5 N=11					183.72	1.90	Firm brown mottled grey and orangish brown CLAY. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM	
							183.57	2.05				
3.00	(S)	4,4,5 4,3,5 N=17					(0.85)		Firm dark grey and black gravelly CLAY. Gravel is angular to subangular fine to coarse of mudstone. Brick inclusion at 1.5-1.7m. (MADE GROUND COHESIVE)		PLCM	
							182.72	2.90	Firm light brown sandy CLAY. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM	
3.70	(S)	25,17 19,14 N=50/ 190mm					(0.40)		Firm brown mottled grey and orangish brown slightly sandy CLAY. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM	
							182.32	3.30	Light brown clayey fine to coarse SAND. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM	
							(0.30) 3.60		Weathered SANDSTONE recovered as sandy subangular fine to coarse gravel of sandstone. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM	
							181.58	4.04	Refusal			

Hole Diameter			Run Information				Water Strikes					
Depth	Diameter (mm)	Remarks	Top (m)	Base (m)	Diam (mm)	Rec'v (m)	Date	Time	Strike	Minutes	Standing	Casing
							General Remarks					
Scale 1:37.5		Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.										

 WSP Telephone: Email:	WINDOW SAMPLE LOG			Hole No. DS09
	Project Low Farm Ground Investigation			Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd			Date Start: 26-06-24 End: 26-06-24
Contractor/Driller RP Drilling Ltd	Method/Plant Used Competitor Dart	Logged By Tom Turner	Co-Ordinates () E: 424633.95 N: 415844.44	Ground Level (m) 176.257

SAMPLES & TESTS						STRATA						
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m ²)	P Pen (kN/m ²)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Dist. / Backfill (mm)
0.10-0.10	ES		<0.1			↓	175.96	0.30	Soft dark brown CLAY with abundant rootlets and roots. (TOPSOIL)		TS	
0.60-0.70	ES				175.71		0.55	Stiff brown mottled grey and orangish brown slightly gravelly slightly sandy CLAY. Gravel is angular to subrounded fine and medium of mudstone and sandstone. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM		
1.30-1.30	D-SPT (S)	1,1,0 1,2,1 N=4			174.56		1.70	Highly weathered slightly sandy slightly clayey COAL recovered as angular fine to coarse gravel of mudstone and coal. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM		
2.00-2.00	D-SPT (S)	5,6,9 10,13,18 N=50/ 295mm			174.51		1.75	Orangish brown angular to subangular fine and medium GRAVEL of sandstone. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM		
					173.81		2.45	Highly weathered SANDSTONE recovered as gravelly fine to coarse sand. Gravel is angular to subangular fine and medium of sandstone. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM		
Refusal												

Hole Diameter			Run Information				Water Strikes					
Depth	Diameter (mm)	Remarks	Top (m)	Base (m)	Diam (mm)	Rec'v (m)	Date	Time	Strike	Minutes	Standing	Casing
							26-06-24	14.00	1.35			
General Remarks												
Scale 1:37.5		Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.										

 WSP Telephone: Email:	WINDOW SAMPLE LOG			Hole No. DS10
	Project Low Farm Ground Investigation			Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd			Date Start: 25-06-24 End: 26-06-24
Contractor/Driller RP Drilling Ltd	Method/Plant Used Competitor Dart	Logged By Tom Turner	Co-Ordinates () E: 424752.75 N: 416374.20	Ground Level (m) 138.932

SAMPLES & TESTS							STRATA					
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Dist. / Backfill
0.60-0.60	ES		<0.1				138.68	0.25	Soft dark brown CLAY with abundant rootlets and roots. (MADE GROUND - TOPSOIL)		CMG	
							138.43	0.50	Stiff light brown mottled orangish brown and grey CLAY. (MADE GROUND COHESIVE)		CMG	
								(0.95)	Soft to firm grey gravelly CLAY with occasional cobbles of mudstone from 0.55-0.8m. Gravel is angular to subangular fine to coarse of mudstone. Clay becoming softer at 1.2m. (MADE GROUND COHESIVE)		CMG	
1.30-1.30	D-SPT (S)	0,1,2 1,1,1 N=5					137.48	1.45				
								(0.75)	Soft to firm light grey gravelly slightly sandy CLAY. Gravel is angular to subangular medium and coarse of mudstone. (MADE GROUND COHESIVE)		CMG	
2.00-2.00	D-SPT (S)	3,2,2 1,2,2 N=7					136.73	2.20				
							136.43	2.50	Stiff grey slightly gravelly slightly sandy CLAY. Gravel is angular to subangular fine and medium of mudstone. (MADE GROUND COHESIVE)		CMG	
2.80-2.80	ES							(0.75)	Grey clayey sandy GRAVEL of mudstone. Coal banding at 2.75-2.90m and 3.10-3.20m		PLCM	
3.00	(S)	5,4,6 9,10,11 N=36					135.68	3.25				
								(1.19)	Grey fine and medium SAND. Becoming light grey at 3.6m. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
4.00-4.00	D-SPT (S)	17,8,8 15,13,14 N=50/ 295mm					134.49	4.44				
									Refusal			

Hole Diameter			Run Information				Water Strikes					
Depth	Diameter (mm)	Remarks	Top (m)	Base (m)	Diam (mm)	Rec'v (m)	Date	Time	Strike	Minutes	Standing	Casing
							General Remarks					
Scale 1:37.5		Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.										

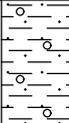
 WSP Telephone: Email:	WINDOW SAMPLE LOG			Hole No. DS11
	Project Low Farm Ground Investigation			Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd			Date Start: 28-06-24 End: 28-06-24
Contractor/Driller RP Drilling Ltd	Method/Plant Used Competitor Dart	Logged By Tom Turner	Co-Ordinates () E: 424789.00 N: 416139.00	Ground Level (m) 152.995

SAMPLES & TESTS							STRATA						
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Dist / Backfill	
0.10-0.10	ES		<0.1				152.75	0.25	Soft dark brown CLAY with abundant rootlets and roots. (TOPSOIL)		TS		
							152.20	0.80	Firm brown mottled grey and orangish brown slightly gravelly slightly sandy CLAY. Gravel is angular to subangular fine to coarse of mudstone. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM		
1.00-1.00	ES		<0.1				151.70	1.30	Brown gravelly slightly clayey fine to coarse SAND. Gravel is angular to subangular fine to coarse of mudstone. Occasional cobbles of mudstone. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM		
1.30	(S)	3,2,2 3,3,5 N=13					151.30	1.70	Soft light brown gravelly slightly sandy CLAY. Gravel is angular to subangular fine and medium of mudstone. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM		
							151.15	1.85	Light brown gravelly slightly clayey fine to coarse SAND. Gravel is angular to subangular fine to coarse of mudstone. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM		
							151.00	2.00					
2.00	(S)	7,6,5 5,8,9 N=27					150.55	2.45	Highly weathered slightly sandy MUDSTONE recovered as angular coarse elongate gravel of mudstone.		PLCM		
							150.45	2.55					
							150.00	3.00	Very weak weathered thinly laminated MUDSTONE recovered as sandy angular medium and coarse elongate gravel of mudstone.		PLCM		
3.00	(S)	6,4,7 7,6,7 N=27					149.80	3.20	Weathered MUDSTONE recovered as sandy subangular fine to coarse gravel of mudstone.		PLCM		
							149.20	3.80	Weathered MUDSTONE recovered as gravelly slightly clayey fine to coarse sand. Gravel is angular to subangular fine and medium of mudstone.		PLCM		
4.00	(S)	11,9,10 10,11,12 N=43					148.65	4.35	Weathered MUDSTONE recovered as slightly gravelly fine to coarse sand. Gravel is subangular fine and medium of mudstone.		PLCM		
							148.25	4.75	Weathered MUDSTONE recovered as sandy subangular fine to coarse gravel of mudstone.		PLCM		
5.00	(S)	6,4,4 5,8,9 N=26					147.55	5.45	Weathered MUDSTONE recovered as sandy subangular fine to coarse gravel of mudstone.		PLCM		
									Reached scheduled depth				

Hole Diameter			Run Information				Water Strikes					
Depth	Diameter (mm)	Remarks	Top (m)	Base (m)	Diam (mm)	Rec'v (m)	Date	Time	Strike	Minutes	Standing	Casing
							General Remarks					
Scale 1:37.5		Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.										

20 WSP WINDOW SAMPLE LOG - OVERTON_V8.01.GPJ WSPTEMPLATE8.00.GDT_15/8/24

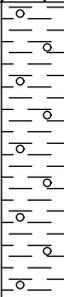
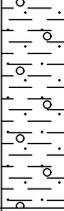
 WSP Telephone: Email:	WINDOW SAMPLE LOG			Hole No. DS12
	Project Low Farm Ground Investigation			Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd			Date Start: 28-06-24 End: 28-06-24
Contractor/Driller RP Drilling Ltd	Method/Plant Used Competitor Dart	Logged By Tom Turner	Co-Ordinates () E: 424825.61 N: 416149.24	Ground Level (m) 150.896

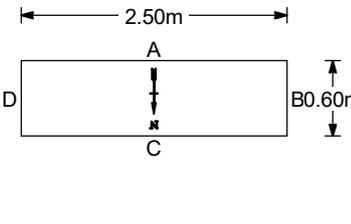
SAMPLES & TESTS							STRATA					
Depth	Type	Test Result	PID (ppmV)	HSV (kN/m ²)	P Pen (kN/m ²)	Water	Elev. (m)	Depth (Thick-ness)	Description	Legend	Geology	Dist. / Backfill
0.40-0.40	ES		<0.1				150.60	(0.30)	Soft dark brown CLAY with abundant rootlets and roots. (TOPSOIL)		TS	
								(1.15)	Firm light brown mottled grey and orangish brown slightly gravelly slightly sandy CLAY. Gravel is angular to subangular fine to coarse of mudstone. Becoming sandy at 1.05m. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM	
1.30	(S)	1,2,2 4,4,6 N=16					149.45	1.45	Brown gravelly slightly clayey fine to coarse SAND. Gravel is angular to subangular fine to coarse of mudstone. (PENNINE LOWER COAL MEASURES FORMATION)		PLCM	
							149.00	1.90	Very weak weathered thinly laminated MUDSTONE recovered as angular medium and coarse elongate gravel of mudstone.		PLCM	
2.00	(S)	5,3,5 6,14,13 N=38				148.90	2.00					
							148.75	2.15	Weathered sandy slightly clayey MUDSTONE recovered as angular fine to coarse gravel of mudstone.		PLCM	
3.00	(S)	4,7,9 10,10,10 N=39						(2.53)				
4.00	(S)	8,5,7 7,9,9 N=32										
4.60	(S)	25,50 N=50/ 40mm					146.22	4.68	Refusal			

Hole Diameter			Run Information				Water Strikes					
Depth	Diameter (mm)	Remarks	Top (m)	Base (m)	Diam (mm)	Rec'v (m)	Date	Time	Strike	Minutes	Standing	Casing
							General Remarks					
Scale 1:37.5		Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.										

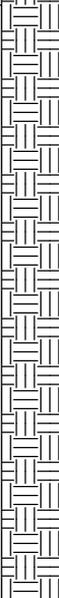
20 WSP WINDOW SAMPLE LOG - LOW FARM - OVERTON_V8.01.GPJ WSPTEMPLATE8.00.GDT 15/8/24

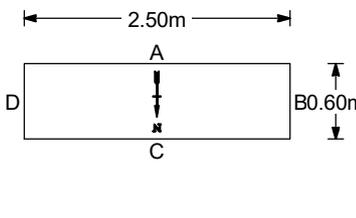
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP01	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 26-06-24 End: 26-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Luke McFadden	Co-Ordinates () E 423454.930 N 416070.908	Ground Level (m) 180.469

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m ²)	P Pen (kN/m ²)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.10-0.20	ES	<0.1				180.22	(0.25) - 0.25	Firm dark brown gravelly CLAY with frequent rootlets. Gravel is angular to sub-angular mudstone and sandstone. [TOPSOIL]		TS	
1.00-0.00 1.00-0.00	B D		120		↓		(1.25)	Very stiff greyish brown very gravelly CLAY. Gravel is angular to sub-angular fine to coarse mudstone and black shale. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
			120			178.97	(0.40)	Black weathered COAL. [WEATHERED PENNINE LOWER COAL MEASURES] <i>1.50 - 1.90 Band of black gravelly CLAY of weathered coal.</i>		PLCM	
						178.57	(0.90)	Very stiff greyish brown sandy gravelly CLAY. Gravel is angular to sub-angular fine to coarse mudstone and black shale. [WEATHERED PENNINE LOWER COAL MEASURES] <i>2.00 - 2.80 Inclusions of orangish brown sand.</i>		PLCM	
						177.67	2.80	Trial pit terminated at 2.8m bgl		END	

	Length 2.50m	Shoring/Support:	Water Strikes					
	Width 0.60m		Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north				1.00			Seepage into pit at 1.0m bgl.
Stability:			General Remarks					
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

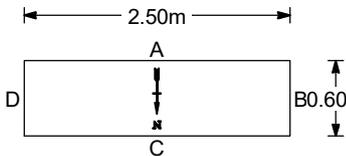
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP02
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 26-06-24 End: 26-06-24
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Luke McFadden	Co-Ordinates () E 423816.459 N 416012.630
			Ground Level (m) 170.527

SAMPLES & TESTS						STRATA							
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill		
0.10-0.20	ES	<0.1				170.28	(0.25) 0.25	Firm dark brown slightly sandy slightly gravelly CLAY. Gravel is angular to sub-angular fine to coarse mudstone and sandstone. [MADE GROUND]		MG			
1.10-1.20	D ES	<0.1					(2.50)	Very stiff greyish brown mottled orangish brown very gravelly CLAY with occasional cobbles. Gravel is angular to sub-angular fine to coarse mudstone (often ferruginous) and sandstone. Cobbles are sub-angular mudstone. [MADE GROUND]		MG			
			120			167.78	2.75						
			120			167.63	2.90	Stiff orangish brown gravelly CLAY of angular to sub-angular mudstone. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM			
								Trial pit terminated at 2.9m bgl.					END

	Length 2.50m	Shoring/Support:	Water Strikes							
	Width 0.60m		Stability:	Date	Time	Strike	Minutes	Standing	Remarks	
	Orientation 0 degrees from north	General Remarks								
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.									

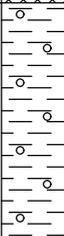
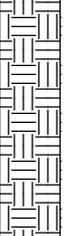
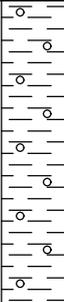
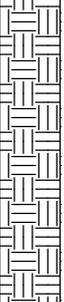
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP03
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 26-06-24 End: 26-06-24
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Luke McFadden	Co-Ordinates () E 423595.350 N 415940.788
			Ground Level (m) 187.465

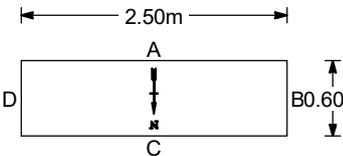
SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thick-ness)	Description	Legend	Geology	Install / Backfill
0.10-0.20	ES	<0.1				187.12	0.35	Firm dark brown slightly gravelly CLAY with frequent rootlets. Gravel is angular to sub-angular fine to coarse mudstone. [TOPSOIL]		TS	
						186.67	0.80	Stiff orangish brown gravelly CLAY. Gravel is angular to sub-angular fine to coarse mudstone and sandstone. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
0.90-1.00	D		120			186.37	0.30	Black COAL. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
1.30-1.40	B					185.87	0.50	Very stiff grey gravelly CLAY. Gravel is angular to sub-angular fine to coarse mudstone. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
1.30-1.40	D					185.47	0.40	Grey MUDSTONE recovered as a greyish yellow slightly clayey sandy gravel of mudstone and siltstone. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
								Trial pit terminated at 2.0m bgl.		END	

	Length 2.50m	Shoring/Support:	Water Strikes					
	Width 0.60m		Stability:	Date	Time	Strike	Minutes	Standing
	Orientation 0 degrees from north	General Remarks						
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

20 WSP TP LOG STANDARD - LOW FARM - OVERTON V8.01.GPJ WSPTEMPLATE8.00.GDT 7/8/24

 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP04	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 26-06-24 End: 26-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Luke McFadden	Co-Ordinates () E 423782.749 N 415887.543	Ground Level (m) 183.356

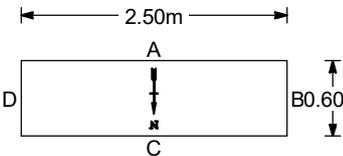
SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.30	ES	<0.1				182.96	0.40	Dark grey clayey slightly sandy GRAVEL. Gravel is angular to sub-angular fine to coarse mudstone (often ferruginous) and sandstone. [POTENTIAL MADE GROUND]		MG	
1.10-1.20 1.10-1.20	B D					181.96	1.40	Stiff greyish brown very gravelly CLAY. Gravel is angular to sub-angular fine to coarse mudstone. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
						181.76	1.60	Black weathered COAL. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
			120				(1.30)	Very stiff greyish brown gravelly CLAY. Gravel is sub-angular mudstone. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
2.70-2.80	D					180.46	2.90	End of trial pit at 2.9m bgl		END	

	Length 2.50m	Shoring/Support:	Water Strikes					
	Width 0.60m		Stability:	Date	Time	Strike	Minutes	Standing
	Orientation 0 degrees from north	General Remarks						
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

20 WSP TP LOG STANDARD - LOW FARM - OVERTON V8.01.GPJ WSPTEMPLATE8.00.GDT 7/18/24

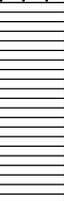
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP05	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 26-06-24 End: 26-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Luke McFadden	Co-Ordinates () E 423658.877 N 415784.551	Ground Level (m) 191.633

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.30	ES	<0.1				191.28	0.35	Firm dark brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is sub angular fine to coarse mudstone. [TOPSOIL]		TS	
0.90-1.00 0.90-1.00 0.90-1.00	B D ES	<0.1					(1.55)	Very stiff very gravelly CLAY. Gravel is angular to sub angular fine to coarse mudstone and sandstone. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
						189.73	1.90	Trial pit terminated at 1.9m bgl		END	

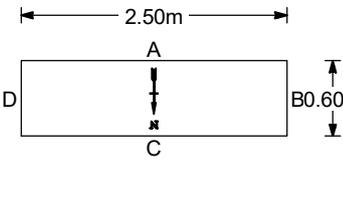
	Length 2.50m	Shoring/Support:	Water Strikes					
	Width 0.60m		Stability:	Date	Time	Strike	Minutes	Standing
	Orientation 0 degrees from north	General Remarks						
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

20 WSP TP LOG STANDARD - LOW FARM - OVERTON_V8.01.GPJ_WSPTEMPLATE8.00.GDT_7/18/24

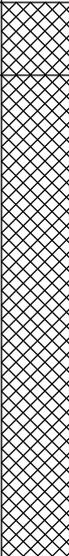
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP06	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 26-06-24 End: 26-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Luke McFadden	Co-Ordinates () E 423409.995 N 415703.422	Ground Level (m) 203.532

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.00-0.10	ES	<0.1				203.18	0.35	Firm dark brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is sub angular fine to coarse mudstone. [TOPSOIL]		TS	
						202.88	0.65	Yellowish brown slightly clayey gravelly SAND. Gravel is sub-angular fine to coarse sandstone and mudstone. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
1.00-1.10	B					202.03	1.50	Yellowish brown MUDSTONE recovered as a clayey slightly sandy gravel of angular to sub angular fine to coarse mudstone, siltstone and sandstone. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
1.00-1.10	D							Trial pit terminated at 1.5m bgl		END	

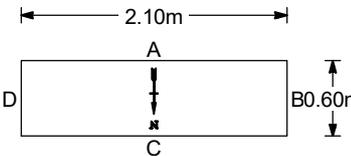
20 WSP TP LOG STANDARD - LOW FARM - OVERTON_V8.01.GPJ - WSPTEMPLATE8.00.GDT 7/18/24

	Length 2.50m	Shoring/Support:	Water Strikes					
	Width 0.60m		Stability:	Date	Time	Strike	Minutes	Standing
	Orientation 0 degrees from north	General Remarks						
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP07	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 25-06-24 End: 25-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424149.468 N 416017.624	Ground Level (m) 174.973

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.40-0.00	ES	0				174.67	0.30	Dark brown sandy CLAY with rare subangular to subrounded gravel of sandstone. (MADE GROUND)		MG	
0.50-1.00	B							Firm grey gravelly CLAY. Gravel is fine to coarse angular to subrounded of coal, mudstone and shale. (MADE GROUND)		MG	
2.00-2.30	B					172.67	2.30				

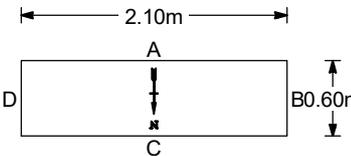
20 WSP TP LOG STANDARD - LOW FARM - OVERTON V8.01.GPJ WSPTEMPLATE8.00.GDT 7/8/24

	Length 2.10m	Shoring/Support: None	Water Strikes					
	Width 0.60m		Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	Stability: Stable	General Remarks					
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP08	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 25-06-24 End: 25-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 423975.382 N 416140.510	Ground Level (m) 169.007

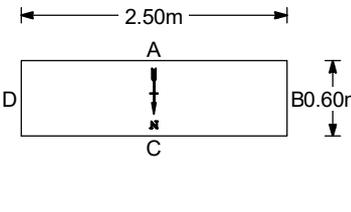
SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.00	ES	0				168.71	0.30	Dark brown sandy CLAY with rare subangular to subrounded gravel of sandstone. (MADE GROUND)		MG	
0.40-0.00 0.50-0.80	ES B	0						Soft to firm brown and grey gravelly CLAY. Gravel is fine to coarse angular to subrounded of coal, mudstone and sandstone. (MADE GROUND)		MG	
1.50-1.70	B					166.71	2.30				

20 WSP TP LOG STANDARD - LOW FARM - OVERTON V8.01.GPJ WSPTEMPLATE8.00.GDT 7/8/24

	Length 2.10m	Shoring/Support: None	Water Strikes						
	Width 0.60m		Stability: Stable	Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	General Remarks							
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.								

 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP09	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 26-06-24 End: 26-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Luke McFadden	Co-Ordinates () E 424156.406 N 416218.446	Ground Level (m) 161.664

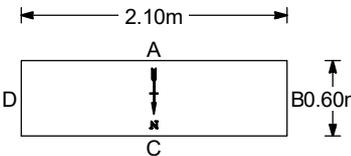
SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.00-0.30	ES	<0.1				161.36	(0.30)	Dark brown slightly sandy slightly gravelly CLAY with frequent rootlets. Gravel is angular to sub-angular fine to coarse mudstone. [MADE GROUND]		MG	
						161.06	(0.30)	Stiff orangish brown gravelly CLAY. Gravel is angular to sub-angular fine to coarse mudstone and black shale. [MADE GROUND]		MG	
0.90-1.00	B					160.46	(0.60)	Stiff grey very gravelly slightly cobbly CLAY. Gravel is angular to sub-angular fine to coarse mudstone. Cobbles are sub-angular angular to sub-angular mudstone. [MADE GROUND]		MG	
0.90-1.00	D					159.36	(1.10)	Grey clayey GRAVEL of angular to sub-angular fine to coarse grey and occasionally orange ferruginous mudstone. Rare cobbles of sub-angular mudstone. [MADE GROUND]		MG	
							2.30	Trial pit terminated at 2.3m bgl		END	

	Length 2.50m	Shoring/Support:	Water Strikes					
	Width 0.60m		Stability:	Date	Time	Strike	Minutes	Standing
	Orientation 0 degrees from north	General Remarks						
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

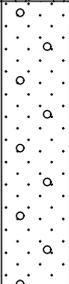
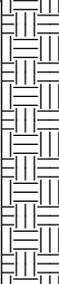
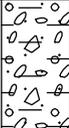
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP10
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 25-06-24 End: 25-06-24
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424156.108 N 416387.593
			Ground Level (m) 148.661

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.00	D					148.36	0.30	Dark brown sandy CLAY with rare fine to coarse subangular to subrounded gravel of mudstone and sandstone. (TOPSOIL)		TS	
0.40-0.65 0.40-0.00	B ES	0				147.46 147.36	1.20 1.30	Firm to siff grey mottled orangish brown slightly sandy CLAY with rare angular to subangular gravel of sandstone. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
1.30-0.00	D					147.36	1.30	Extremely weak greyish brown SANDSTONE recovered as a fine to coarse angular to subangular gravel. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	

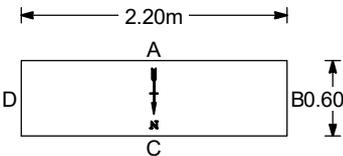
20 WSP TP LOG STANDARD - LOW FARM - OVERTON_V8.01.GPJ - WSPTEMPLATE8.00.GDT - 7/8/24

	Length 2.10m	Shoring/Support: None	Water Strikes						
	Width 0.60m		Stability: Stable	Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	General Remarks							
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.								

 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP11
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 25-06-24 End: 25-06-24
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424391.992 N 416534.612
			Ground Level (m) 139.243

SAMPLES & TESTS							STRATA				
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.00	ES	0				138.94	0.30	Dark brown clayey fine to coarse SAND. (TOPSOIL)		TS	
0.50-0.00	D						(1.20)	Orangish brown gravelly SAND. Gravel is fine to coarse angular to subangular of sandstone. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
1.50-1.60	B					137.74	1.50	Orangish brown slightly clayey sandy fine to coarse angular to subangular GRAVEL. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
1.70-1.90	B					137.19	2.05				

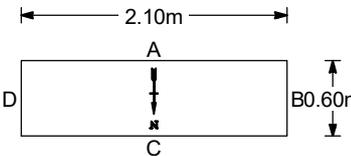
20 WSP TP LOG STANDARD - LOW FARM - OVERTON V8.01.GPJ WSPTEMPLATE8.00.GDT 7/18/24

	Length 2.20m	Shoring/Support: None	Water Strikes						
	Width 0.60m		Stability: Stable	Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	General Remarks							
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.								

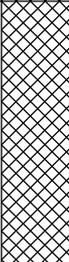
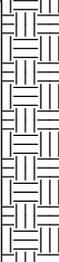
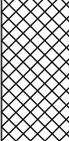
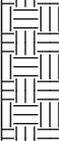
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP12
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 25-06-24 End: 25-06-24
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424321.466 N 416297.265
			Ground Level (m) 146.270

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.40-0.60 0.40-0.00	B ES	0				145.97	(0.30) 0.30	Dark brown sandy CLAY with rare subangular to subrounded gravel of sandstone. (TOPSOIL)		TS	
0.80-1.00	B					145.57	(0.40) 0.70	Firm brown slightly gravelly CLAY. Gravel is fine to coarse subangular to subrounded of coal and mudstone. (MADE GROUND)		PLCM	
1.90-2.10	B					144.37	(1.20) 1.90	Firm to siff grey orangish brown slightly gravelly CLAY. Gravel is fine to coarse subangular to subrounded of mudstone. (MADE GROUND)		PLCM	
						143.87	(0.50) 2.40	Extremely weak grey SANDSTONE recovered as a fine to coarse angular to subangular sandstone gravel. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	

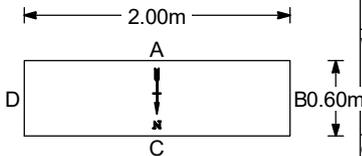
20 WSP TP LOG STANDARD - LOW FARM - OVERTON V8.01.GPJ WSPTEMPLATE8.00.GDT 7/8/24

	Length 2.10m	Shoring/Support: None	Water Strikes					
	Width 0.60m		Stability: Stable	Date	Time	Strike	Minutes	Standing
	Orientation 0 degrees from north	General Remarks						
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP13	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 24-06-24 End: 24-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424520.807 N 416282.732	Ground Level (m) 143.926

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.00	ES	0				143.63	(0.30) 0.30	Dark brown slightly sandy CLAY. (MADE GROUND - TOPSOIL)		CMG	
0.50-0.70 0.60-0.00	B ES	0					(1.10)	Firm to stiff oranish brown and grey slightly sandy CLAY. Gravel is fine to coarse subangular to subrounded of sandstone. (MADE GROUND)		MG	
1.20-1.40	B					142.53	1.40				
1.50-1.80	B						(0.60)	Firm greyish brown gravelly CLAY. Gravel is fine to coarse angular to subangular of coal, ironstone and mudstone. (MADE GROUND)		MG	
2.00-0.00	D					141.93	2.00				

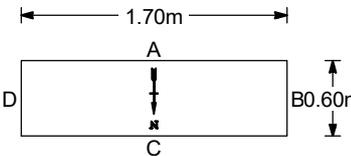
20 WSP TP LOG STANDARD LOW FARM - OVERTON V8.01.GPJ WSPTEMPLATE8.00.GDT 7/18/24

	Length 2.00m	Shoring/Support: None	Water Strikes						
	Width 0.60m		Stability: Stable	Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	General Remarks							
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.								

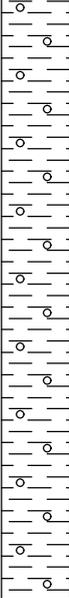
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP14
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 25-06-24 End: 25-06-24
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424414.306 N 416180.813
			Ground Level (m) 154.945

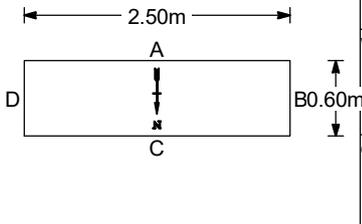
SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.00	D					154.65	(0.30)	Dark brown sandy CLAY with rare subangular to subrounded gravel of sandstone. (MADE GROUND - TOPSOIL)		CMG	
0.40-0.60 0.40-0.00	B ES	0				154.15	(0.50)	Firm, friable bluish grey slightly gravelly CLAY. Gravel is fine to coarse subangular to subrounded of coal and mudstone. (MADE GROUND)		MG	
0.80-1.00	B					153.95	1.00	Extremely weak orangish brown SANDSTONE recovered as a sandy fine to coarse angular to subangular gravel with high cobble content. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	

20 WSP TP LOG STANDARD - LOW FARM - OVERTON V8.01.GPJ WSPTEMPLATE8.00.GDT 7/8/24

	Length 1.70m	Shoring/Support: None	Water Strikes					
	Width 0.60m		Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	Stability: Stable	General Remarks					
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP15	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 26-06-24 End: 26-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Luke McFadden	Co-Ordinates () E 424433.297 N 416043.979	Ground Level (m) 168.848

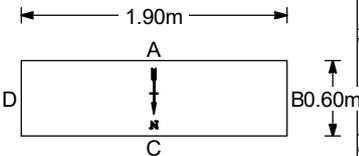
SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m ²)	P Pen (kN/m ²)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.10-0.20	ES	<0.1	120			168.60	(0.25) - 0.25	Stiff dark brown mottled organish brown gravelly CLAY. Gravel is angular to sub-angular fine to coarse red shale, black shale, mudstone and rare plastic. [POTENTIAL MADE GROUND]		MG	
0.50-0.60 0.50-0.60 0.50-0.60	B D ES	<0.1	120				(2.50)	Very stiff greyish brown gravelly CLAY. Gravel is angular to sub-angular fine to coarse mudstone, siltstone and shale. [WEATHERED PENNINE LOWER COAL MEASURES] <i>1.00 - 2.75 Inclusions of black shale, red shale and yellow sandstone.</i>		PLCM	
			120			166.10	2.75	Trial pit terminated at 2.75m bgl		END	

	Length 2.50m	Shoring/Support:	Water Strikes					
	Width 0.60m		Stability:	Date	Time	Strike	Minutes	Standing
	Orientation 0 degrees from north	General Remarks						
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

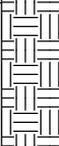
20 WSP TP LOG STANDARD - LOW FARM - OVERTON_V8.01.GPJ_WSPTEMPLATE8.00.GDT_7/18/24

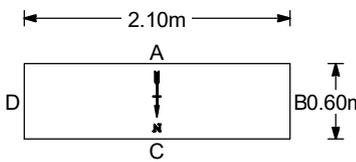
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP16
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 27-06-24 End: 27-06-24
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 423914.484 N 415570.552
			Ground Level (m) 187.282

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.00	ES	0				186.98	0.30	Dark brown sandy CLAY with rare subangular to subrounded gravel of sandstone. (TOPSOIL)		TS	
0.50-0.90	B						(1.60)	Firm to stiff orangish brown and grey slightly gravelly CLAY. Gravel is fine to coarse subangular to subrounded of mudstone. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
2.00-0.00	D					185.38 185.28	1.90 2.00	Extremely weak grey SANDSTONE recovered as a fine to coarse angular to subangular sandstone gravel. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	

	Length 1.90m	Shoring/Support: None	Water Strikes					
	Width 0.60m		Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	Stability: Stable	General Remarks					
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

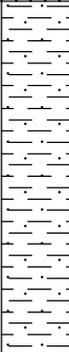
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP17	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 27-06-24 End: 27-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424080.891 N 415567.404	Ground Level (m) 191.517

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.30-0.00	ES	0				191.12	0.40	Dark brown sandy CLAY with rare subangular to subrounded gravel of sandstone and rare brick fragments. (MADE GROUND)		MG	
0.50-0.70	B					190.52	1.00	Firm, friable brown slightly sandy CLAY. (MADE GROUND)		MG	
1.10-1.40	B						(1.20)	Firm to stiff grey and orangish brown slightly gravelly CLAY. Gravel is fine to coarse angular to subangular of mudstone. (MADE GROUND)		MG	
2.20-0.00	D					189.32	2.20				

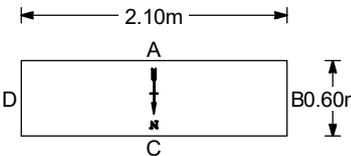
	Length 2.10m	Shoring/Support: None	Water Strikes					
	Width 0.60m		Stability: Stable	Date	Time	Strike	Minutes	Standing
	Orientation 0 degrees from north	General Remarks						
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

20 WSP TP LOG STANDARD - LOW FARM - OVERTON_V8.01.GPJ WSPTEMPLATE8.00.GDT 7/18/24

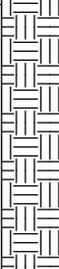
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP18
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 27-06-24 End: 27-06-24
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 423983.991 N 415385.782
			Ground Level (m) 182.387

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.00	ES	0				182.09	0.30	Dark brown sandy CLAY with rare subangular to subrounded gravel of sandstone and rare brick fragments. (POSSIBLE MADE GROUND)		MG	
0.40-0.70	B						(1.50)	Firm orangish brown and grey slightly sandy CLAY. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
1.80-20.00	B					180.59	1.80	Dark brown clayey fine to coarse angular to subangular mudstone and ironstone GRAVEL. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
						180.39	2.00				

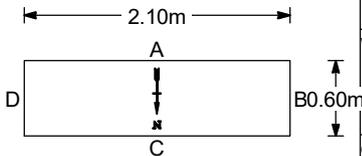
20 WSP TP LOG STANDARD - LOW FARM - OVERTON_V8.01.GPJ WSPTEMPLATE8.00.GDT 7/8/24

	Length 2.10m	Shoring/Support: None	Water Strikes						
	Width 0.60m		Stability: Stable	Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	General Remarks							
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.								

 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP19	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 27-06-24 End: 27-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424543.627 N 415784.134	Ground Level (m) 180.458

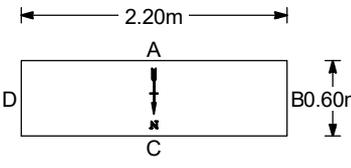
SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.00	ES	0				180.16	0.30	Dark brown sandy CLAY with rare subangular to subrounded gravel of sandstone and rare brick fragments. (MADE GROUND)		MG	
0.50-0.00	D					179.56	0.90	Firm to stiff orangish brown and grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to subangular of mudstone. (MADE GROUND)		MG	
1.00-0.00	D					178.46	2.00	Firm, friable gravelly CLAY. Gravel is fine to coarse subangular to subrounded of mudstone. (MADE GROUND)		MG	

20 WSP TP LOG STANDARD - LOW FARM - OVERTON_V8.01.GPJ WSPTEMPLATE8.00.GDT 7/18/24

	Length 2.10m	Shoring/Support: None	Water Strikes					
	Width 0.60m		Stability: Stable	Date	Time	Strike	Minutes	Standing
	Orientation 0 degrees from north	General Remarks						
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

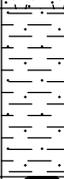
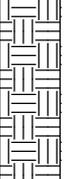
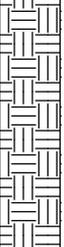
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP20	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 27-06-24 End: 27-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424713.349 N 415902.514	Ground Level (m) 169.345

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.40-0.60	B					169.05	(0.30)	Dark brown sandy CLAY. (MADE GROUND - TOPSOIL)		MG	
						168.35	(0.70)	Firm to stiff, friable orangish brown and grey slightly sandy CLAY. (MADE GROUND)			
1.20-0.00 1.20-0.00	D ES	0				167.45	(0.90)	Red clayey fine to coarse angular to subangular GRAVEL of red shale. (MADE GROUND)		MG	
2.00-2.40	B				166.85	(0.60)	Firm grey gravelly friable CLAY. Gravel is fine to coarse of mudstone and coal. (MADE GROUND)	MG			

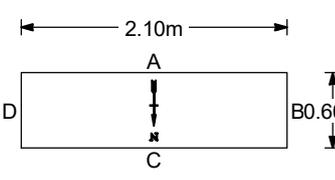
	Length 2.20m	Shoring/Support: None	Water Strikes					
	Width 0.60m		Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	Stability: Stable	General Remarks					
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

20 WSP TP LOG STANDARD - LOW FARM - OVERTON V8.01.GPJ WSPTEMPLATE8.00.GDT 7/18/24

 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP21
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 27-06-24 End: 27-06-24
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424726.040 N 415975.173
			Ground Level (m) 163.754

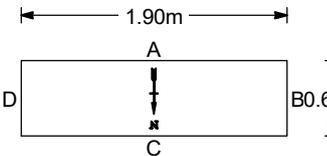
SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.40-0.60 0.40-0.00	B ES	0				163.45	(0.30) 0.30	Dark brown sandy CLAY with rare subangular to subrounded gravel of sandstone. (TOPSOIL)		TS	
						162.75	(0.70) 1.00	Firm to stiff orangish brown and brown sandy CLAY. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
1.10-0.00 1.50-1.70	ES B	0				161.75	(1.00) 2.00	Black fine to coarse angular to subangular GRAVEL of weathered coal. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
2.00-2.30	ES	0				161.45	(0.30) 2.30	Firm locally soft grey and brown slightly sandy CLAY. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	

20 WSP TP LOG STANDARD - LOW FARM - OVERTON V8.01.GPJ WSPTEMPLATE8.00.GDT 7/8/24

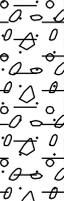
	Length 2.10m	Shoring/Support: None	Water Strikes						
	Width 0.60m		Stability: Stable	Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	General Remarks							
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.								

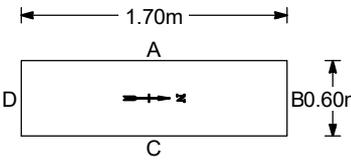
 WSP Telephone: Fax:	TRIAL PIT LOG			Hole No. TP22
	Project Low Farm Ground Investigation			Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd			Date Start: 27-06-24 End: 27-06-24
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424883.645 N 416008.290	Ground Level (m) 153.855

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.50-0.00	ES	0				153.46	0.40	Dark brown sandy CLAY with rare subangular to subrounded gravel of sandstone. (TOPSOIL)		TS	
0.80-1.20	B					153.06	0.80	Firm dark grey gravelly CLAY. Gravel is fine to coarse subangular to subrounded of coal and mudstone. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
						152.16	1.70	Firm orangish brown slightly sandy CLAY. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
2.00-2.20	B					151.66	2.20	Firm grey slightly gravelly CLAY. Gravel is fine to coarse angular to subangular of coal and mudstone. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	

	Length 1.90m	Shoring/Support: None	Water Strikes						
	Width 0.60m		Stability: Stable	Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	General Remarks							
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.								

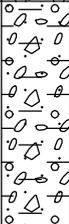
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP23
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 25-06-24 End: 25-06-24
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424520.449 N 416394.683
			Ground Level (m) 137.358

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m ²)	P Pen (kN/m ²)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.00	ES	0				137.01	0.35	Dark brown sandy CLAY with rare fine to coarse subangular to subrounded gravel of sandstone. (TOPSOIL)		TS	
0.60-0.80	B					136.16	1.20	Orangish brown and light orangish brown clayey sandy fine to coarse angular to subrounded GRAVEL of sandstone with moderate cobble content. Occasional sandy clay pockets up to 100mm by 50mm. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
1.20-0.00	D					136.01	1.35	Extremely weak light grey SANDSTONE recovered as an angular to subangular gravel. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	

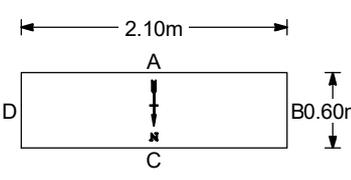
	Length 1.70m	Shoring/Support: None	Water Strikes					
	Width 0.60m		Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 90 degrees from north	Stability: Stable	General Remarks					
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

20 WSP TP LOG STANDARD - LOW FARM - OVERTON V8.01.GPJ WSPTEMPLATE8.00.GDT 7/8/24

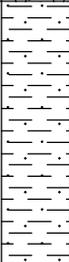
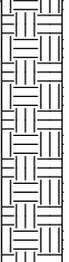
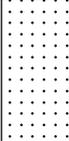
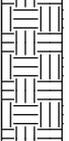
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	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 25-06-24 End: 25-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424629.659 N 416409.397	Ground Level (m) 133.396

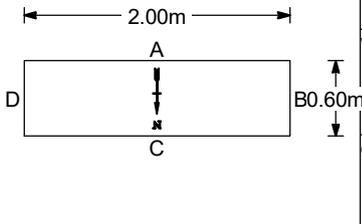
SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
							(0.30)	Dark brown sandy CLAY with rare fine to coarse subangular to subrounded gravel of sandstone. (TOPSOIL)		TS	
0.50-0.00	ES	0				133.10	0.30	Orangish brown and light orangish brown clayey sandy fine to coarse angular to subrounded GRAVEL of sandstone with moderate cobble content. Occasional sandy clay pockets up to 100mm by 50mm. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
0.70-0.90	B						(0.95)				
						132.15	1.25	Extremely weak light grey SANDSTONE recovered as an angular to subangular gravel. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
						132.40	1.30				

20 WSP TP LOG STANDARD - LOW FARM - OVERTON V8.01.GPJ - WSPTEMPLATE8.00.GDT 7/8/24

	Length 2.10m	Shoring/Support: None	Water Strikes						
	Width 0.60m		Stability: Stable	Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	General Remarks							
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.								

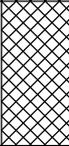
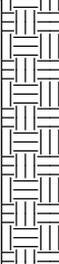
 WSP Telephone: Fax:	TRIAL PIT LOG			Hole No. TP25
	Project Low Farm Ground Investigation			Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd			Date Start: 24-06-24 End: 24-06-24
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424722.913 N 416422.081	Ground Level (m) 132.979

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.00	ES	0				132.68	(0.30) 0.30	Dark brown slightly sandy CLAY. (MADE GROUND)		TS	
0.50-1.00 0.50-0.00	B ES	0.1					(1.10)	Firm to stiff oranish brown and grey slightly sandy CLAY. Gravel is fine to coarse subangular to subrounded of sandstone. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
1.20-0.00	D					131.58	1.40				
1.40-0.00	D						(0.60)	Extremely weak greyish brown SANDSTONE recovered as an angular to subangular gravel. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
						130.98	2.00				

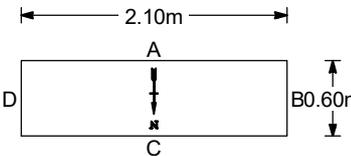
	Length 2.00m	Shoring/Support: None	Water Strikes					
	Width 0.60m		Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	Stability: Stable	General Remarks					
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

20 WSP TP LOG STANDARD - LOW FARM - OVERTON V8.01.GPJ WSPTEMPLATE8.00.GDT 7/8/24

 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP26	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 24-06-24 End: 24-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424798.520 N 416429.842	Ground Level (m) 139.890

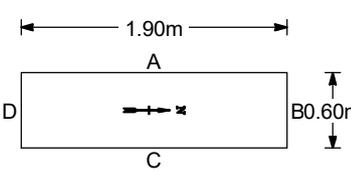
SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.00	ES	0				139.59	0.30	Dark brown slightly sandy CLAY with rare fine to coarse subangular brick fragments. (MADE GROUND)		MG	
0.40-0.60 0.40-0.00	B ES	0				138.99	0.60	Firm to stiff oranish brown and grey slightly sandy CLAY. Gravel is fine to coarse subangular to subrounded of sandstone. (MADE GROUND)		MG	
0.90-1.00	B						0.90	Firm to stiff light grey slightly sanfy slightly gravelly CLAY. Gravel is fine to coarse angular to subrounded of sandstone and coal. (MADE GROUND)		MG	
1.60-2.00	B					137.89	2.00				

20 WSP TP LOG STANDARD - LOW FARM - OVERTON_V8.01.GPJ_WSPTEMPLATE8.00.GDT_7/8/24

	Length 2.10m	Shoring/Support: None	Water Strikes						
	Width 0.60m		Stability: Stable	Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	General Remarks							
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.								

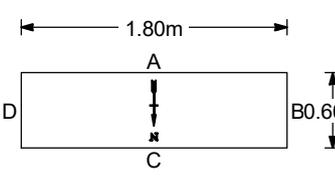
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP27
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 24-06-24 End: 24-06-24
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424688.248 N 416326.325
			Ground Level (m) 140.414

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.00	ES	0				140.21	0.20	Dark brown slightly sandy CLAY. (MADE GROUND)		MG	
0.30-0.00	D					140.01	0.40	Firm orangish brown sandy CLAY with rare subangular to subrounded gravel of sandstone and mudstone. (MADE GROUND)		MG	
0.50-0.00	ES	0						Firm greyish brown gravelly CLAY. Gravel is fine to coarse angular to subangular of coal, ironstone and mudstone. (MADE GROUND)		MG	
0.60-0.90	B						(1.80)				
2.00-2.20	B					138.21	2.20				

	Length 1.90m	Shoring/Support: None	Water Strikes					
	Width 0.60m		Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 90 degrees from north	Stability: Stable	General Remarks					
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

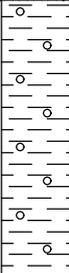
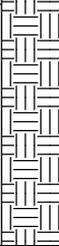
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP28	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 25-06-24 End: 24-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Fay Chappel	Co-Ordinates () E 424819.922 N 416341.708	Ground Level (m) 143.953

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.00	ES	0				143.65	(0.30) 0.30	Dark brown slightly sandy CLAY.		TS	
0.40-0.60	B					143.15	(0.50) 0.80	Firm to stiff oranish brown and grey slightly sandy CLAY. Gravel is fine to coarse subangular to subrounded of sandstone. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
0.80-1.20	B					142.25	(0.90) 1.70	Firm to stiff orangish brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular to subrounded of sandstone and mudstone with low cobble content of subangular sandstone. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	
1.80-0.00	D					141.95	(0.30) 2.00	Extremely weak greyish brown SANDSTONE recovered as an angular to subangular gravel. (WEATHERED PENNINE LOWER COAL MEASURES)		PLCM	

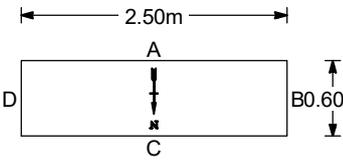
	Length 1.80m	Shoring/Support: None	Water Strikes						
	Width 0.60m		Stability: Stable	Date	Time	Strike	Minutes	Standing	Remarks
	Orientation 0 degrees from north	General Remarks							
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.								

20 WSP TP LOG STANDARD - LOW FARM - OVERTON_V8.01.GPJ_WSPTEMPLATE8.00.GDT_7/8/24

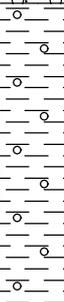
 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP29
	Project Low Farm Ground Investigation		Sheet 1 of 1
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 28-06-24 End: 28-06-24
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Luke McFadden	Co-Ordinates () E 424816.527 N 416166.879
			Ground Level (m) 149.891

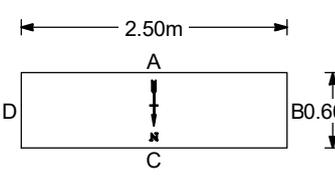
SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m ²)	P Pen (kN/m ²)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.10-0.20	ES	<0.1				149.64	0.25	Soft dark brown slightly sandy gravelly CLAY. Gravel is angular to sub angular fine to coarse of mixed lithologies including mudstone, sandstone, limestone and rare ceramic. [MADE GROUND - TOPSOIL]		MG	
0.90-1.00 0.90-1.00 0.90-1.00	B D ES	<0.1				148.49	1.40	Stiff to very stiff bluish grey mottled orangish brown gravelly CLAY. Gravel is angular to sub angular fine to coarse mudstone. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
2.30-2.40	D					147.49	2.40	Dark grey MUDSTONE recovered as a slightly clayey slightly sandy gravel of angular mudstone. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
								Trial pit terminated at 2.4m bgl		END	

20 WSP TP LOG STANDARD - LOW FARM - OVERTON V8.01.GPJ WSPTEMPLATE8.00.GDT 7/18/24

	Length 2.50m	Shoring/Support:	Water Strikes					
	Width 0.60m		Stability:	Date	Time	Strike	Minutes	Standing
	Orientation 0 degrees from north	General Remarks						
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

 WSP Telephone: Fax:	TRIAL PIT LOG		Hole No. TP30	
	Project Low Farm Ground Investigation		Sheet 1 of 1	
Job No 2024UK251558	Client Boom Power Ltd		Date Start: 28-06-24 End: 28-06-24	
Contractor / Driller Acorn Waste Management Ltd	Method/Plant Used JCB-3CX	Logged By Luke McFadden	Co-Ordinates () E 424832.686 N 416126.284	Ground Level (m) 152.373

SAMPLES & TESTS						STRATA					
Depth	Type	PID (ppmV)	HSV (kN/m2)	P Pen (kN/m2)	Water	Elev. (m)	Depth (Thickness)	Description	Legend	Geology	Install / Backfill
0.20-0.30	ES	<0.1				152.07	(0.30) 0.30	Grass over soft dark brown gravelly organic CLAY with frequent rootless. Gravel is sub angular fine to coarse mudstone, sandstone, coal and black shale. (TOPSOIL)		TS	
0.60-0.70 0.60-0.70	B D					150.77	(1.30) 1.60	Very stiff organise brown mottled bluish grey gravelly CLAY with rare cobbles. Gravel is angular to sub-angular fine to coarse mudstone. Cobbles are angular mudstone and shale. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
1.80-1.90	D					150.47	(0.30) 1.90	Grey MUDSTONE recovered as a clayey gravel of angular mudstone. [WEATHERED PENNINE LOWER COAL MEASURES]		PLCM	
								Trial pit terminated at 1.9m bgl		END	

	Length 2.50m	Shoring/Support:	Water Strikes					
	Width 0.60m		Stability:	Date	Time	Strike	Minutes	Standing
	Orientation 0 degrees from north	General Remarks						
Scale 1:31.25	Notes: All dimensions in metres. Logs should be read in accordance with the provided Key. Descriptions are based on visual and manual identification.							

20 WSP TP LOG STANDARD - LOW FARM - OVERTON V8.01.GPJ WSPTEMPLATE8.00.GDT 7/8/24

Appendix F

MONITORING DATA



PRE-REPORT DATA CHECK



All Response Zone depths are complete.



All visit dates in the Monitoring Readings table found in the Monitoring Visit table .



All visit dates in the Dips table found in the Monitoring Visit table .



All visit dates in the Water Samples table found in the Monitoring Visit table .

Key:	Data checks	Depth to water	Methane	Carbon Dioxide	Gas Flow
	Datum or reponse zone information missing. "Depth to Water" and "Elev of Water" cannot be calculated.	Response zone <i>fully</i> flooded during sampling	> 1% v/v	> 5% v/v	> 70 l/hr
	Reference elevation captured during drilling is missing. "Depth to Water" cannot be calculated.	Response zone <i>significantly</i> flooded during sampling			

Event(s) Selected: Gas Monitoring R1 , Site Area(s) Selected: Whole site

Current Event: Gas Monitoring R1, Visit Date: 10/07/2024 Sheet 1 of 1

Engineer(s)	Tom Turner	Equipment	Serial No	Calibrated	Comments and Ground Conditions:
Start/End Time	08:00 - 13:30	Dipmeter		True	
Pressure Start/End (mB)	981 - 980	Gas Analyser		True	
Temperature (Deg C)					
Weather Conditions	Overcast				

Borehole	Response Zone (mbgl)		Gas Flow (l/hr)		Borehole Differential Pressure	Methane (% v/v)		Carbon Dioxide (% v/v)		Oxygen (% v/v)		Other Gases (ppmV)			Depth to Water	Elev of Water	Depth to Base	Elev of Base	Thickness of product	Sampled ?
	Top	Base	Initial	Steady		Pa	Initial	Steady	Initial	Steady	Initial	Steady	PID	H2S						
DS01(l)	1.00	5.00	0.30	0.30	0.04		0.10		1.40		19.00		0.00	1.00	4.96	193.36	4.97	193.35	N/A	No
DS02(l)	1.00	5.00	0.40	0.40	0.05		0.10		2.80		19.70		0.00	1.00	Dry	Dry	5.05	171.78	N/A	No
DS03(l)	1.00	4.70	0.20	0.20	-0.20		0.00		4.90		13.90		1.00	1.00	4.37	168.65	4.65	168.37	N/A	No
DS05(l)	1.00	5.00	0.40	0.40	-0.04		0.00		0.30		20.90		1.00	1.00	Dry	Dry	4.97	149.11	N/A	No
DS06(l)	1.00	2.00	0.30	0.30			0.10		0.90		20.10		0.00	1.00	Dry	Dry	2.04	159.88	N/A	No
DS08(l)	1.70	3.70	0.40	0.40	0.07		0.10		3.00		18.30		0.00	1.00	Dry	Dry	3.73	181.89	N/A	No
DS09(l)	0.80	1.90	0.30	0.30			0.20		2.70		18.40		0.00	0.00	1.50	174.76	1.85	174.41	N/A	No
DS10(l)	1.00	4.00	0.30	0.30	-0.07		0.00		4.50		14.40		0.00	1.00	Dry	Dry	3.92	135.01	N/A	No
DS11(l)	1.00	5.00	0.30	0.30			0.10		1.10		15.90		1.00	0.00	4.20	148.80	5.01	147.99	N/A	No
DS12(l)	1.00	4.60	0.20	0.10			0.20		1.00		18.20		0.00	0.00	4.27	146.63	4.54	146.36	N/A	No

Appendix G

LABORATORY TESTING RESULTS





Units 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US

Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

WSP UK Limited
8 First Street
Main
Lancashire
M15 4RP

Attention: Fay Chappel

CERTIFICATE OF ANALYSIS

Date of report Generation: 18 July 2024
Customer: WSP UK Limited
Sample Delivery Group (SDG): 240627-52
Your Reference: Low Farm
Location: Low Farm
Report No: 735101
Order Number: UK0037228.1558-200

This report has been revised and directly supersedes 734022 in its entirety.

We received 18 samples on Thursday June 27, 2024 and 18 of these samples were scheduled for analysis which was completed on Thursday July 18, 2024. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.

Incorrect sampling dates and/or sample information will affect the validity of results.

The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Sonia McWhan
Operations Manager





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

Superseded Report: 734022

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
29987423	DS03	ES	0.40	25/06/2024
29987408	DS04	ES	0.90	25/06/2024
29987414	DS05	ES	0.20	25/06/2024
29987420	DS05	ES	2.20	25/06/2024
29987391	TP07	ES	0.40	25/06/2024
29987397	TP08	ES	0.20	25/06/2024
29987403	TP08	ES	0.40	25/06/2024
29987466	TP10	ES	0.40	25/06/2024
29987471	TP11	ES	0.20	25/06/2024
29987375	TP12	ES	0.40	25/06/2024
29987450	TP13	ES	0.60	24/06/2024
29987381	TP14	ES	0.40	25/06/2024
29987455	TP23	ES	0.20	25/06/2024
29987460	TP24	ES	0.50	25/06/2024
29987368	TP25	ES	0.20	24/06/2024
29987428	TP26	ES	0.40	24/06/2024
29987437	TP27	ES	0.50	24/06/2024
29987443	TP28	ES	0.20	24/06/2024

Only received samples which have had analysis scheduled will be shown on the following pages.



CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

Superseded Report: 734022

Results Legend X Test N No Determination Possible Sample Types - S - Soil/Solid UNS - Unspecified Solid GW - Ground Water SW - Surface Water LE - Land Leachate PL - Prepared Leachate PR - Process Water SA - Saline Water TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water DW - Drinking Water Non-regulatory UNL - Unspecified Liquid SL - Sludge G - Gas OTH - Other	Lab Sample No(s)	29987437	29987443	TP27	TP28	ES	ES	0.50	0.20	1kg TUB with Handle	250g Amber Jar (ALE210)	1kg TUB with Handle	250g Amber Jar (ALE210)	S	S	S	S	
	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type													
	Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 18	X	X													
	Boron Water Soluble	All	NDPs: 0 Tests: 17		X		X											
	Calorific Value (S)*	All	NDPs: 0 Tests: 5		X													
	EPH CWG GC (S)	All	NDPs: 0 Tests: 10		X													
	GRO by GC-FID (S)	All	NDPs: 0 Tests: 10		X													
Hexavalent Chromium (s)	All	NDPs: 0 Tests: 17		X		X												
Loss on Ignition in soils	All	NDPs: 0 Tests: 5		X														
Metals in solid samples by OES	All	NDPs: 0 Tests: 17		X		X												
PAH by GCMS	All	NDPs: 0 Tests: 17		X		X												
pH	All	NDPs: 0 Tests: 17		X		X												
Sample description	All	NDPs: 0 Tests: 18		X		X												
Total Organic Carbon	All	NDPs: 0 Tests: 17		X		X												
TPH CWG GC (S)	All	NDPs: 0 Tests: 10		X														
VOC MS (S)	All	NDPs: 0 Tests: 10		X														



CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

Superseded Report: 734022

Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm
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Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Inclusions	Inclusions 2
29987423	DS03	0.40	Dark Brown	Silty Clay	None	None
29987408	DS04	0.90	Dark Brown	Sandy Loam	Stones	Vegetation
29987414	DS05	0.20	Dark Brown	Silt Loam	Crushed Brick	Vegetation
29987420	DS05	2.20	Dark Brown	Silty Clay Loam	Crushed Brick	Stones
29987391	TP07	0.40	Light Brown	Silty Clay	Stones	None
29987397	TP08	0.20	Dark Brown	Sandy Clay Loam	Stones	Vegetation
29987403	TP08	0.40	Light Brown	Silty Clay	Stones	None
29987466	TP10	0.40	Dark Brown	Silt Loam	Stones	Vegetation
29987471	TP11	0.20	Dark Brown	Sandy Loam	Stones	Vegetation
29987375	TP12	0.40	Light Brown	Silty Clay	Vegetation	None
29987450	TP13	0.60	Light Brown	Silty Clay	Vegetation	None
29987381	TP14	0.40	Dark Brown	Silty Clay	Crushed Brick	Vegetation
29987455	TP23	0.20	Dark Brown	Sandy Loam	Stones	Vegetation
29987460	TP24	0.50	Light Brown	Silty Clay	None	None
29987368	TP25	0.20	Light Brown	Silt Loam	Vegetation	Stones
29987428	TP26	0.40	Dark Brown	Sandy Loam	Stones	None
29987437	TP27	0.50	Dark Brown	Sandy Loam	Stones	None
29987443	TP28	0.20	Dark Brown	Sandy Loam	Stones	Vegetation

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.



CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

Superseded Report: 734022

Results Legend		Customer Sample Ref.	DS03	DS04	DS05	DS05	TP07	TP08
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.40	0.90	0.20	2.20	0.40	0.20
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / filtered sample.		25/06/2024	25/06/2024	25/06/2024	25/06/2024	25/06/2024	25/06/2024
diss,filtr	Dissolved / filtered sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
tot.unfiltr	Total / unfiltered sample.		240627-52	240627-52	240627-52	240627-52	240627-52	240627-52
*	Subcontracted - refer to subcontractor report for accreditation status.		29987423	29987408	29987414	29987420	29987391	29987397
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery	ES	ES	ES	ES	ES	ES	
(F)	Trigger breach confirmed							
1-4456	Sample deviation (see appendix)							
Component	LOD/Units	Method						
Moisture Content Ratio (% of as received sample)	%	PM024	14	14	19	8.6	13	18
Gross Calorific Value in Dry Matter Q(V/gr/d)*	MJ/kg	SUB				1.53	0.52	
Gross Calorific Value Original Q(V/gr/ar)*	MJ/kg	SUB				1.37	<0.5	
Net Calorific Value in Dry Matter Q(V/net/d)*	MJ/kg	SUB				1.33	<0.5	
Net Calorific Value in Original Q(V/net/ar)*	MJ/kg	SUB				0.96	<0.5	
Water Analytical M (ad)*	%	SUB				2.64	1.08	
Water Gross M(ex)*	%	SUB				7.76	14.6	
Water Total M(ar)*	%	SUB				10.2	15.5	
Loss on ignition	<0.7 %	TM018				4.55	7.05	
Soil Organic Matter (SOM)	<0.35 %	TM132	2.36	0.655	9.91		3.57	5.64
pH	1 pH Units	TM133	6.63	7.26	7.08		8.01	5.87
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6	<0.6	<0.6		0.805	<0.6
Arsenic	<0.6 mg/kg	TM181	7.31	14	20.5		7.74	13.9
Barium	<0.6 mg/kg	TM181	63.7	38.4	116		110	84.4
Beryllium	<0.01 mg/kg	TM181	0.954	0.509	0.949		0.961	0.728
Cadmium	<0.02 mg/kg	TM181	0.042	0.171	0.413		0.0348	0.317
Chromium	<0.9 mg/kg	TM181	5.21	4.32	12.9		<0.9	7.29
Copper	<1.4 mg/kg	TM181	27.8	19	44		38.3	31.9
Lead	<0.7 mg/kg	TM181	19.1	20.6	60.4		29.2	45.1
Mercury	<0.1 mg/kg	TM181	<0.1	<0.1	<0.1		<0.1	<0.1
Nickel	<0.2 mg/kg	TM181	32.5	16.3	22.4		43.2	17.6
Selenium	<1 mg/kg	TM181	<1	<1	2.06		1.9	1.97
Vanadium	<0.2 mg/kg	TM181	17.7	18.6	27.2		14	24
Zinc	<1.9 mg/kg	TM181	91.4	94.7	111		143	102
Boron, water soluble	<1 mg/kg	TM222	<1	<1	<1		<1	<1



CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

Superseded Report: 734022

Results Legend		Customer Sample Ref.	TP08	TP10	TP11	TP12	TP13	TP14
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.40	0.40	0.20	0.40	0.60	0.40
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		25/06/2024	25/06/2024	25/06/2024	25/06/2024	24/06/2024	25/06/2024
diss,filtr	Dissolved / filtered sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
tot.unfilt	Total / unfiltered sample.		240627-52	240627-52	240627-52	240627-52	240627-52	240627-52
*	Subcontracted - refer to subcontractor report for accreditation status.		29987403	29987466	29987471	29987375	29987450	29987381
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery	ES	ES	ES	ES	ES	ES	
(F)	Trigger breach confirmed							
1-445@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
Moisture Content Ratio (% of as received sample)	%	PM024	11	12	13	21	14	15
Gross Calorific Value in Dry Matter Q(V/gr/d)*	MJ/kg	SUB						1.77
Gross Calorific Value Original Q(V/gr/ar)*	MJ/kg	SUB						1.47
Net Calorific Value in Dry Matter Q(V/net/d)*	MJ/kg	SUB						1.55
Net Calorific Value in Original Q(V/net/ar)*	MJ/kg	SUB						0.91
Water Analytical M (ad)*	%	SUB						1.54
Water Gross M(ex)*	%	SUB						15.4
Water Total M(ar)*	%	SUB						16.7
Loss on ignition	<0.7 %	TM018						14.3
Soil Organic Matter (SOM)	<0.35 %	TM132	1.91	0.51	3.81	3.22	2.65	12.8
pH	1 pH Units	TM133	7.23	6.13	7.22	5.24	7.05	7
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Arsenic	<0.6 mg/kg	TM181	9.08	5.46	13.8	9.56	11.2	16.4
Barium	<0.6 mg/kg	TM181	68.3	35	60.9	63.1	63.6	51.3
Beryllium	<0.01 mg/kg	TM181	1.14	0.854	0.546	0.666	0.913	1.08
Cadmium	<0.02 mg/kg	TM181	0.0934	0.0339	0.422	0.102	<0.02	0.199
Chromium	<0.9 mg/kg	TM181	7.91	8.45	9.82	13.3	<0.9	8.62
Copper	<1.4 mg/kg	TM181	33	24.2	31.2	12.4	21	30.2
Lead	<0.7 mg/kg	TM181	19.9	13.8	47.9	28.9	18.7	24.9
Mercury	<0.1 mg/kg	TM181	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	<0.2 mg/kg	TM181	41.7	20.5	17.1	11.3	22.9	24.1
Selenium	<1 mg/kg	TM181	<1	<1	<1	3.7	<1	<1
Vanadium	<0.2 mg/kg	TM181	16.8	16.7	21	31.6	20.1	14
Zinc	<1.9 mg/kg	TM181	112	73.1	105	63.6	77.5	69
Boron, water soluble	<1 mg/kg	TM222	<1	<1	<1	<1	<1	<1



CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

Superseded Report: 734022

Results Legend		Customer Sample Ref.	TP23	TP24	TP25	TP26	TP27	TP28	
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.20	0.50	0.20	0.40	0.50	0.20	
M	mCERTS accredited.		Soil/Solid (S)						
aq	Aqueous / settled sample.		25/06/2024	25/06/2024	24/06/2024	24/06/2024	24/06/2024	24/06/2024	24/06/2024
diss,filtr	Dissolved / filtered sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
tot.unfilt	Total / unfiltered sample.		240627-52	240627-52	240627-52	240627-52	240627-52	240627-52	240627-52
*	Subcontracted - refer to subcontractor report for accreditation status.		29987455	29987460	29987368	29987428	29987437	29987443	29987443
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		ES						
(F)	Trigger breach confirmed								
1-4456	Sample deviation (see appendix)								
Component	LOD/Units		Method						
Moisture Content Ratio (% of as received sample)	%	PM024	15	5.8	24	11	11	20	
Gross Calorific Value in Dry Matter Q(V/gr/d)*	MJ/kg	SUB				12.6	0.58		
Gross Calorific Value Original Q(V/gr/ar)*	MJ/kg	SUB				11.2	0.5		
Net Calorific Value in Dry Matter Q(V/net/d)*	MJ/kg	SUB				12.1	<0.5		
Net Calorific Value in Original Q(V/net/ar)*	MJ/kg	SUB				10.5	<0.5		
Water Analytical M (ad)*	%	SUB				1.25	1.71		
Water Gross M(ex)*	%	SUB				10.4	10.6		
Water Total M(ar)*	%	SUB				11.6	12.1		
Loss on ignition	<0.7 %	TM018				29.2	5.96		
Soil Organic Matter (SOM)	<0.35 %	TM132	4.33	<0.35	5.29	42.8	2	6.38	
pH	1 pH Units	TM133	6.84	6.66	6.75	4.62	7.24	7.08	
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	
Arsenic	<0.6 mg/kg	TM181	11.7	5.33	15.6	30.6	8.62	14.7	
Barium	<0.6 mg/kg	TM181	72	25.3	86.8	47.3	74	90	
Beryllium	<0.01 mg/kg	TM181	0.603	0.503	0.871	0.745	1.15	0.858	
Cadmium	<0.02 mg/kg	TM181	0.315	0.223	0.279	0.0523	0.109	0.353	
Chromium	<0.9 mg/kg	TM181	7.71	7.4	12.9	6.62	12.3	14.1	
Copper	<1.4 mg/kg	TM181	23.5	15	33.1	37	36.8	35.7	
Lead	<0.7 mg/kg	TM181	44.2	7.39	54.8	21.8	24.3	51.6	
Mercury	<0.1 mg/kg	TM181	<0.1	<0.1	0.1	<0.1	<0.1	0.13	
Nickel	<0.2 mg/kg	TM181	14.2	24.2	19	20	45.3	20.9	
Selenium	<1 mg/kg	TM181	1.33	<1	<1	<1	<1	<1	
Vanadium	<0.2 mg/kg	TM181	20.6	12.7	27.6	13.4	16.8	25.8	
Zinc	<1.9 mg/kg	TM181	108	63	113	51.3	111	113	
Boron, water soluble	<1 mg/kg	TM222	<1	<1	<1	<1	<1	<1	



CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

Superseded Report: 734022

PAH by GCMS

Results Legend		Customer Sample Ref.	DS03	DS04	DS05	TP07	TP08	TP08
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.40	0.90	0.20	0.40	0.20	0.40
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / filtered sample.		25/06/2024	25/06/2024	25/06/2024	25/06/2024	25/06/2024	25/06/2024
diss,filtr	Dissolved / filtered sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
tot.unfiltr	Total / unfiltered sample.		240627-52	240627-52	240627-52	240627-52	240627-52	240627-52
*	Subcontracted - refer to subcontractor report for accreditation status.		29987423	29987408	29987414	29987391	29987397	29987403
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		ES	ES	ES	ES	ES	ES
(F)	Trigger breach confirmed							
1-4*5@	Sample deviation (see appendix)							
Component	LOD/Units		Method					
Naphthalene-d8 % recovery**	%	TM218	93.6	76.5	79.9	79.5	81.6	79.7
Acenaphthene-d10 % recovery**	%	TM218	84.8	78.5	76.1	80.2	79.7	80.6
Phenanthrene-d10 % recovery**	%	TM218	84.6	79	79.3	79	78.5	80.2
Chrysene-d12 % recovery**	%	TM218	81.5	72.9	71.5	69.7	72.8	72.3
Perylene-d12 % recovery**	%	TM218	83	73.3	70.4	65.5	73.7	71.6
Naphthalene	<0.009 mg/kg	TM218	<0.009 M	<0.009 M	1.14 M	<0.009 3 M	0.0576 M	<0.009 M
Acenaphthylene	<0.012 mg/kg	TM218	<0.012 M	<0.012 M	0.0226 M	<0.012 3 M	0.0402 M	<0.012 M
Acenaphthene	<0.008 mg/kg	TM218	<0.008 M	<0.008 M	1.64 M	<0.008 3 M	0.119 M	<0.008 M
Fluorene	<0.01 mg/kg	TM218	<0.01 M	<0.01 M	1.09 M	<0.01 3 M	0.0996 M	<0.01 M
Phenanthrene	<0.015 mg/kg	TM218	0.0499 M	0.0333 M	6.57 M	0.0458 3 M	1.26 M	<0.015 M
Anthracene	<0.016 mg/kg	TM218	<0.016 M	<0.016 M	1.12 M	<0.016 3 M	0.295 M	<0.016 M
Fluoranthene	<0.017 mg/kg	TM218	0.041 M	0.0461 M	6.06 M	<0.017 3 M	1.75 M	<0.017 M
Pyrene	<0.015 mg/kg	TM218	0.0392 M	0.0404 M	4.94 M	0.0204 3 M	1.44 M	<0.015 M
Benz(a)anthracene	<0.014 mg/kg	TM218	0.0185 M	0.0214 M	2.35 M	0.0249 3 M	0.671 M	<0.014 M
Chrysene	<0.01 mg/kg	TM218	0.0367 M	0.0238 M	2.66 M	0.0185 3 M	0.707 M	<0.01 M
Benzo(b)fluoranthene	<0.015 mg/kg	TM218	0.0367 M	0.0256 M	2.5 M	0.0283 3 M	0.679 M	<0.015 M
Benzo(k)fluoranthene	<0.014 mg/kg	TM218	<0.014 M	<0.014 M	0.822 M	<0.014 3 M	0.252 M	<0.014 M
Benzo(a)pyrene	<0.015 mg/kg	TM218	<0.015 M	0.0178 M	1.65 M	<0.015 3 M	0.521 M	<0.015 M
Indeno(1,2,3-cd)pyrene	<0.018 mg/kg	TM218	<0.018 M	<0.018 M	0.775 M	<0.018 3 M	0.292 M	<0.018 M
Dibenzo(a,h)anthracene	<0.023 mg/kg	TM218	<0.023 M	<0.023 M	0.235 M	<0.023 3 M	0.0668 M	<0.023 M
Benzo(g,h,i)perylene	<0.024 mg/kg	TM218	<0.024 M	<0.024 M	0.828 M	0.031 3 M	0.293 M	<0.024 M
PAH, Total Detected USEPA 16	<0.118 mg/kg	TM218	0.222	0.208	34.4	0.169 3	8.54	<0.118



CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

Superseded Report: 734022

PAH by GCMS

Results Legend		Customer Sample Ref.	TP10	TP11	TP12	TP13	TP14	TP23
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.40	0.20	0.40	0.60	0.40	0.20
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		25/06/2024	25/06/2024	25/06/2024	24/06/2024	25/06/2024	25/06/2024
diss,filtr	Dissolved / filtered sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
tot.unfiltr	Total / unfiltered sample.		240627-52	240627-52	240627-52	240627-52	240627-52	240627-52
*	Subcontracted - refer to subcontractor report for accreditation status.		29987466	29987471	29987375	29987450	29987381	29987455
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery	ES	ES	ES	ES	ES	ES	
(F)	Trigger breach confirmed							
1-4*5@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
Naphthalene-d8 % recovery**	%	TM218	83.2	76.5	81.6	82	77	79.4
Acenaphthene-d10 % recovery**	%	TM218	79.6	78.5	79.5	79.1	79.6	80.5
Phenanthrene-d10 % recovery**	%	TM218	76.7	79.2	77.7	78.2	78.7	81.3
Chrysene-d12 % recovery**	%	TM218	72.4	72	71.8	70.7	69.2	72.1
Perylene-d12 % recovery**	%	TM218	74.8	70.8	71	70.9	66.3	72.6
Naphthalene	<0.009 mg/kg	TM218	<0.009 M	0.205 M	<0.009 M	0.0847 M	0.198 M	1.95 M
Acenaphthylene	<0.012 mg/kg	TM218	<0.012 M	0.0158 M				
Acenaphthene	<0.008 mg/kg	TM218	<0.008 M	0.228 M	<0.008 M	0.118 M	0.671 M	1.38 M
Fluorene	<0.01 mg/kg	TM218	<0.01 M	0.159 M	<0.01 M	0.0778 M	0.456 M	0.877 M
Phenanthrene	<0.015 mg/kg	TM218	<0.015 M	1.28 M	<0.015 M	0.652 M	3.11 M	7.89 M
Anthracene	<0.016 mg/kg	TM218	<0.016 M	0.241 M	<0.016 M	0.0984 M	0.507 M	1.5 M
Fluoranthene	<0.017 mg/kg	TM218	0.021 M	1.48 M	<0.017 M	0.702 M	3.1 M	7.8 M
Pyrene	<0.015 mg/kg	TM218	0.0184 M	1.28 M	<0.015 M	0.613 M	2.63 M	6.35 M
Benz(a)anthracene	<0.014 mg/kg	TM218	<0.014 M	0.625 M	<0.014 M	0.281 M	1.23 M	2.8 M
Chrysene	<0.01 mg/kg	TM218	0.0116 M	0.731 M	<0.01 M	0.356 M	1.42 M	3.09 M
Benzo(b)fluoranthene	<0.015 mg/kg	TM218	<0.015 M	0.742 M	<0.015 M	0.328 M	1.35 M	3.24 M
Benzo(k)fluoranthene	<0.014 mg/kg	TM218	<0.014 M	0.237 M	<0.014 M	0.111 M	0.44 M	1.07 M
Benzo(a)pyrene	<0.015 mg/kg	TM218	<0.015 M	0.512 M	<0.015 M	0.234 M	0.942 M	2.39 M
Indeno(1,2,3-cd)pyrene	<0.018 mg/kg	TM218	<0.018 M	0.286 M	<0.018 M	0.124 M	0.531 M	1.37 M
Dibenzo(a,h)anthracene	<0.023 mg/kg	TM218	<0.023 M	0.0739 M	<0.023 M	0.0327 M	0.144 M	0.294 M
Benzo(g,h,i)perylene	<0.024 mg/kg	TM218	<0.024 M	0.321 M	<0.024 M	0.149 M	0.536 M	1.56 M
PAH, Total Detected USEPA 16	<0.118 mg/kg	TM218	<0.118 M	8.4 M	<0.118 M	3.96 M	17.3 M	43.6 M



CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

Superseded Report: 734022

PAH by GCMS

Results Legend		Customer Sample Ref.	TP24	TP25	TP26	TP27	TP28
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50	0.20	0.40	0.50	0.20
M	mCERTS accredited.		Soil/Solid (S)				
aq	Aqueous / settled sample.		25/06/2024	24/06/2024	24/06/2024	24/06/2024	24/06/2024
diss,filtr	Dissolved / filtered sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
tot.unfiltr	Total / unfiltered sample.		240627-52	240627-52	240627-52	240627-52	240627-52
*	Subcontracted - refer to subcontractor report for accreditation status.		29987460	29987368	29987428	29987437	29987443
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		ES	ES	ES	ES	ES
(F)	Trigger breach confirmed						
1-4456@	Sample deviation (see appendix)						
Component	LOD/Units		Method				
Naphthalene-d8 % recovery**	%	TM218	79.8	78.9	81.5	93.1	76
Acenaphthene-d10 % recovery**	%	TM218	76.9	78.8	82	81.5	79.1
Phenanthrene-d10 % recovery**	%	TM218	75.6	78.6	80.7	80.4	77.8
Chrysene-d12 % recovery**	%	TM218	70	71.2	67.2	73.5	68.3
Perylene-d12 % recovery**	%	TM218	70.2	70.8	53.5	67.9	66.9
Naphthalene	<0.009 mg/kg	TM218	<0.009 M	0.332 M	0.0401 3 M	<0.009 3 M	0.404 3 M
Acenaphthylene	<0.012 mg/kg	TM218	<0.012 M	0.0177 M	<0.012 3 M	<0.012 3 M	0.0169 3 M
Acenaphthene	<0.008 mg/kg	TM218	0.0106 M	1.3 M	0.0167 3 M	<0.008 3 M	0.879 3 M
Fluorene	<0.01 mg/kg	TM218	<0.01 M	0.785 M	0.0324 3 M	<0.01 3 M	0.594 3 M
Phenanthrene	<0.015 mg/kg	TM218	0.0622 M	6.5 M	0.919 3 M	0.0357 3 M	4.61 3 M
Anthracene	<0.016 mg/kg	TM218	<0.016 M	1.1 M	<0.016 3 M	0.0351 3 M	0.782 3 M
Fluoranthene	<0.017 mg/kg	TM218	0.0856 M	7.5 M	0.145 3 M	<0.017 3 M	5.08 3 M
Pyrene	<0.015 mg/kg	TM218	0.0749 M	6.22 M	0.291 3 M	<0.015 3 M	4.26 3 M
Benz(a)anthracene	<0.014 mg/kg	TM218	0.0386 M	2.76 M	0.0906 3 M	<0.014 3 M	1.97 3 M
Chrysene	<0.01 mg/kg	TM218	0.046 M	2.99 M	0.178 3 M	<0.01 3 M	2.27 3 M
Benzo(b)fluoranthene	<0.015 mg/kg	TM218	0.0469 M	3.04 M	0.0676 3 M	<0.015 3 M	2.11 3 M
Benzo(k)fluoranthene	<0.014 mg/kg	TM218	0.0167 M	1.1 M	0.0165 3 M	<0.014 3 M	0.761 3 M
Benzo(a)pyrene	<0.015 mg/kg	TM218	0.0318 M	2.35 M	0.0315 3 M	<0.015 3 M	1.53 3 M
Indeno(1,2,3-cd)pyrene	<0.018 mg/kg	TM218	<0.018 M	1.3 M	<0.018 3 M	<0.018 3 M	0.836 3 M
Dibenzo(a,h)anthracene	<0.023 mg/kg	TM218	<0.023 M	0.284 M	<0.023 3 M	<0.023 3 M	0.21 3 M
Benzo(g,h,i)perylene	<0.024 mg/kg	TM218	<0.024 M	1.45 M	<0.024 3 M	<0.024 3 M	0.87 3 M
PAH, Total Detected USEPA 16	<0.118 mg/kg	TM218	0.413	39	1.83	<0.118	27.2



CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

Superseded Report: 734022

TPH CWG (S)

Results Legend		Customer Sample Ref.	DS03	DS04	TP07	TP08	TP10	TP13
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.40	0.90	0.40	0.40	0.40	0.60
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		25/06/2024	25/06/2024	25/06/2024	25/06/2024	25/06/2024	24/06/2024
diss,filtr	Dissolved / filtered sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
tot.unfiltr	Total / unfiltered sample.		240627-52	240627-52	240627-52	240627-52	240627-52	240627-52
*	Subcontracted - refer to subcontractor report for accreditation status.		29987423	29987408	29987391	29987403	29987466	29987450
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		ES	ES	ES	ES	ES	ES
(F)	Trigger breach confirmed							
1-4456	Sample deviation (see appendix)							
Component	LOD/Units		Method					
GRO Surrogate % recovery**	%	TM089	88	107	75.2	78	114	71.2
Aliphatics >C5-C6 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aliphatics >C6-C8 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aliphatics >C8-C10 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aliphatics >C10-C12 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1 #	<1 #	1.42 #	<1 #	<1 #	<1 #
Aliphatics >C12-C16 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1 #	<1 #	9.79 #	<1 #	<1 #	<1 #
Aliphatics >C16-C21 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1 #	<1 #	11.1 #	1.24 #	<1 #	<1 #
Aliphatics >C16-C35 (EH_2D_AL_#1)	<1 mg/kg	TM414	2.58 #	<1 #	21.6 #	3.08 #	<1 #	1.8 #
Aliphatics >C21-C35 (EH_2D_AL_#1)	<1 mg/kg	TM414	1.67 #	<1 #	10.5 #	1.84 #	<1 #	1.23 #
Aliphatics >C35-C44 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1 #	<1 #	1.69 #	<1 #	<1 #	<1 #
Total Aliphatics >C10-C44 (EH_2D_AR_#1)	<5 mg/kg	TM414	<5 #	<5 #	34.5 #	<5 #	<5 #	<5 #
Total Aliphatics & Aromatics >C10-C44 (EH_2D_Total_#1)	<10 mg/kg	TM414	<10 #	<10 #	40.3 #	<10 #	<10 #	<10 #
Aromatics >EC5-EC7 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aromatics >EC7-EC8 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aromatics >EC8-EC10 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aromatics > EC10-EC12 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Aromatics > EC12-EC16 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1 #	<1 #	1.5 #	<1 #	<1 #	<1 #
Aromatics > EC16-EC21 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Aromatics > EC16-EC35 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1 #	<1 #	3.33 #	<1 #	<1 #	1.39 #
Aromatics > EC21-EC35 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1 #	<1 #	3.08 #	<1 #	<1 #	1.06 #
Aromatics >EC35-EC44 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Aromatics > EC40-EC44 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Total Aromatics > EC10-EC44 (EH_2D_AR_#1)	<5 mg/kg	TM414	<5 #	<5 #	5.83 #	<5 #	<5 #	<5 #
Total Aliphatics & Aromatics >C5-C44 (EH_2D_Total_#1+HS_1D_Total)	<10 mg/kg	TM414	<10 #	<10 #	40.3 #	<10 #	<10 #	<10 #
Total Aliphatics >C5-C10 (HS_1D_AL_TOTAL)	<0.05 mg/kg	TM089	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Total Aromatics >EC5-EC10 (HS_1D_AR_TOTAL)	<0.05 mg/kg	TM089	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
GRO >C5-C10 (HS_1D_TOTAL)	<0.02 mg/kg	TM089	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02



CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

Superseded Report: 734022

TPH CWG (S)

Results Legend		Customer Sample Ref.	TP14	TP24	TP25	TP27		
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.40	0.50	0.20	0.50		
M	mCERTS accredited.		Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)		
aq	Aqueous / settled sample.		25/06/2024	25/06/2024	24/06/2024	24/06/2024		
diss,fit	Dissolved / filtered sample.							
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted - refer to subcontractor report for accreditation status.							
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		27/06/2024	27/06/2024	27/06/2024	27/06/2024		
(F)	Trigger breach confirmed		240627-52	240627-52	240627-52	240627-52		
1-446@	Sample deviation (see appendix)		29987381	29987460	29987368	29987437		
			ES	ES	ES	ES		
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	60.8	93.7	108	77.7		
Aliphatics >C5-C6 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	2	
Aliphatics >C6-C8 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	2	
Aliphatics >C8-C10 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	2	
Aliphatics >C10-C12 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1	<1	<1	<1	#	#
Aliphatics >C12-C16 (EH_2D_AL_#1)	<1 mg/kg	TM414	2.62	<1	<1	5.48	#	#
Aliphatics >C16-C21 (EH_2D_AL_#1)	<1 mg/kg	TM414	5.15	<1	<1	8.92	#	#
Aliphatics >C16-C35 (EH_2D_AL_#1)	<1 mg/kg	TM414	12.8	<1	23.9	19.6		
Aliphatics >C21-C35 (EH_2D_AL_#1)	<1 mg/kg	TM414	7.69	<1	22.9	10.6	#	#
Aliphatics >C35-C44 (EH_2D_AL_#1)	<1 mg/kg	TM414	4.99	<1	1.73	1.46		
Total Aliphatics >C10-C44 (EH_2D_AR_#1)	<5 mg/kg	TM414	21	<5	25.6	27.1		
Total Aliphatics & Aromatics >C10-C44 (EH_2D_Total_#1)	<10 mg/kg	TM414	62.5	<10	128	29.7		
Aromatics >EC5-EC7 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	2	
Aromatics >EC7-EC8 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	2	
Aromatics >EC8-EC10 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	2	
Aromatics > EC10-EC12 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	<1	<1	<1	#	#
Aromatics > EC12-EC16 (EH_2D_AR_#1)	<1 mg/kg	TM414	1.61	<1	3.41	<1	#	#
Aromatics > EC16-EC21 (EH_2D_AR_#1)	<1 mg/kg	TM414	10.8	1.1	22.7	<1	#	#
Aromatics > EC16-EC35 (EH_2D_AR_#1)	<1 mg/kg	TM414	38.8	1.87	91.6	<1		
Aromatics > EC21-EC35 (EH_2D_AR_#1)	<1 mg/kg	TM414	28	<1	68.9	<1	#	#
Aromatics >EC35-EC44 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	<1	6.94	<1		
Aromatics > EC40-EC44 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	<1	<1	<1		
Total Aromatics > EC10-EC44 (EH_2D_AR_#1)	<5 mg/kg	TM414	41.5	<5	102	<5		
Total Aliphatics & Aromatics >C5-C44 (EH_2D_Total_#1+HS_1D_Total)	<10 mg/kg	TM414	62.5	<10	128	27.1		
Total Aliphatics >C5-C10 (HS_1D_AL_TOTAL)	<0.05 mg/kg	TM089	<0.05	<0.05	<0.05	<0.05	2	
Total Aromatics >EC5-EC10 (HS_1D_AR_TOTAL)	<0.05 mg/kg	TM089	<0.05	<0.05	<0.05	<0.05	2	
GRO >C5-C10 (HS_1D_TOTAL)	<0.02 mg/kg	TM089	<0.02	<0.02	<0.02	<0.02	2	



CERTIFICATE OF ANALYSIS

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SDG: 240627-52
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Superseded Report: 734022

Asbestos Identification - Solid Samples

Results Legend

- # ISO17025 accredited.
- M mCERTS accredited.
- * Subcontracted test.
- (F) Trigger breach confirmed
- 1-5&*\$@ Sample deviation (see appendix)

Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Asbestos Actinolite	Asbestos Anthophyllite	Asbestos Tremolite	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Non-Asbestos Fibre
01/07/2024	Alex Horner	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
01/07/2024	Alex Horner	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
01/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
04/07/2024	Renata Bozhkov	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
01/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
01/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
02/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
01/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



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SDG: 240627-52
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Superseded Report: 734022

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Asbestos Actinolite	Asbestos Anthophyllite	Asbestos Tremolite	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP11ES 0.20 SOLID 25/06/2024 00:00:00 27/06/2024 09:00:00 240627-52 29987471 TM048	02/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP12ES 0.40 SOLID 25/06/2024 00:00:00 27/06/2024 09:00:00 240627-52 29987375 TM048	02/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP13ES 0.60 SOLID 24/06/2024 00:00:00 27/06/2024 09:00:00 240627-52 29987450 TM048	02/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP14ES 0.40 SOLID 25/06/2024 00:00:00 27/06/2024 09:00:00 240627-52 29987381 TM048	01/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP23ES 0.20 SOLID 25/06/2024 00:00:00 27/06/2024 09:00:00 240627-52 29987455 TM048	01/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP24ES 0.50 SOLID 25/06/2024 00:00:00 27/06/2024 09:00:00 240627-52 29987460 TM048	01/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP25ES 0.20 SOLID 24/06/2024 00:00:00 27/06/2024 09:00:00 240627-52 29987368 TM048	01/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP26ES 0.40 SOLID 24/06/2024 00:00:00 27/06/2024 09:00:00 240627-52 29987428 TM048	01/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP27ES 0.50 SOLID 24/06/2024 00:00:00 27/06/2024 09:00:00 240627-52 29987437 TM048	01/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



CERTIFICATE OF ANALYSIS

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SDG: 240627-52
Client Ref.: Low Farm

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Superseded Report: 734022

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Asbestos Actinolite	Asbestos Anthophyllite	Asbestos Tremolite	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Non-Asbestos Fibre
Cust. Sample Ref.	TP28ES	01/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Depth (m)	0.20										
Sample Type	SOLID										
Date Sampled	24/06/2024 00:00:00										
Date Received	27/06/2024 09:00:00										
SDG	240627-52										
Original Sample Method Number	29987443 TM048										



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Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

Superseded Report: 734022

Table of Results - Appendix

Method No	Description
TM414	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GCxGC-FID
TM089	Determination of Gasoline Range Hydrocarbons (GRO) by Headspace GC-FID (C4-C12)
TM151	Determination of Hexavalent Chromium using Kone analyser
TM181	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES
PM024	Soil preparation including homogenisation, moisture, screens of soils for Asbestos Containing Material
TM018	Determination of Loss on Ignition
TM116	Determination of Volatile Organic Compounds by Headspace / GC-MS
TM132	ELTRA CS800 Operators Guide
TM133	Determination of pH in Soil and Water using the GLpH pH Meter
SUB	Subcontracted Test
TM048	Identification of Asbestos in Bulk Material
TM218	The determination of PAH in soil samples by GC-MS
TM222	Determination of Hot Water Soluble Boron in Soils (10:1 Water:Soil) by ICP OES.

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).



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Superseded Report: 734022

Test Completion Dates

Lab Sample No(s)	29987423	29987408	29987414	29987420	29987391	29987397	29987403	29987466	29987471	29987375
Customer Sample Ref.	DS03	DS04	DS05	DS05	TP07	TP08	TP08	TP10	TP11	TP12
AGS Ref.	ES									
Depth	0.40	0.90	0.20	2.20	0.40	0.20	0.40	0.40	0.20	0.40
Type	Soil/Solid (S)									
Asbestos ID in Solid Samples	02-Jul-2024	02-Jul-2024	01-Jul-2024	04-Jul-2024	01-Jul-2024	01-Jul-2024	02-Jul-2024	01-Jul-2024	02-Jul-2024	02-Jul-2024
Boron Water Soluble	03-Jul-2024	02-Jul-2024	02-Jul-2024		02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	03-Jul-2024
Calorific Value (S)*				18-Jul-2024	18-Jul-2024					
EPH CWG GC (S)	03-Jul-2024	02-Jul-2024			02-Jul-2024		02-Jul-2024	03-Jul-2024		
GRO by GC-FID (S)	01-Jul-2024	01-Jul-2024			01-Jul-2024		01-Jul-2024	01-Jul-2024		
Hexavalent Chromium (s)	01-Jul-2024	01-Jul-2024	01-Jul-2024		01-Jul-2024	01-Jul-2024	01-Jul-2024	01-Jul-2024	02-Jul-2024	01-Jul-2024
Loss on Ignition in soils				02-Jul-2024	02-Jul-2024					
Metals in solid samples by OES	02-Jul-2024	02-Jul-2024	02-Jul-2024		02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024
PAH by GCMS	08-Jul-2024	04-Jul-2024	04-Jul-2024		04-Jul-2024	04-Jul-2024	04-Jul-2024	04-Jul-2024	04-Jul-2024	04-Jul-2024
pH	01-Jul-2024	02-Jul-2024	02-Jul-2024		01-Jul-2024	01-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	01-Jul-2024
Sample description	28-Jun-2024									
Total Organic Carbon	03-Jul-2024	03-Jul-2024	03-Jul-2024		03-Jul-2024	03-Jul-2024	03-Jul-2024	03-Jul-2024	03-Jul-2024	03-Jul-2024
TPH CWG GC (S)	03-Jul-2024	02-Jul-2024			02-Jul-2024		02-Jul-2024	03-Jul-2024		
VOC MS (S)	01-Jul-2024	01-Jul-2024			01-Jul-2024		01-Jul-2024	01-Jul-2024		

Lab Sample No(s)	29987450	29987381	29987455	29987460	29987368	29987428	29987437	29987443
Customer Sample Ref.	TP13	TP14	TP23	TP24	TP25	TP26	TP27	TP28
AGS Ref.	ES							
Depth	0.60	0.40	0.20	0.50	0.20	0.40	0.50	0.20
Type	Soil/Solid (S)							
Asbestos ID in Solid Samples	02-Jul-2024	01-Jul-2024						
Boron Water Soluble	03-Jul-2024	02-Jul-2024						
Calorific Value (S)*		18-Jul-2024				18-Jul-2024	18-Jul-2024	
EPH CWG GC (S)	02-Jul-2024	02-Jul-2024		03-Jul-2024	03-Jul-2024		02-Jul-2024	
GRO by GC-FID (S)	01-Jul-2024	01-Jul-2024		01-Jul-2024	01-Jul-2024		02-Jul-2024	
Hexavalent Chromium (s)	01-Jul-2024	02-Jul-2024						
Loss on Ignition in soils		02-Jul-2024				02-Jul-2024	02-Jul-2024	
Metals in solid samples by OES	02-Jul-2024	03-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024
PAH by GCMS	04-Jul-2024	04-Jul-2024	04-Jul-2024	04-Jul-2024	04-Jul-2024	08-Jul-2024	08-Jul-2024	04-Jul-2024
pH	01-Jul-2024	02-Jul-2024	02-Jul-2024	01-Jul-2024	01-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024
Sample description	28-Jun-2024							
Total Organic Carbon	03-Jul-2024							
TPH CWG GC (S)	02-Jul-2024	02-Jul-2024		03-Jul-2024	03-Jul-2024		02-Jul-2024	
VOC MS (S)	01-Jul-2024	01-Jul-2024		01-Jul-2024	01-Jul-2024		02-Jul-2024	



CERTIFICATE OF ANALYSIS

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SDG: 240627-52
Client Ref.: Low Farm

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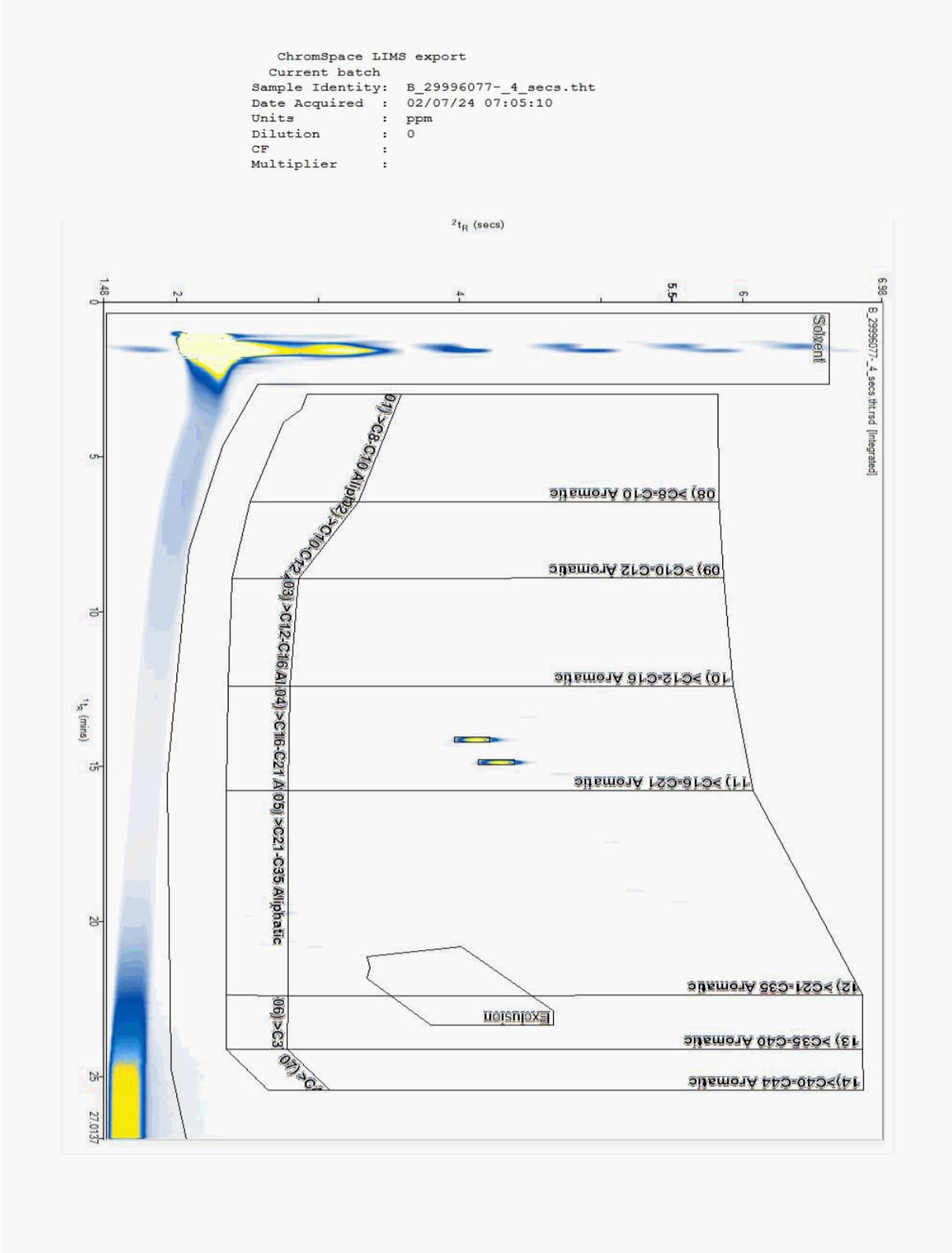
Superseded Report: 734022

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 29996077
Sample ID : TP24

Depth : 0.50





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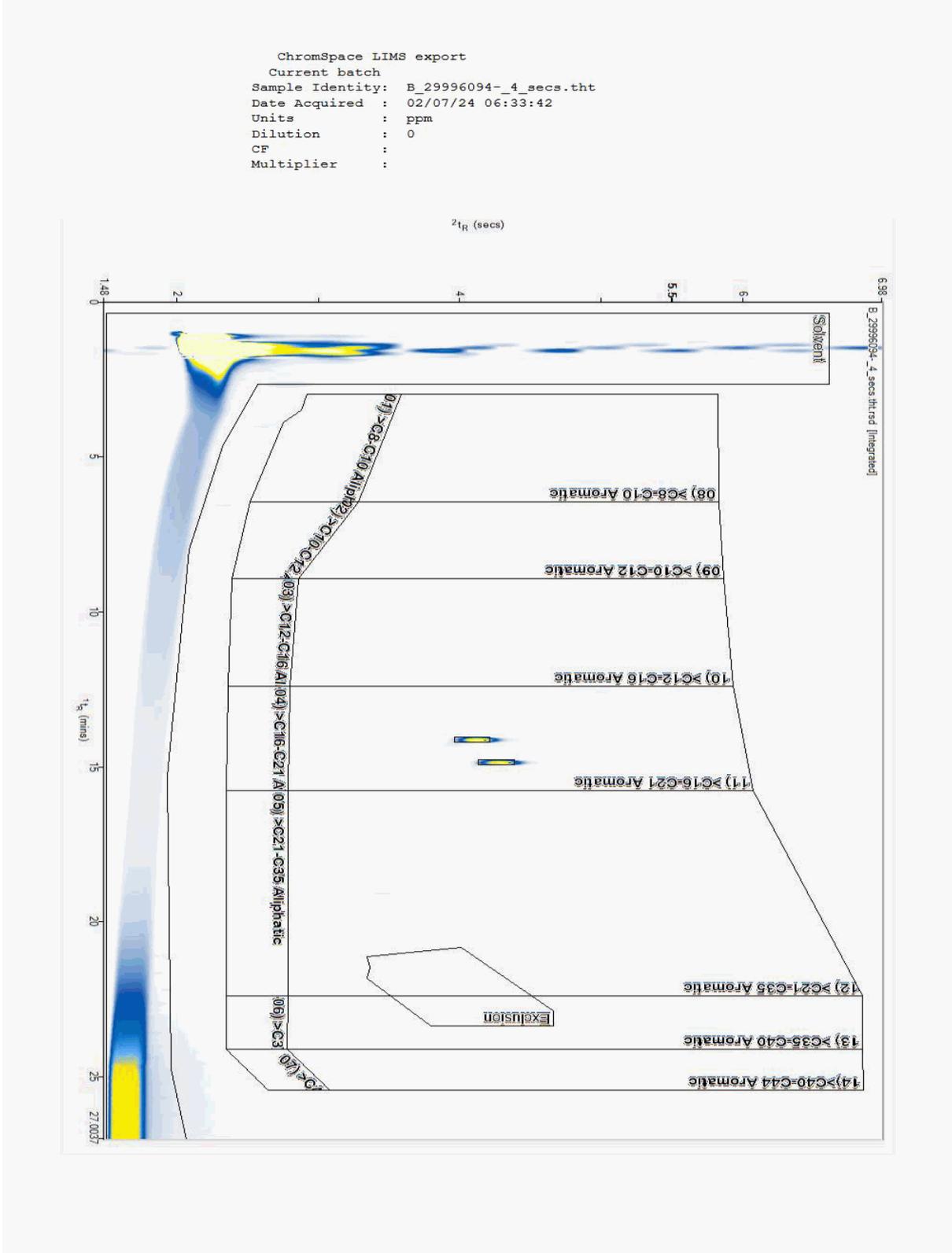
Superseded Report: 734022

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 29996094
Sample ID : TP10

Depth : 0.40





CERTIFICATE OF ANALYSIS

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Location: Low Farm

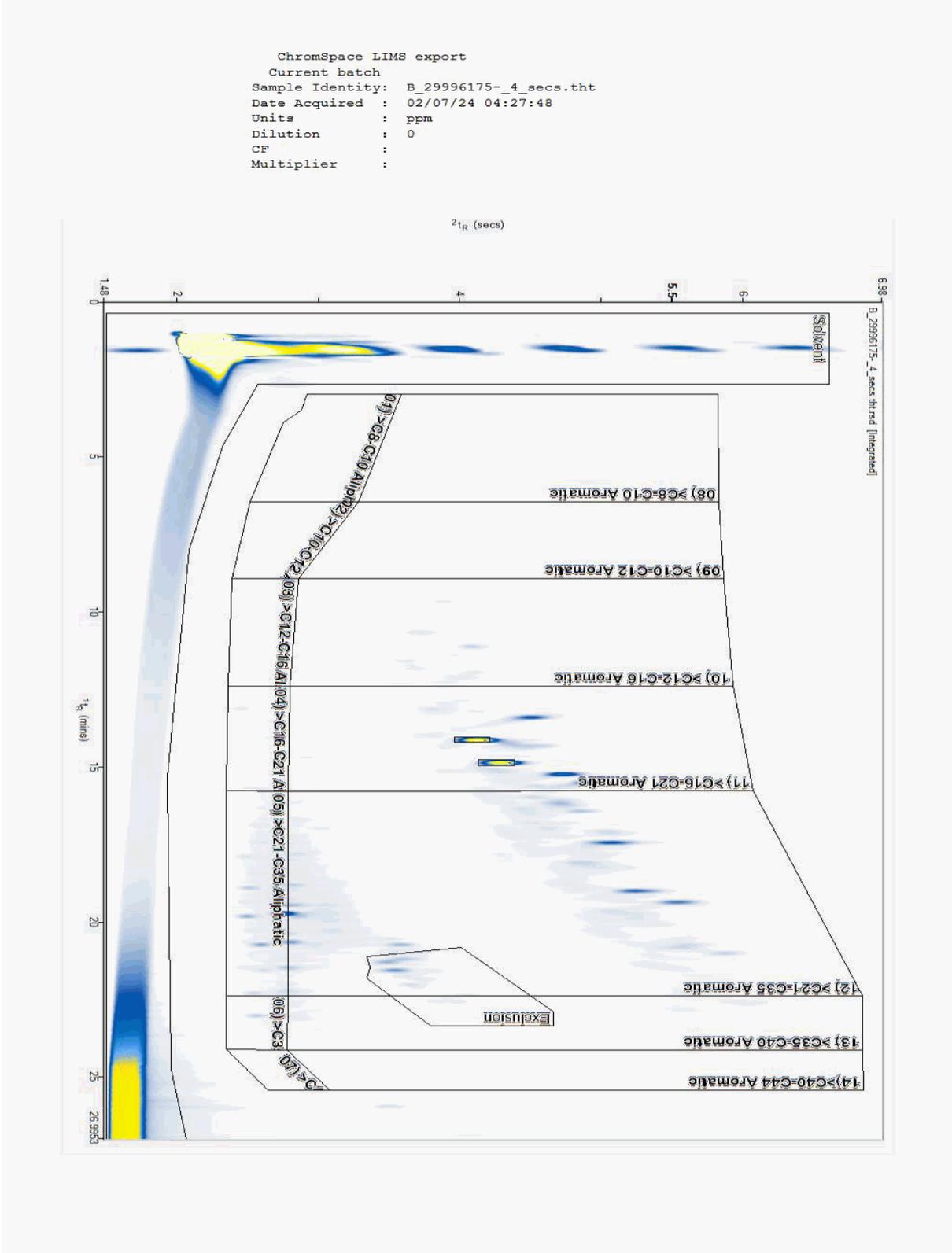
Superseded Report: 734022

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 29996175
Sample ID : TP25

Depth : 0.20





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

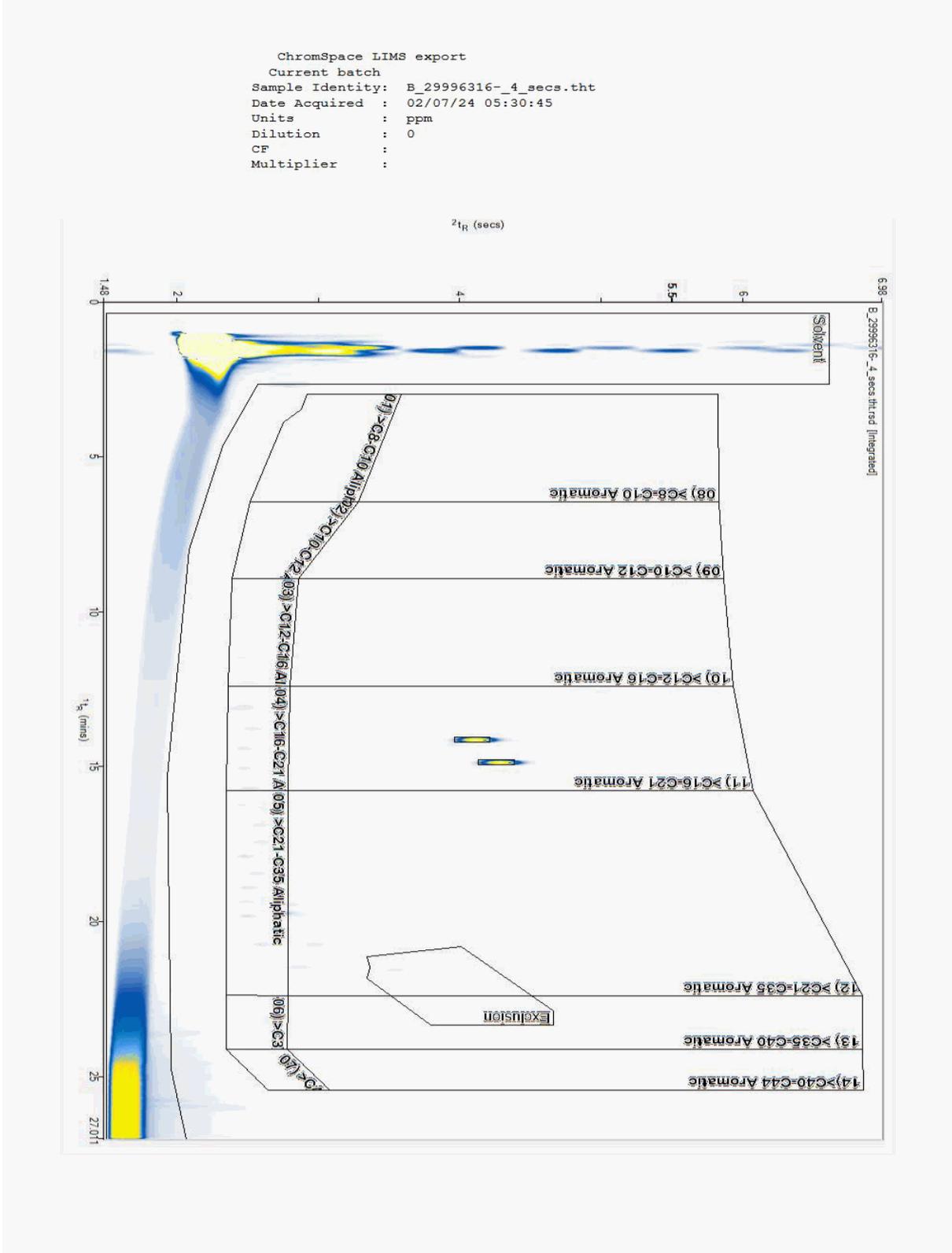
Superseded Report: 734022

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 29996316
Sample ID : DS03

Depth : 0.40





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Report Number: 735101
Location: Low Farm

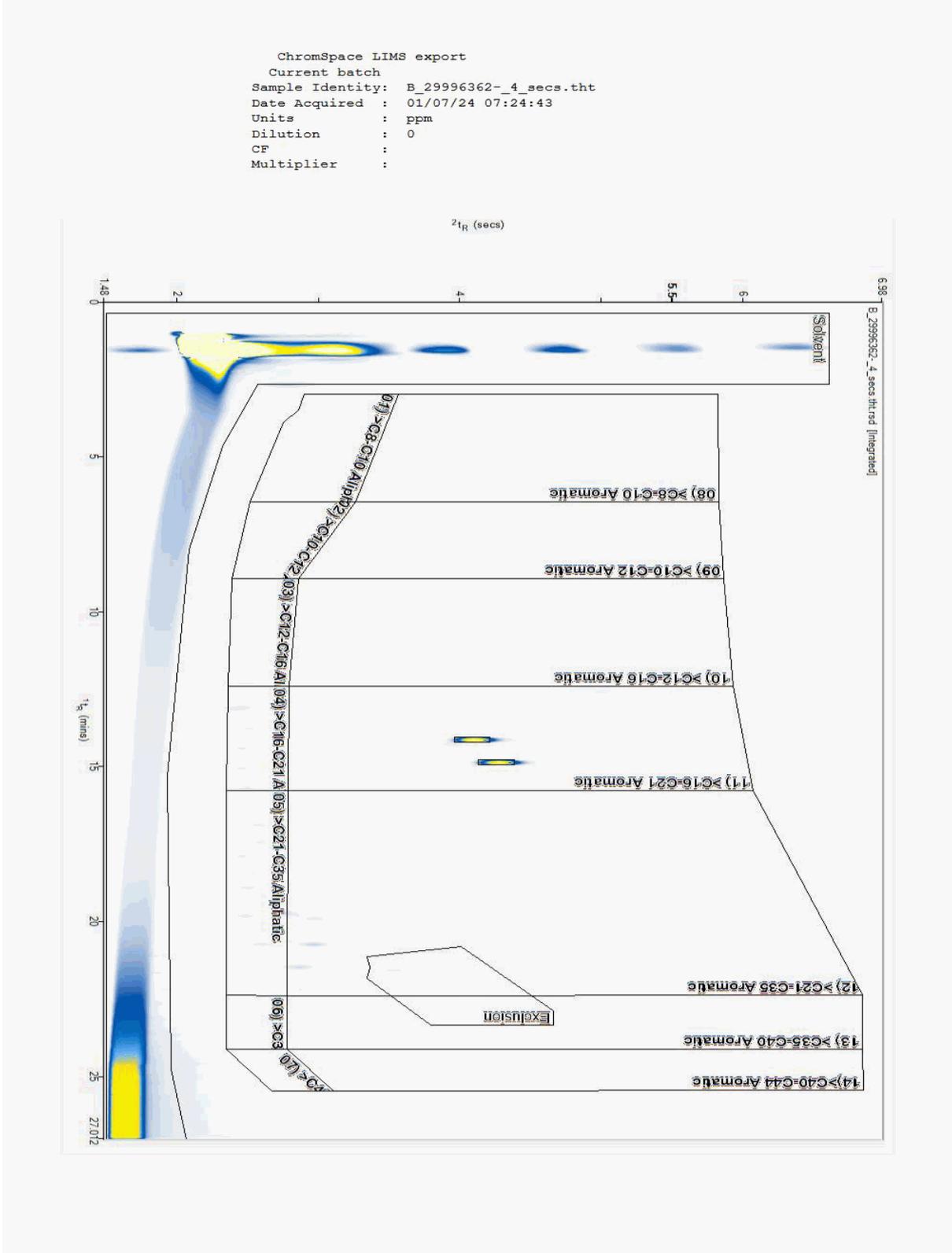
Superseded Report: 734022

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 29996362
Sample ID : TP13

Depth : 0.60





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

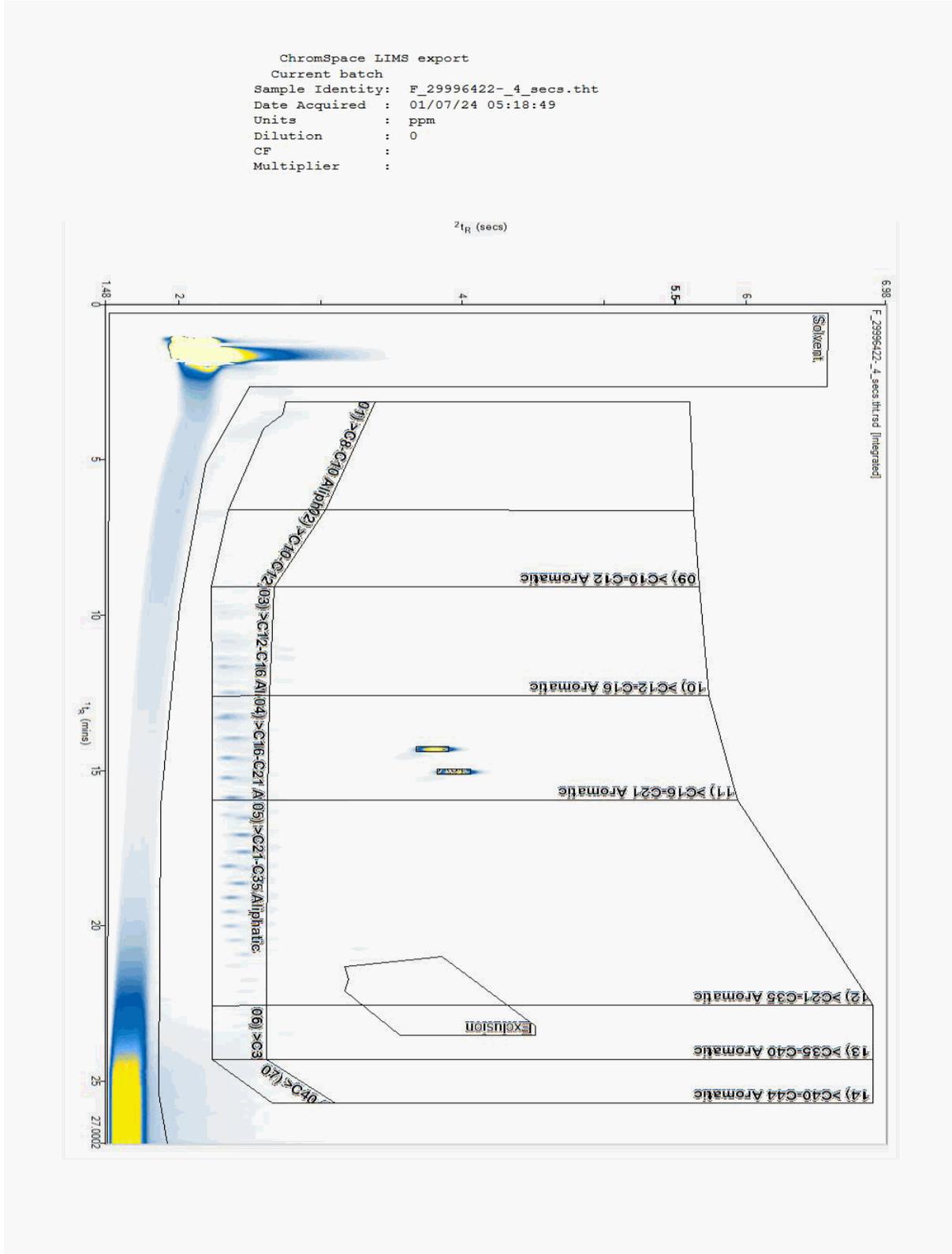
Superseded Report: 734022

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 29996422
Sample ID : TP27

Depth : 0.50





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

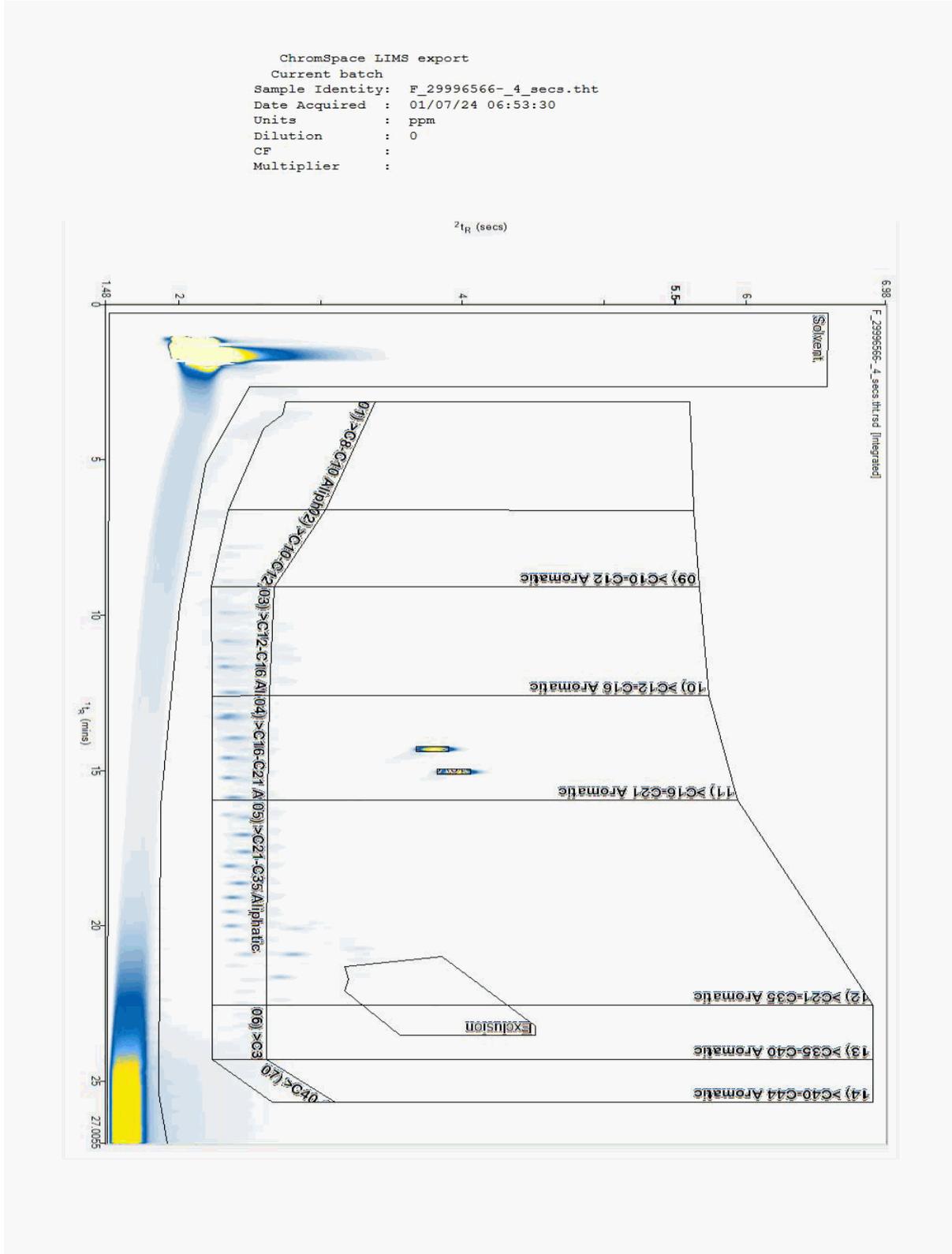
Superseded Report: 734022

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 29996566
Sample ID : TP07

Depth : 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

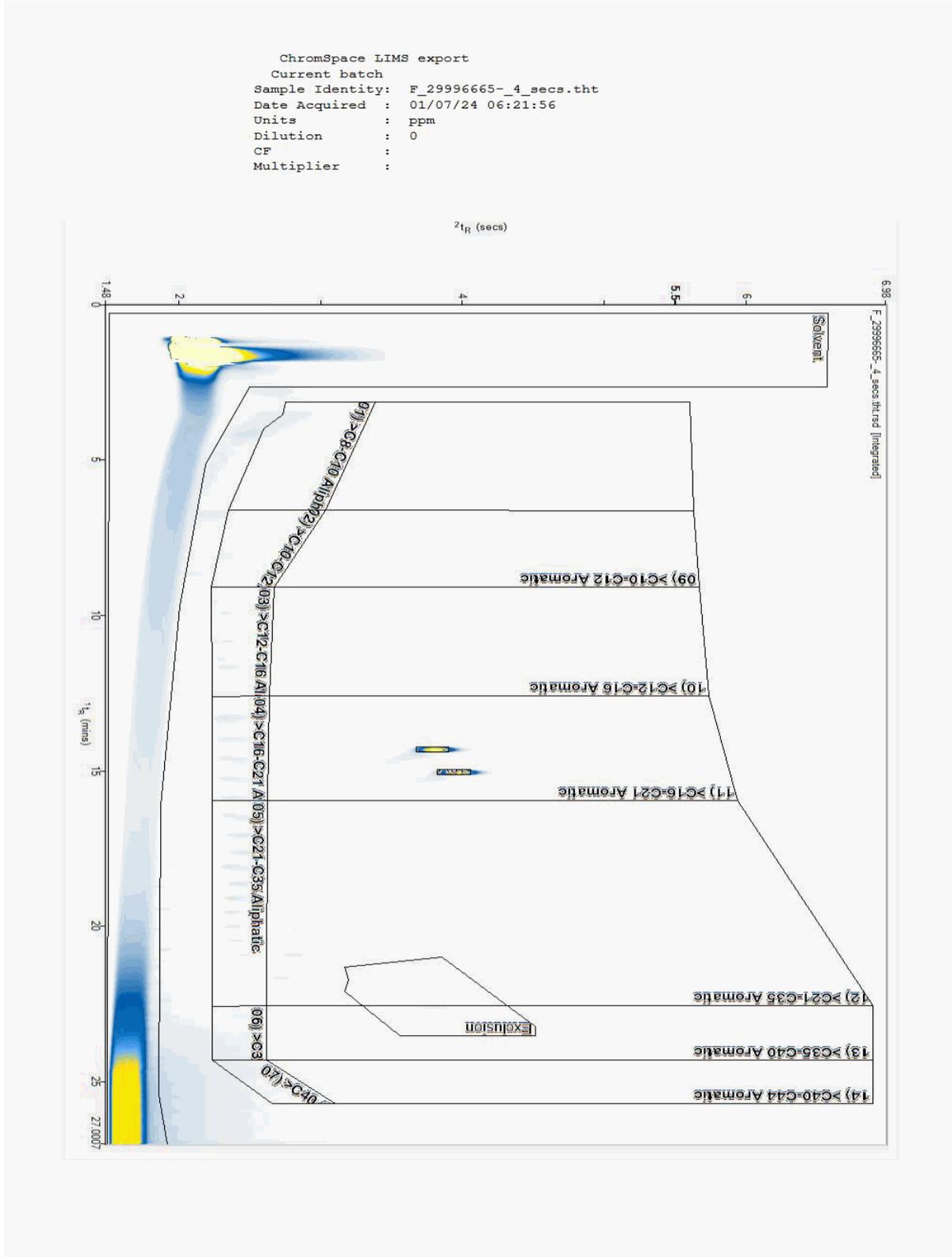
Superseded Report: 734022

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 29996665
Sample ID : TP08

Depth : 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

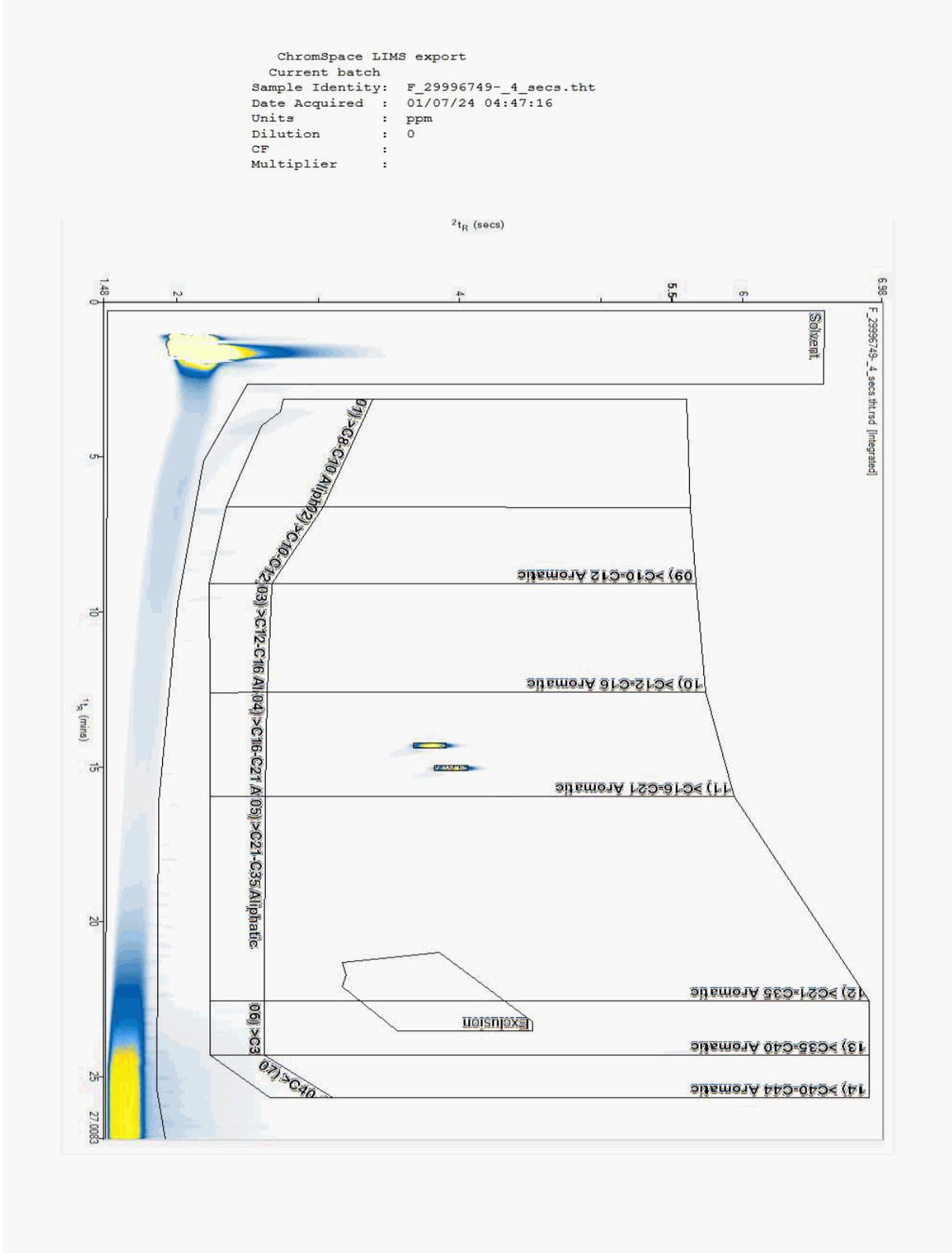
Superseded Report: 734022

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 29996749
Sample ID : DS04

Depth : 0.90





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

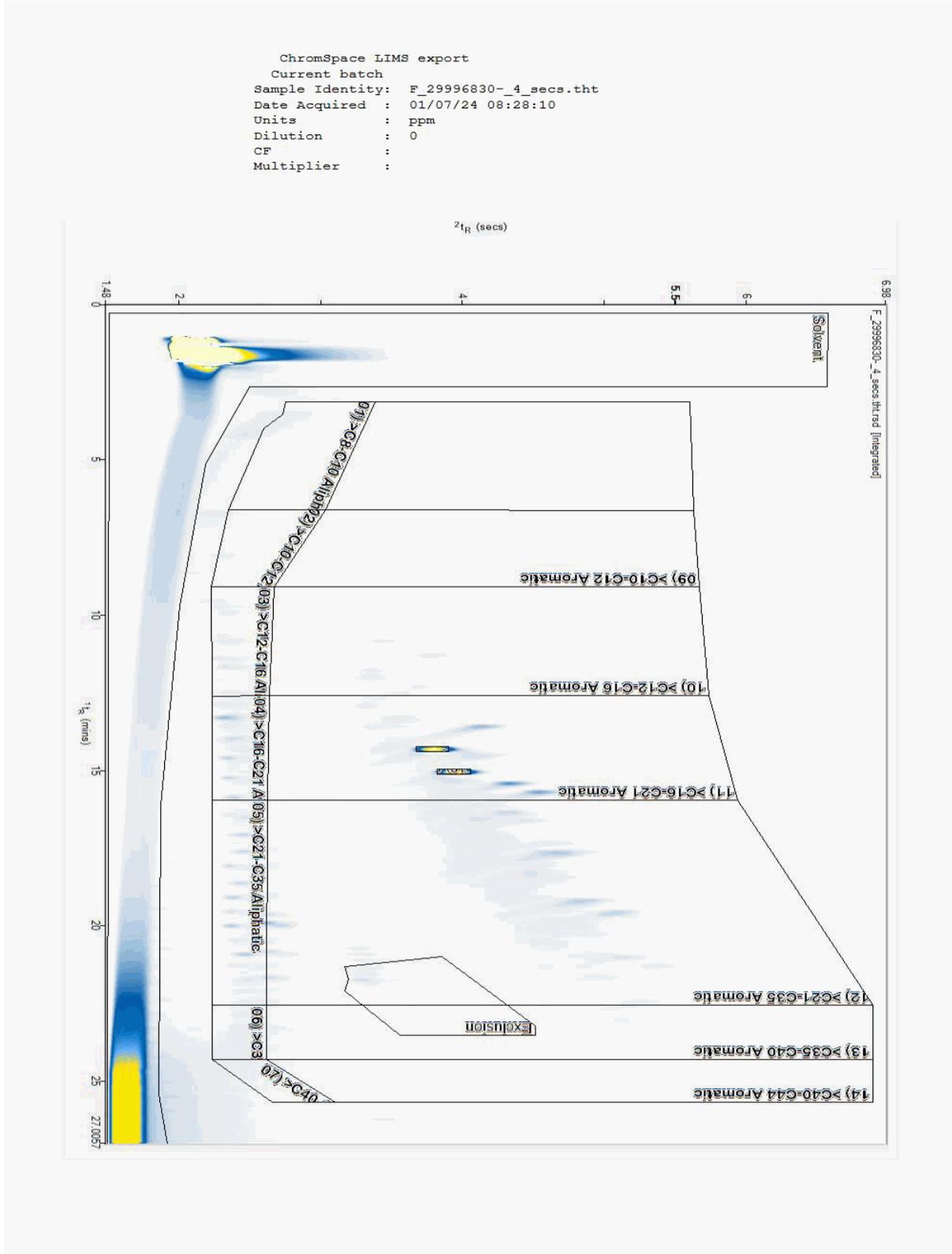
Superseded Report: 734022

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 29996830
Sample ID : TP14

Depth : 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

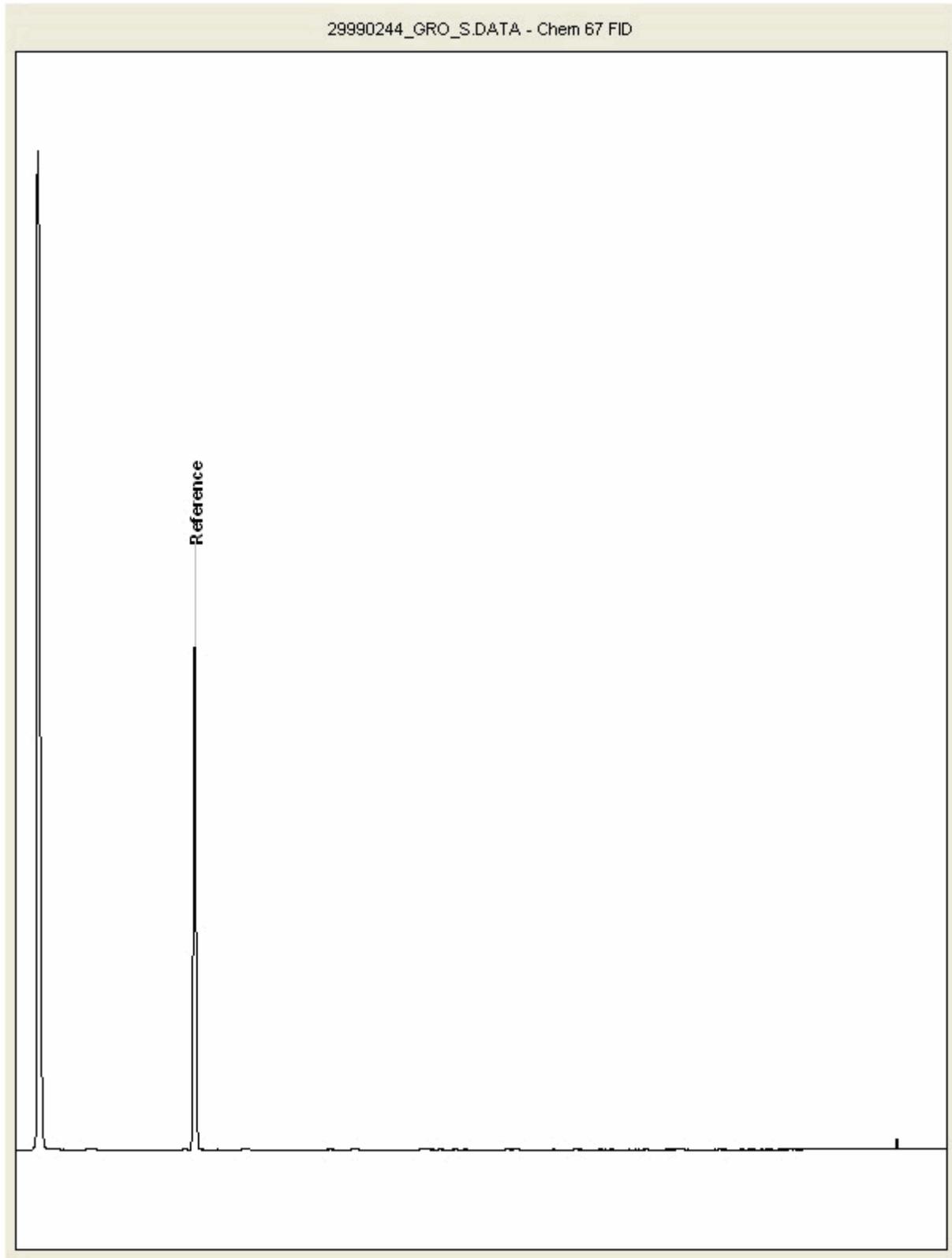
Superseded Report: 734022

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 29990244
Sample ID : DS03

Depth : 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

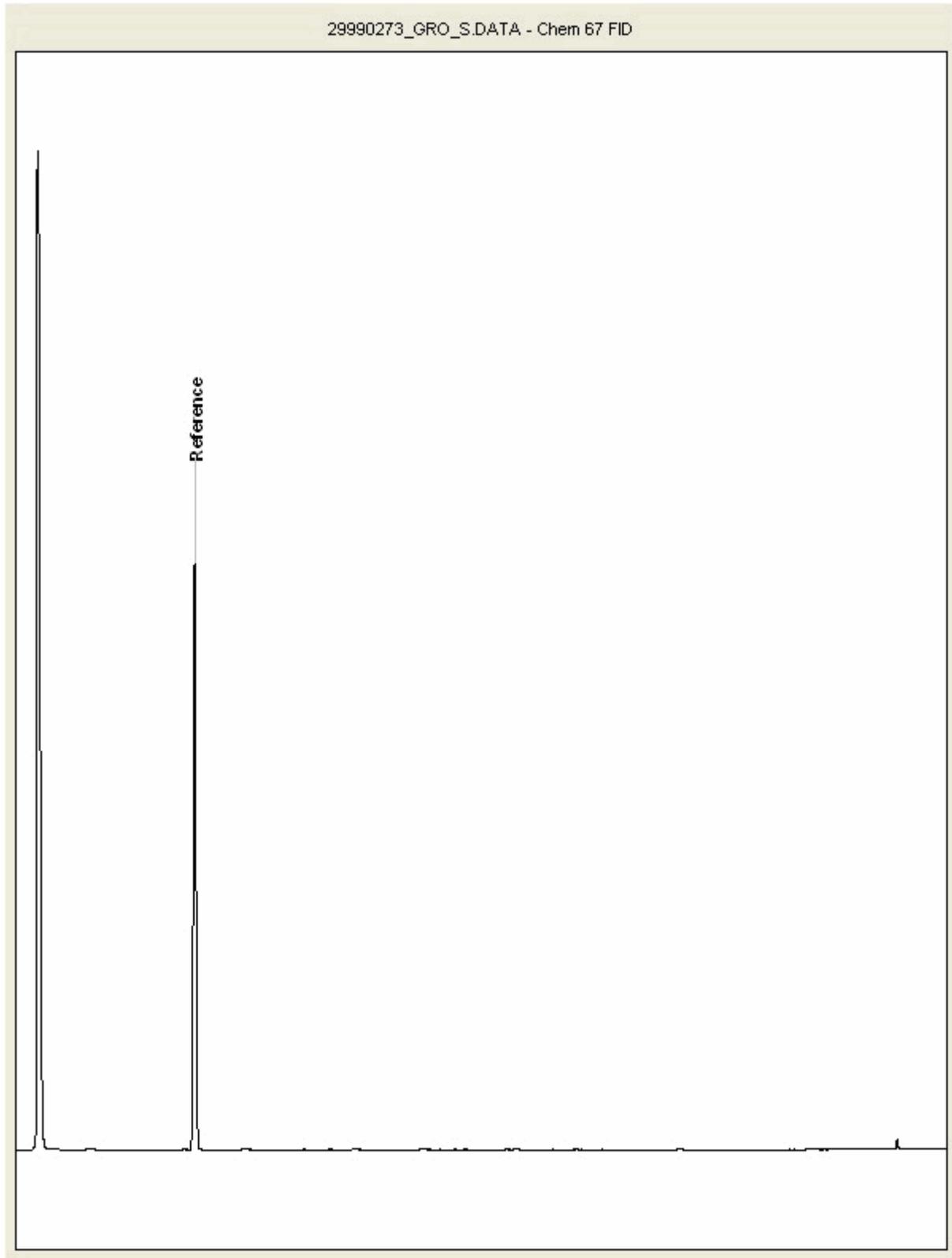
Superseded Report: 734022

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 29990273
Sample ID : DS04

Depth : 0.90





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

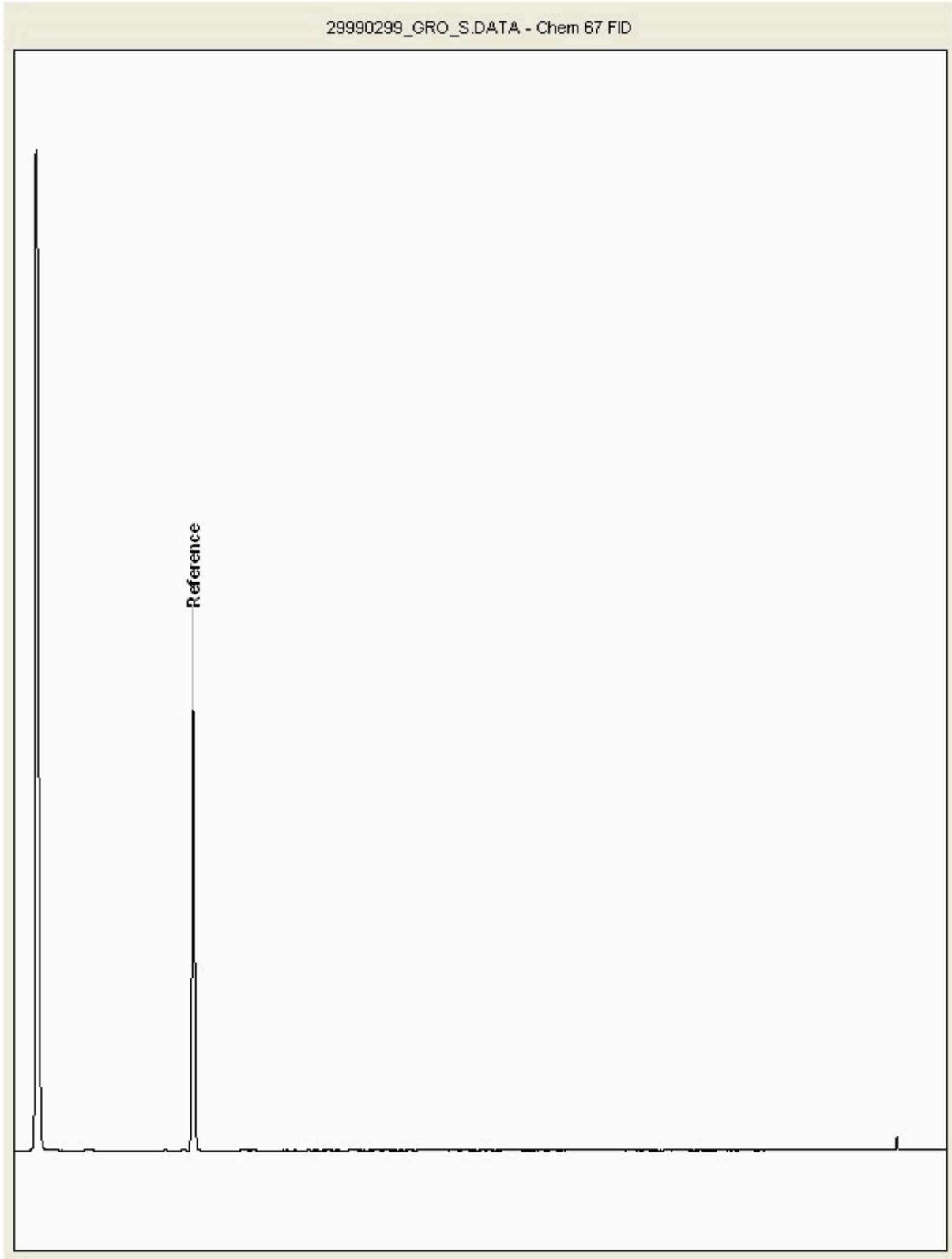
Superseded Report: 734022

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 29990299
Sample ID : TP07

Depth : 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

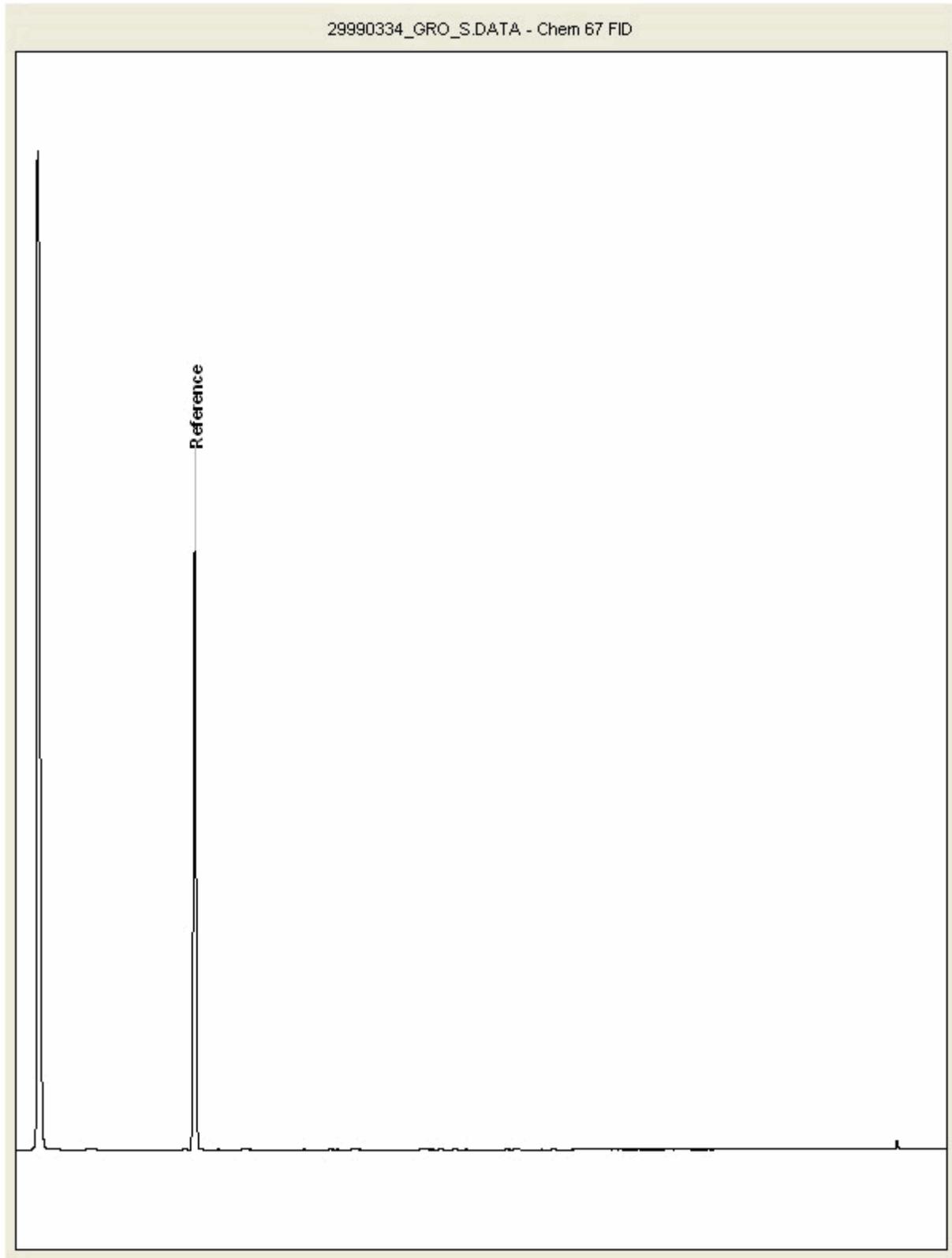
Superseded Report: 734022

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 29990334
Sample ID : TP25

Depth : 0.20





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

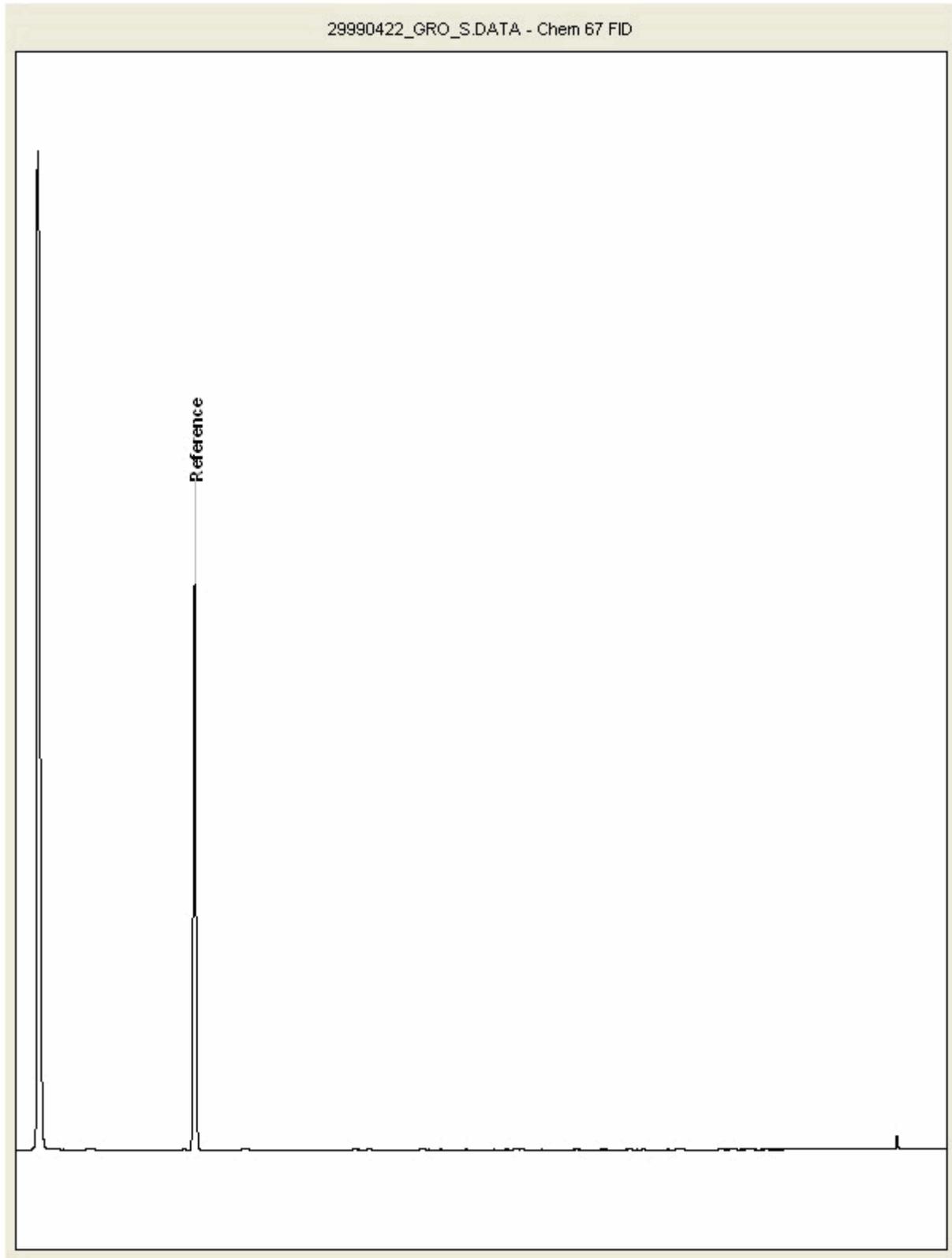
Superseded Report: 734022

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 29990422
Sample ID : TP24

Depth : 0.50





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

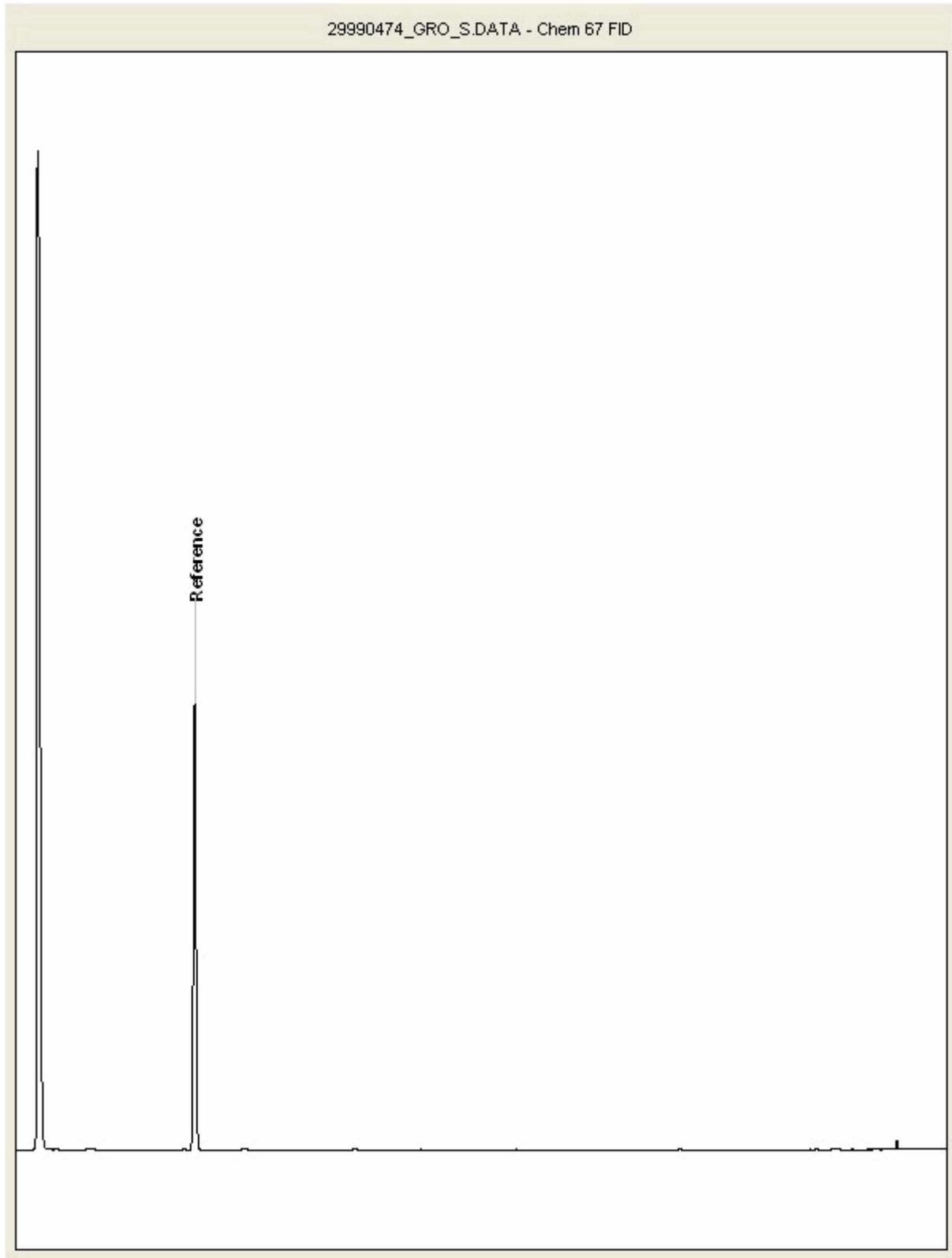
Superseded Report: 734022

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 29990474
Sample ID : TP10

Depth : 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

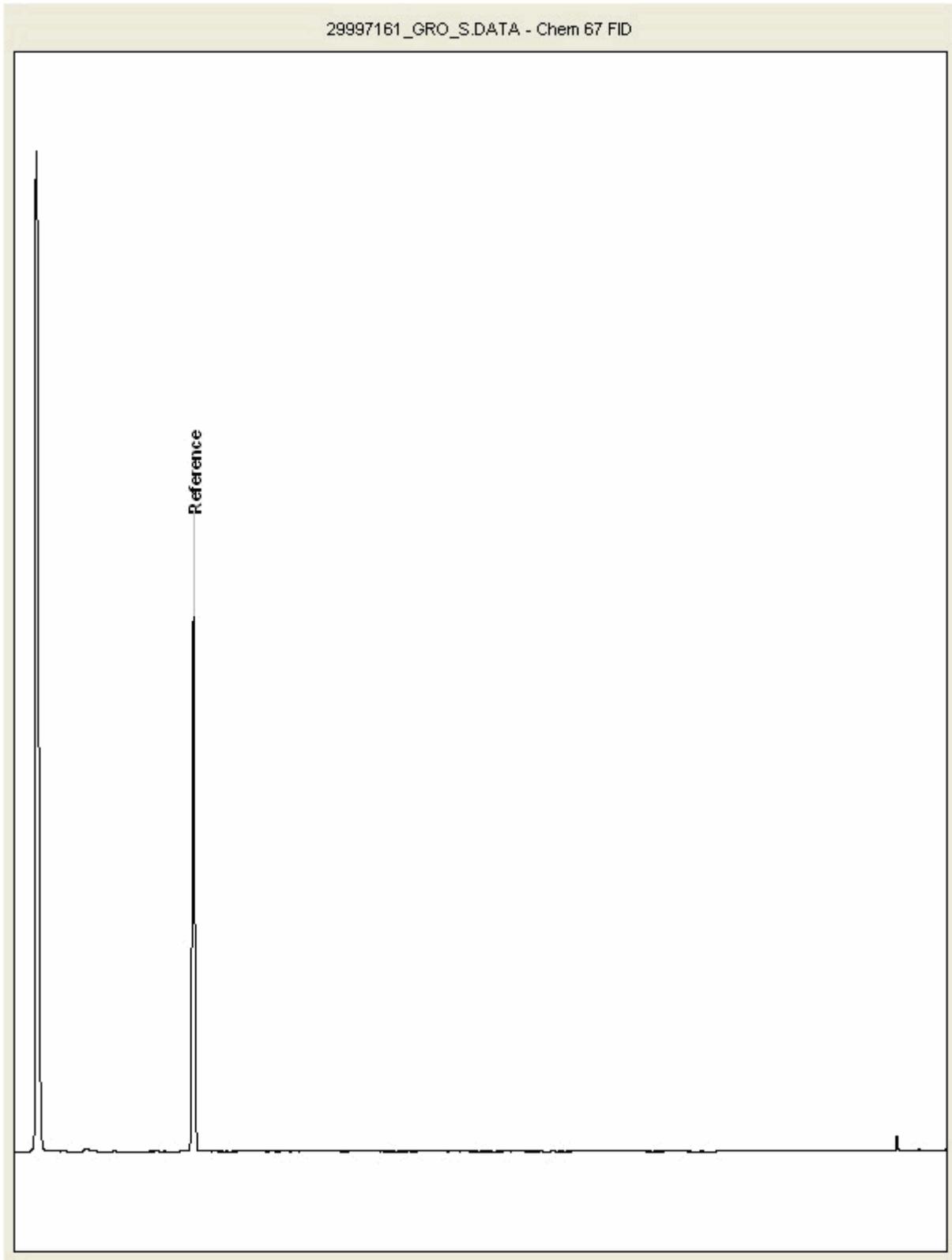
Superseded Report: 734022

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 29997161
Sample ID : TP13

Depth : 0.60





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

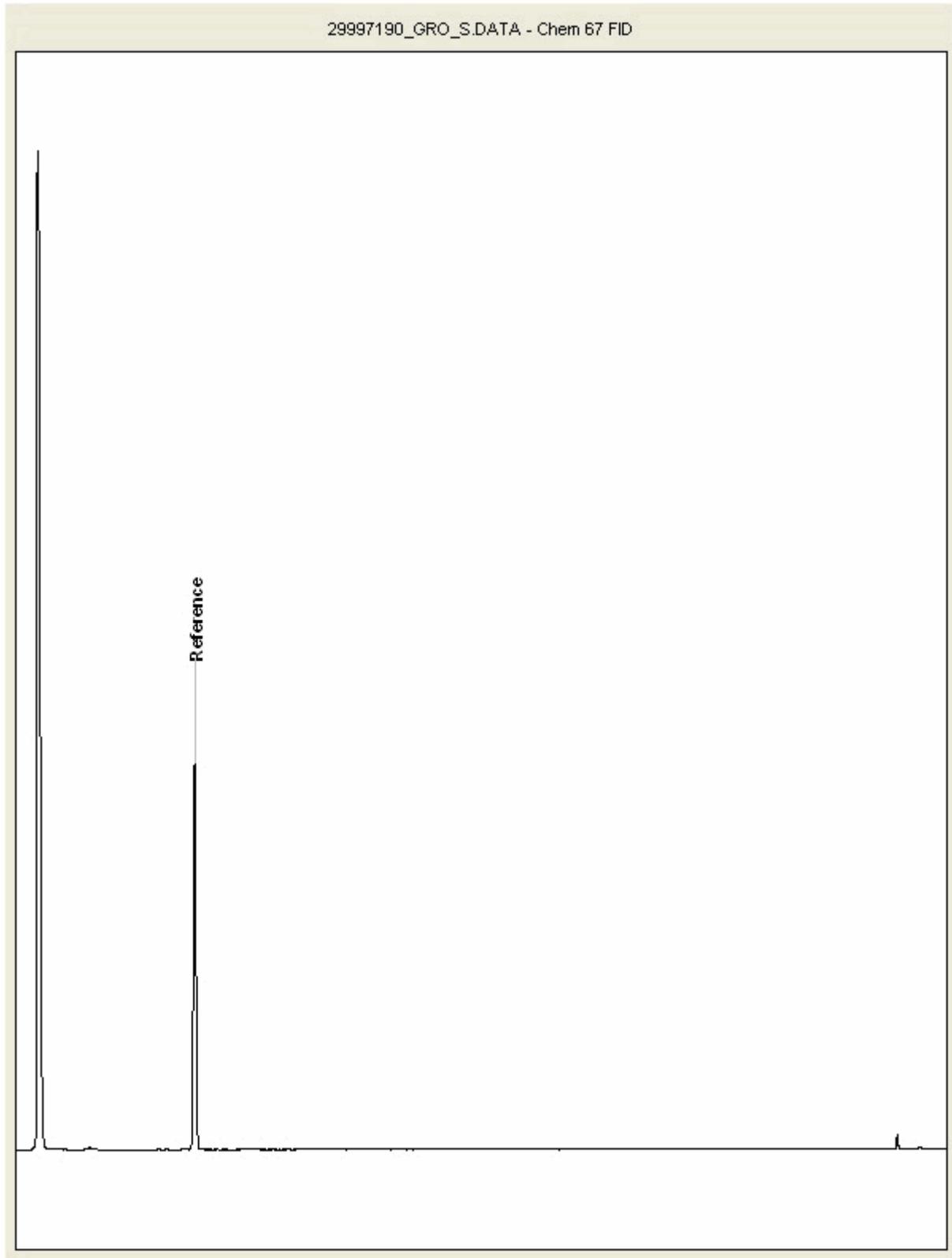
Superseded Report: 734022

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 29997190
Sample ID : TP14

Depth : 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

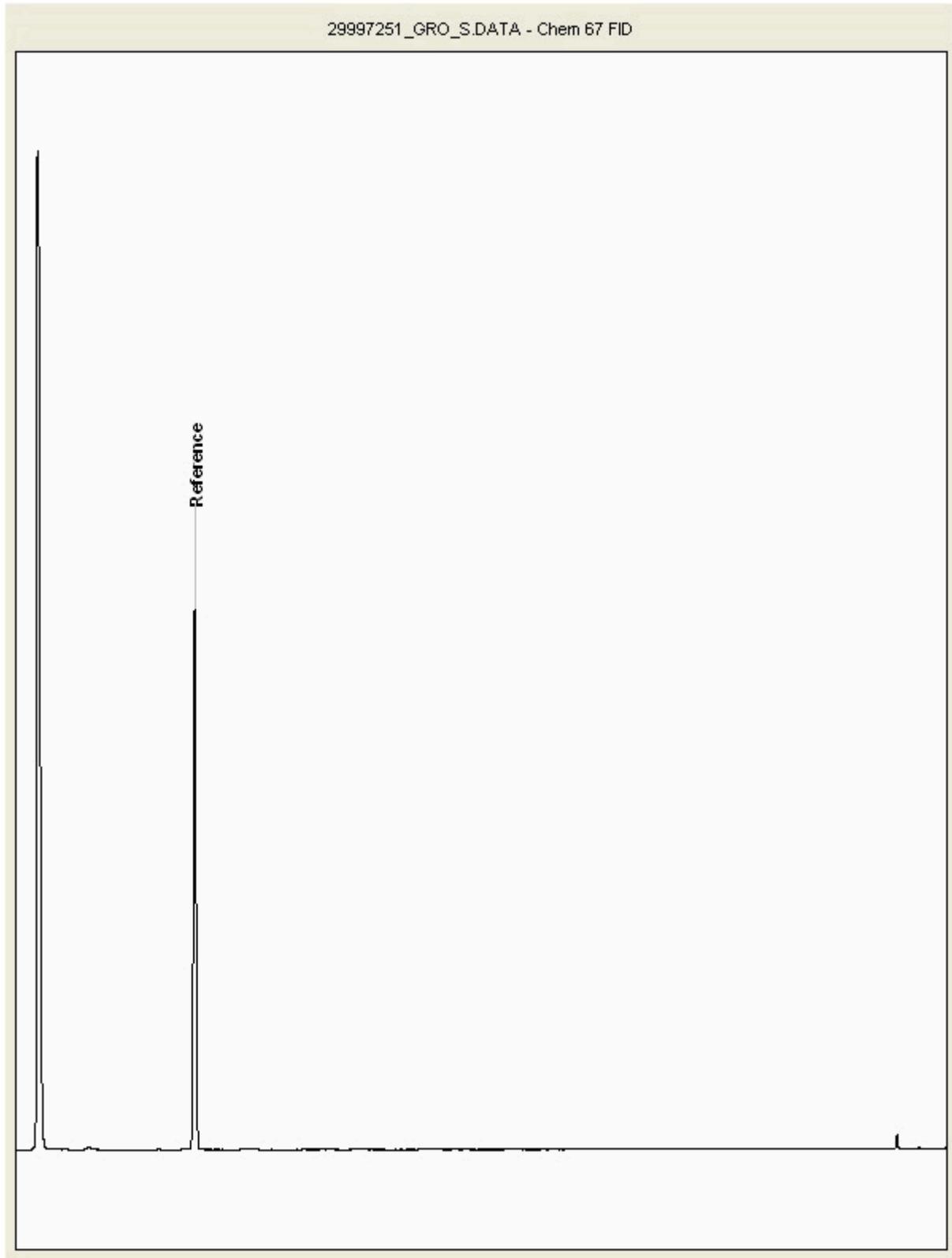
Superseded Report: 734022

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 29997251
Sample ID : TP08

Depth : 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 240627-52
Client Ref.: Low Farm

Report Number: 735101
Location: Low Farm

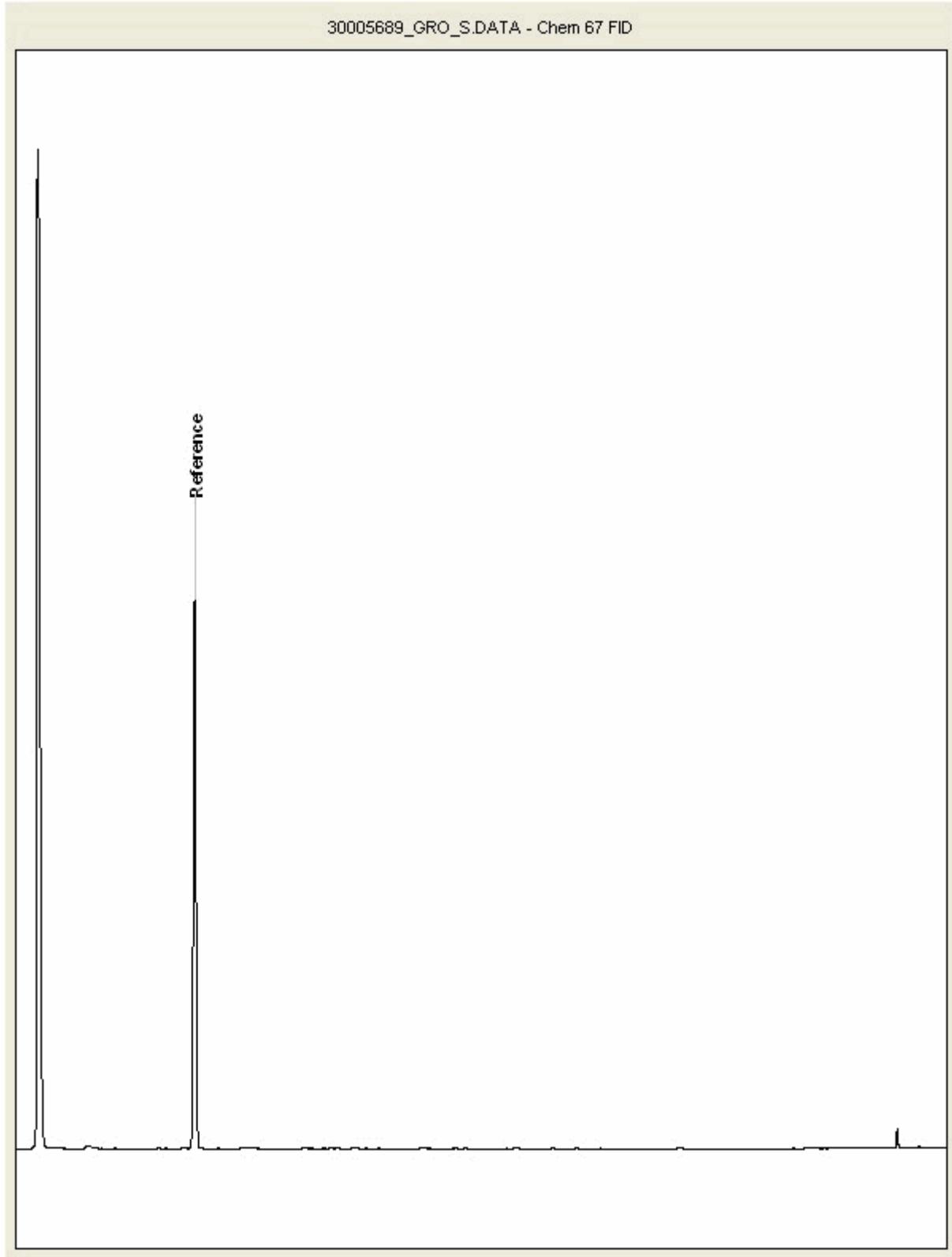
Superseded Report: 734022

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 30005689
Sample ID : TP27

Depth : 0.50





CERTIFICATE OF ANALYSIS

Work Order	: PR2478329	Issue Date	: 18-Jul-2024
Customer	: ALS Laboratories (UK) Limited	Laboratory	: ALS Czech Republic, s.r.o.
Contact	: ALS Hawarden Reporting	Contact	: Client Service
Address	: Unit 7-8 Hawarden Business Park Manor Road, Hawarden CH5 3US Deeside	Address	: Na Harfe 336/9 Prague 9 - Vysocany 190 00 Czech Republic
E-mail	: euhdsubconresults@ALSGlobal.com	E-mail	: customer.support@alsglobal.com
Telephone	: ----	Telephone	: +420 226 226 228
Project	: 240627-52	Page	: 1 of 3
Order number	: ----	Date Samples Received	: 01-Jul-2024
		Quote number	: PR2022ALSEC-GB0002 (CZ-256-18-0022)
Site	: ----	Date of test	: 01-Jul-2024 - 18-Jul-2024
Sampled by	: customer	QC Level	: ALS CR Standard Quality Control Schedule

General Comments

This report shall not be reproduced except in full, without prior written approval from the laboratory. The laboratory is not responsible for the sample data supplied by the customer and their impact on the validity of the result.

The laboratory declares that the test results relate only to the listed samples. If "ALS" is not included in the test report in the "Sampled by" section, then the results refer to the sample as received.

Responsible for accuracy

Testing Laboratory No. 1163
Accredited by CAI according to
CSN EN ISO/IEC 17025:2018

Signatories

Lubomír Pokorný

Position

Country Manager



The company is certified according to ČSN EN ISO 14001 (Environmental management systems) and ČSN ISO 45001 (Occupational health and safety management systems)



Analytical Results

Sub-Matrix: SOIL				Client sample ID					
				29996044 DS05		29995927 TP07		29996073 TP14	
				PR2478329001		PR2478329002		PR2478329003	
				28-Jun-2024 11:45		28-Jun-2024 11:34		28-Jun-2024 11:50	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU
Physical Parameters									
Gross Calorific Value in Dry Matter Q(V/gr/d)	I-CV-CALS	0.50	MJ/kg DW	1.53	± 24.0%	0.52	± 64.5%	1.77	± 21.4%
Gross Calorific Value Original Q(V/gr/ar)	I-CV-CALS	0.50	MJ/kg	1.37	± 26.3%	<0.50	----	1.47	± 24.8%
Net Calorific Value in Dry Matter Q(V/net/d)	I-CV-CALS	0.50	MJ/kg DW	1.33	± 26.9%	<0.50	----	1.55	± 23.7%
Net Calorific Value Original Q(V/net/ar)	I-CV-CALS	0.50	MJ/kg	0.96	± 36.0%	<0.50	----	0.91	± 38.1%
Water Analytical M(ad)	I-WA-GR	0.50	%	2.64	± 23.6%	1.08	± 36.8%	1.54	± 29.5%
Water Gross M(ex)	I-WG-GR	0.50	%	7.76	± 20.4%	14.6	± 20.1%	15.4	± 20.1%
Water Total M(ar)	I-WT-CC	0.50	%	10.2	----	15.5	----	16.7	----

Sub-Matrix: SOIL				Client sample ID					
				29996157 TP26		29996297 TP27		----	
				PR2478329004		PR2478329005		----	
				28-Jun-2024 11:56		28-Jun-2024 12:01		----	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU
Physical Parameters									
Gross Calorific Value in Dry Matter Q(V/gr/d)	I-CV-CALS	0.50	MJ/kg DW	12.6	± 10.3%	0.58	± 58.8%	----	----
Gross Calorific Value Original Q(V/gr/ar)	I-CV-CALS	0.50	MJ/kg	11.2	± 10.4%	0.50	± 66.7%	----	----
Net Calorific Value in Dry Matter Q(V/net/d)	I-CV-CALS	0.50	MJ/kg DW	12.1	± 10.4%	<0.50	----	----	----
Net Calorific Value Original Q(V/net/ar)	I-CV-CALS	0.50	MJ/kg	10.5	± 10.5%	<0.50	----	----	----
Water Analytical M(ad)	I-WA-GR	0.50	%	1.25	± 33.3%	1.71	± 27.9%	----	----
Water Gross M(ex)	I-WG-GR	0.50	%	10.4	± 20.2%	10.6	± 20.2%	----	----
Water Total M(ar)	I-WT-CC	0.50	%	11.6	----	12.1	----	----	----

When sampling date is not provided by the client, the laboratory determines it for procedural reasons, then it is equal to the date of receipt of the sample to the laboratory and is displayed in brackets. Measurement uncertainty is expressed as expanded measurement uncertainty with coverage factor $k = 2$, representing 95% confidence level.

Key: LOR = Limit of reporting; MU = Measurement Uncertainty. The MU does not include sampling uncertainty.

Brief Method Summaries

Analytical Methods	Method Descriptions
Location of test performance: Bendlova 1687/7 Ceska Lipa Czech Republic 470 01	
I-CV-CALS	CZ_SOP_D06_07_124.A (CSN ISO 1928, CSN EN ISO 18125, CSN EN ISO 21654, CSN EN 15170, CSN DIN 51900-1, CSN DIN 51900-2, CSN DIN 51900-3, CSN P CEN/TS 16023) Determination of gross calorific value by calorimetric method and calculation of net calorific value and emission factor from measured values.
I-WA-GR	CZ_SOP_D06_07_041 (CSN 44 1377, CSN EN ISO 18134-1, CSN EN ISO 18134-2, CSN EN ISO 18134-3, CSN P CEN/TS 15414-1, CSN P CEN/TS 15414-2, CSN EN ISO 21660-3, CSN EN12880, CSN EN14346:2007, CSN EN 15002) Determination of analytical water and gross water by gravimetry and determination of total water by calculation from measured values.
I-WG-GR	CZ_SOP_D06_07_041 (CSN 44 1377, CSN EN ISO 18134-1, CSN EN ISO 18134-2, CSN EN ISO 18134-3, CSN P CEN/TS 15414-1, CSN P CEN/TS 15414-2, CSN EN ISO 21660-3, CSN EN12880, CSN EN14346:2007, CSN EN 15002) Determination of analytical water and gross water by gravimetry and determination of total water by calculation from measured values.
I-WT-CC	CZ_SOP_D06_07_041 (CSN 44 1377, CSN EN ISO 18134-1, CSN EN ISO 18134-2, CSN EN ISO 18134-3, CSN P CEN/TS 15414-1, CSN P CEN/TS 15414-2, CSN EN ISO 21660-3, CSN EN12880, CSN EN14346:2007, CSN EN 15002) Determination of analytical water and gross water by gravimetry and determination of total water by calculation from measured values.
Preparation Methods	Method Descriptions



<i>Preparation Methods</i>	<i>Method Descriptions</i>
<i>Location of test performance: Bendlova 1687/7 Ceska Lipa Czech Republic 470 01</i>	
I-PPBURN	Sample combustion in a calorimetric bomb for fuel tests
*S-PPHOM.07	CZ_SOP_D06_07_P01 Preparation of solid samples for analysis (crushing, milling and pulverizing).
*S-PPHOM0.3	CZ_SOP_D06_07_P01 Preparation of solid samples for analysis (crushing, milling and pulverizing).

The symbol "*" for the method indicates a test outside the scope of accreditation of the laboratory or subcontractor. If the UNICO-SUB code is stated in the method table, this only informs that the tests have been performed by a subcontractor and the results are given in an annex to the test report, including information on test accreditation. If the lab used for matrix outside the scope of accreditation or non-standard sample matrix procedure specified in the accredited method and issues non-accredited results, this fact is stated on the title page of this protocol in the section "Notes". If the test report shows the results of subcontracting, the place of performance of the test is outside the laboratories of ALS Czech Republic, s.r.o.

The method for calculating of the summation parameters is available on request in the customer service.

The end of the certificate of analysis



CERTIFICATE OF ANALYSIS

SDG: 240627-52
Client Ref: Low Farm

Report Number: 735101
Location: Low Farm

Superseded Report: 734022

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur e.g volatile mercury

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as "mixed hydrocarbons". Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	Container with Headspace provided for volatiles analysis
2	Incorrect container received
3	Deviation from method
4	Matrix interference
◆	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to late arrival of instructions or samples
§	Sampled on date not provided

20. Asbestos

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as "Not detected". If no asbestos fibre types are found all will be reported as "Not detected" and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anorthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.



Units 7-8 Hawarden Business Park
 Manor Road (off Manor Lane)
 Hawarden
 Deeside
 CH5 3US

Tel: (01244) 528777
 email: hawardencustomerservices@alsglobal.com
 Website: www.alsenvironmental.co.uk

WSP UK Limited
 8 First Street
 Main
 Lancashire
 M15 4RP

Attention: Fay Chappel

CERTIFICATE OF ANALYSIS

Date of report Generation: 25 July 2024
Customer: WSP UK Limited
Sample Delivery Group (SDG): 240629-35
Your Reference: Low Farm
Location: Low Farm
Report No: 735811
Order Number: UK0037228.1558-200

This report has been revised and directly supersedes 734510 in its entirety.

We received 31 samples on Saturday June 29, 2024 and 31 of these samples were scheduled for analysis which was completed on Thursday July 25, 2024. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.

Incorrect sampling dates and/or sample information will affect the validity of results.

The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Lauren Ellis
 General Manager Western Europe Environmental



1291



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
30000142	DS01	ES	0.50	27/06/2024
30000082	DS01	ES	2.00	27/06/2024
30000147	DS02	ES	0.15	27/06/2024
30000069	DS06	ES	0.80	27/06/2024
30000074	DS06	ES	1.40	27/06/2024
30000136	DS07	ES	0.90	27/06/2024
30000152	DS08	ES	0.45	27/06/2024
30000085	DS08	ES	1.30	27/06/2024
30000120	DS09	ES	0.10	27/06/2024
30000077	DS09	ES	0.60	27/06/2024
30000014	DS10	ES	0.60	27/06/2024
30000066	DS10	ES	2.80	27/06/2024
30000030	TP01	ES	0.10	27/06/2024
30000041	TP02	ES	0.10	27/06/2024
30000046	TP02	ES	1.10	27/06/2024
30000051	TP03	ES	0.10	27/06/2024
30000035	TP04	ES	0.20	27/06/2024
30000056	TP05	ES	0.20	27/06/2024
30000061	TP05	ES	0.90	27/06/2024
30000164	TP06	ES	0.10	27/06/2024
30000159	TP09	ES	0.30	27/06/2024
30000020	TP15	ES	0.10	27/06/2024
30000025	TP15	ES	0.50	27/06/2024
30000099	TP16	ES	0.20	27/06/2024
30000088	TP17	ES	0.30	27/06/2024
30000093	TP18	ES	0.20	27/06/2024
30000131	TP19	ES	0.20	27/06/2024
30000125	TP20	ES	1.20	27/06/2024
30000104	TP21	ES	0.40	27/06/2024
30000109	TP21	ES	1.10	27/06/2024
30000112	TP22	ES	0.50	27/06/2024

Only received samples which have had analysis scheduled will be shown on the following pages.



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

Results Legend



Test



No Determination Possible

Sample Types -

- S - Soil/Solid
- UNS - Unspecified Solid
- GW - Ground Water
- SW - Surface Water
- LE - Land Leachate
- PL - Prepared Leachate
- PR - Process Water
- SA - Saline Water
- TE - Trade Effluent
- TS - Treated Sewage
- US - Untreated Sewage
- RE - Recreational Water
- DW - Drinking Water
- Non-regulatory
- UNL - Unspecified Liquid
- SL - Sludge
- G - Gas
- OTH - Other

	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type															
							30000014	30000077	30000120	30000085	30000152	30000036	30000074	30000069	30000147	30000082	30000142				
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 25	X		X	X		X	X		X	X		X							
Boron Water Soluble	All	NDPs: 0 Tests: 25		X			X	X		X	X		X								
Calorific Value (S)*	All	NDPs: 0 Tests: 7			X				X			X									
EPH CWG GC (S)	All	NDPs: 0 Tests: 9	X						X												X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 9		X						X											X
Hexavalent Chromium (s)	All	NDPs: 0 Tests: 25	X		X	X		X	X		X	X		X							X
Loss on Ignition in soils	All	NDPs: 0 Tests: 7			X				X			X									
Metals in solid samples by OES	All	NDPs: 0 Tests: 25	X		X	X		X	X		X	X		X							X
PAH by GCMS	All	NDPs: 0 Tests: 25	X		X	X		X	X		X	X		X							X
pH	All	NDPs: 0 Tests: 25	X		X	X		X	X		X	X		X							X
Sample description	All	NDPs: 0 Tests: 29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Total Organic Carbon	All	NDPs: 0 Tests: 25	X		X	X		X	X		X	X		X							X
TPH CWG GC (S)	All	NDPs: 0 Tests: 9	X											X							X
VOC MS (S)	All	NDPs: 0 Tests: 9		X										X							X



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm
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Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Inclusions	Inclusions 2
30000082	DS01	2.00	Grey	Clay Loam	N/A	N/A
30000142	DS01	0.50	Dark Brown	Sandy Loam	Stones	None
30000147	DS02	0.15	Dark Brown	Sandy Loam	Stones	Vegetation
30000069	DS06	0.80	Dark Brown	Sandy Loam	Stones	N/A
30000074	DS06	1.40	Dark Brown	Sandy Clay Loam	Stones	None
30000136	DS07	0.90	Dark Brown	Clay	Stones	None
30000085	DS08	1.30	Grey	Clay	Stones	None
30000152	DS08	0.45	Dark Brown	Sandy Clay	Stones	None
30000077	DS09	0.60	Dark Brown	Loamy Sand	Stones	Tar
30000120	DS09	0.10	Dark Brown	Sandy Loam	Stones	Vegetation
30000014	DS10	0.60	Dark Brown	Sandy Loam	Stones	None
30000066	DS10	2.80	Light Brown	Sandy Clay Loam	Stones	Vegetation
30000030	TP01	0.10	Light Brown	Clay Loam	Stones	Vegetation
30000041	TP02	0.10	Light Brown	Clay Loam	Stones	Vegetation
30000046	TP02	1.10	Dark Brown	Clay	Stones	None
30000051	TP03	0.10	Dark Brown	Sandy Loam	Stones	Vegetation
30000035	TP04	0.20	Dark Brown	Sandy Loam	Stones	Vegetation
30000056	TP05	0.20	Dark Brown	Sandy Loam	Stones	Vegetation
30000061	TP05	0.90	Dark Brown	Sandy Loam	Stones	None
30000164	TP06	0.10	Dark Brown	Loamy Sand	Stones	Vegetation
30000159	TP09	0.30	Light Brown	Clay Loam	Stones	Vegetation
30000020	TP15	0.10	Dark Brown	Sandy Loam	Vegetation	Brick
30000025	TP15	0.50	Dark Brown	Clay	Stones	Vegetation
30000099	TP16	0.20	Dark Brown	Sandy Loam	Stones	Vegetation
30000088	TP17	0.30	Dark Brown	Sandy Loam	Stones	Vegetation
30000093	TP18	0.20	Dark Brown	Sandy Loam	Stones	Vegetation
30000131	TP19	0.20	Dark Brown	Sandy Loam	Stones	Vegetation
30000125	TP20	1.20	Dark Brown	Loamy Sand	Stones	None
30000104	TP21	0.40	Dark Brown	Sandy Loam	Stones	Vegetation
30000109	TP21	1.10	Dark Brown	Sandy Loam	Stones	Vegetation
30000112	TP22	0.50	Dark Brown	Sandy Loam	Vegetation	Tar

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

Results Legend		Customer Sample Ref.	DS01	DS01	DS02	DS06	DS06	DS07
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50	2.00	0.15	0.80	1.40	0.90
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
diss,filtr	Dissolved / filtered sample.		29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024
tot.unfiltr	Total / unfiltered sample.		240629-35	240629-35	240629-35	240629-35	240629-35	240629-35
*	Subcontracted - refer to subcontractor report for accreditation status.		30000142	30000082	30000147	30000069	30000074	30000136
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		ES	ES	ES	ES	ES	ES
(F)	Trigger breach confirmed							
1-4*5@	Sample deviation (see appendix)							
Component	LOD/Units		Method					
Moisture Content Ratio (% of as received sample)	%	PM024	12	8.1	23	9.6	11	15
Gross Calorific Value in Dry Matter Q(V/gr/d)*	MJ/kg	SUB		1.28			<0.5	
Gross Calorific Value Original Q(V/gr/ar)*	MJ/kg	SUB		1.13			<0.5	
Net Calorific Value in Dry Matter Q(V/net/d)*	MJ/kg	SUB		1.08			<0.5	
Net Calorific Value in Original Q(V/net/ar)*	MJ/kg	SUB		0.68			<0.5	
Water Analytical M (ad)*	%	SUB		1.9			1.69	
Water Gross M(ex)*	%	SUB		10			11.7	
Water Total M(ar)*	%	SUB		11.7			13.2	
Loss on ignition	<0.7 %	TM018		24.3			5.79	
Soil Organic Matter (SOM)	<0.35 %	TM132	6.26		6.88	5.55		17
pH	1 pH Units	TM133	7.39		6.72	7.43		4.42
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6		<0.6	<0.6		<0.6
Arsenic	<0.6 mg/kg	TM181	6.92		18.9	18.5		17.3
Barium	<0.6 mg/kg	TM181	42.1		70.7	105		62.9
Beryllium	<0.01 mg/kg	TM181	1.35		0.795	1.18		0.686
Cadmium	<0.02 mg/kg	TM181	0.0516		0.272	<0.02		<0.02
Chromium	<0.9 mg/kg	TM181	8.88		10.7	<0.9		10.2
Copper	<1.4 mg/kg	TM181	34.7		29	37.4		70
Lead	<0.7 mg/kg	TM181	26.1		799	22.4		27.5
Mercury	<0.1 mg/kg	TM181	<0.1		<0.1	<0.1		<0.1
Nickel	<0.2 mg/kg	TM181	41.3		15.4	36.2		25.4
Selenium	<1 mg/kg	TM181	<1		1.38	1.07		1.12
Vanadium	<0.2 mg/kg	TM181	17		27.7	10.1		15
Zinc	<1.9 mg/kg	TM181	99.3		88.1	122		52.4
Boron, water soluble	<1 mg/kg	TM222	<1		<1	<1		<1



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

Results Legend		Customer Sample Ref.	DS08	DS08	DS09	DS09	DS10	DS10
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.45	1.30	0.10	0.60	0.60	2.80
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
diss,filtr	Dissolved / filtered sample.		29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024
tot.unfilt	Total / unfiltered sample.		240629-35	240629-35	240629-35	240629-35	240629-35	240629-35
*	Subcontracted - refer to subcontractor report for accreditation status.		30000152	30000085	30000120	30000077	30000014	30000066
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery	ES	ES	ES	ES	ES	ES	
(F)	Trigger breach confirmed							
1-4456	Sample deviation (see appendix)							
Component	LOD/Units	Method						
Moisture Content Ratio (% of as received sample)	%	PM024	12	18	17	13	10	15
Gross Calorific Value in Dry Matter Q(V/gr/d)*	MJ/kg	SUB		3.25		11.4		4.8
Gross Calorific Value Original Q(V/gr/ar)*	MJ/kg	SUB		2.61		9.88		3.89
Net Calorific Value in Dry Matter Q(V/net/d)*	MJ/kg	SUB		3.01		10.9		4.46
Net Calorific Value in Original Q(V/net/ar)*	MJ/kg	SUB		1.96		9.14		3.18
Water Analytical M(ad)*	%	SUB		3.23		2.43		3.81
Water Gross M(ex)*	%	SUB		17		11.2		15.8
Water Total M(ar)*	%	SUB		19.7		13.4		19
Loss on ignition	<0.7 %	TM018		18.5		36.8		13.2
Soil Organic Matter (SOM)	<0.35 %	TM132	12		11.2		1.93	
pH	1 pH Units	TM133	4.93		6.31		7.11	
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6		<0.6		<0.6	
Arsenic	<0.6 mg/kg	TM181	18		20.3		9.19	
Barium	<0.6 mg/kg	TM181	73.1		86.7		54.8	
Beryllium	<0.01 mg/kg	TM181	0.892		0.954		1.1	
Cadmium	<0.02 mg/kg	TM181	<0.02		0.187		0.0286	
Chromium	<0.9 mg/kg	TM181	9.55		18.1		13.5	
Copper	<1.4 mg/kg	TM181	51.8		29.6		33.9	
Lead	<0.7 mg/kg	TM181	27.8		46		31.7	
Mercury	<0.1 mg/kg	TM181	<0.1		<0.1		<0.1	
Nickel	<0.2 mg/kg	TM181	26		22.4		41.2	
Selenium	<1 mg/kg	TM181	<1		<1		<1	
Vanadium	<0.2 mg/kg	TM181	17.2		29.6		18.1	
Zinc	<1.9 mg/kg	TM181	59.1		99.9		116	
Boron, water soluble	<1 mg/kg	TM222	<1		<1		<1	



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

Results Legend		Customer Sample Ref.	TP01	TP02	TP02	TP03	TP04	TP05
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.10	0.10	1.10	0.10	0.20	0.20
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
diss,filtr	Dissolved / filtered sample.		29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024
tot.unfilt	Total / unfiltered sample.		240629-35	240629-35	240629-35	240629-35	240629-35	240629-35
*	Subcontracted - refer to subcontractor report for accreditation status.		30000030	30000041	30000046	30000051	30000035	30000056
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery	ES	ES	ES	ES	ES	ES	
(F)	Trigger breach confirmed							
1.4.5@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
Moisture Content Ratio (% of as received sample)	%	PM024	18	20	14	18	12	19
Soil Organic Matter (SOM)	<0.35 %	TM132	5.59 #	6.95 #	2.4 #	5.69 #	8.28 #	4.53 #
pH	1 pH Units	TM133	6.9 M	6.91 M	6.99 M	7.35 M	7.68 M	7.28 M
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6 M					
Arsenic	<0.6 mg/kg	TM181	14.2 M	18.9 M	7.55 M	13.5 M	10.5 M	12.3 M
Barium	<0.6 mg/kg	TM181	59.5 #	84.1 #	49.1 #	51.7 #	61.9 #	60.5 #
Beryllium	<0.01 mg/kg	TM181	0.686 M	0.838 M	1.02 M	0.652 M	1.34 M	0.641 M
Cadmium	<0.02 mg/kg	TM181	0.157 M	0.25 M	<0.02 M	0.139 M	0.0923 M	0.26 M
Chromium	<0.9 mg/kg	TM181	7.35 M	6.92 M	9.4 M	6.84 M	<0.9 M	18.6 M
Copper	<1.4 mg/kg	TM181	24.2 M	27.6 M	31.3 M	21.9 M	43.8 M	22.4 M
Lead	<0.7 mg/kg	TM181	53.4 M	61.2 M	18.4 M	50.8 M	31.1 M	48.6 M
Mercury	<0.1 mg/kg	TM181	<0.1 M					
Nickel	<0.2 mg/kg	TM181	18.7 M	18.8 M	39.8 M	16.9 M	45.6 M	15.2 M
Selenium	<1 mg/kg	TM181	<1 #	1.25 #	<1 #	1.03 #	1.8 #	<1 #
Vanadium	<0.2 mg/kg	TM181	20 #	26.4 #	17.2 #	20.2 #	12.7 #	27.1 #
Zinc	<1.9 mg/kg	TM181	84.4 M	103 M	104 M	75 M	109 M	85.3 M
Boron, water soluble	<1 mg/kg	TM222	<1 M					



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

Results Legend		Customer Sample Ref.	TP05	TP06	TP09	TP15	TP15	TP16
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.90	0.10	0.30	0.10	0.50	0.20
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
diss,filtr	Dissolved / filtered sample.		29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024
tot.unfilt	Total / unfiltered sample.		240629-35	240629-35	240629-35	240629-35	240629-35	240629-35
*	Subcontracted - refer to subcontractor report for accreditation status.		30000061	30000164	30000159	30000020	30000025	30000099
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery	ES	ES	ES	ES	ES	ES	
(F)	Trigger breach confirmed							
1.4.5@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
Moisture Content Ratio (% of as received sample)	%	PM024	9.9	14	16	21	13	15
Soil Organic Matter (SOM)	<0.35 %	TM132	0.865 #	3.69 #	4.78 #	6.55 #	2.09 #	9.05 #
pH	1 pH Units	TM133	6.2 M	7.01 M	5.48 M	6.17 M	7.42 M	6.41 M
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6 M					
Arsenic	<0.6 mg/kg	TM181	7.63 M	11.7 M	13.3 M	27 M	8.76 M	18.3 M
Barium	<0.6 mg/kg	TM181	32.9 #	48.8 #	80 #	113 #	94.6 #	86.5 #
Beryllium	<0.01 mg/kg	TM181	0.514 M	0.506 M	0.719 M	1.22 M	1.38 M	0.716 M
Cadmium	<0.02 mg/kg	TM181	<0.02 M	0.17 M	0.166 M	0.16 M	0.0228 M	0.331 M
Chromium	<0.9 mg/kg	TM181	8.63 M	9.54 M	7.77 M	19.6 M	5.85 M	23.8 M
Copper	<1.4 mg/kg	TM181	17.3 M	21.6 M	26 M	38.1 M	35.8 M	34.4 M
Lead	<0.7 mg/kg	TM181	13.7 M	54.6 M	40.6 M	57.8 M	25.9 M	59.9 M
Mercury	<0.1 mg/kg	TM181	<0.1 M					
Nickel	<0.2 mg/kg	TM181	25 M	13.7 M	19.1 M	25.8 M	43.1 M	18.4 M
Selenium	<1 mg/kg	TM181	<1 #	1.32 #	1.29 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181	16.8 #	20.8 #	26.6 #	32.6 #	18.3 #	28.6 #
Zinc	<1.9 mg/kg	TM181	53.6 M	76.8 M	96.9 M	112 M	117 M	98.2 M
Boron, water soluble	<1 mg/kg	TM222	<1 M					



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

Results Legend		Customer Sample Ref.	TP17	TP18	TP19	TP20	TP21	TP21
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.30	0.20	0.20	1.20	0.40	1.10
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
diss,filtr	Dissolved / filtered sample.		29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024
tot.unfilt	Total / unfiltered sample.		240629-35	240629-35	240629-35	240629-35	240629-35	240629-35
*	Subcontracted - refer to subcontractor report for accreditation status.		30000088	30000093	30000131	30000125	30000104	30000109
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		ES	ES	ES	ES	ES	ES
(F)	Trigger breach confirmed							
1-4456	Sample deviation (see appendix)							
Component	LOD/Units		Method					
Moisture Content Ratio (% of as received sample)	%	PM024	18	20	18	11	22	26
Gross Calorific Value in Dry Matter Q(V/gr/d)*	MJ/kg	SUB						17.2
Gross Calorific Value Original Q(V/gr/ar)*	MJ/kg	SUB						11.2
Net Calorific Value in Dry Matter Q(V/net/d)*	MJ/kg	SUB						16.6
Net Calorific Value in Original Q(V/net/ar)*	MJ/kg	SUB						9.98
Water Analytical M (ad)*	%	SUB						8.86
Water Gross M(ex)*	%	SUB						28.7
Water Total M(ar)*	%	SUB						35
Loss on ignition	<0.7 %	TM018						59.5
Soil Organic Matter (SOM)	<0.35 %	TM132	7.12	12.3	11.3	0.614	4.43	M
pH	1 pH Units	TM133	7.25	7.44	6.68	6.11	7.19	
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6	<0.6	<0.6	<0.6	<0.6	
Arsenic	<0.6 mg/kg	TM181	20.3	27.5	18.1	27.3	16.1	
Barium	<0.6 mg/kg	TM181	88.7	145	93.9	156	99.1	
Beryllium	<0.01 mg/kg	TM181	1.09	0.925	1.05	2.2	1.01	
Cadmium	<0.02 mg/kg	TM181	0.129	0.203	0.127	<0.02	0.0571	
Chromium	<0.9 mg/kg	TM181	6.54	26.2	12.7	15.3	4.68	
Copper	<1.4 mg/kg	TM181	30.1	31.9	29.8	26.4	22.4	
Lead	<0.7 mg/kg	TM181	43.9	60.2	42.3	25.2	29.7	
Mercury	<0.1 mg/kg	TM181	<0.1	<0.1	<0.1	<0.1	<0.1	
Nickel	<0.2 mg/kg	TM181	23.4	15.8	24.2	37.2	20.6	
Selenium	<1 mg/kg	TM181	<1	1.82	<1	<1	1.94	
Vanadium	<0.2 mg/kg	TM181	31	82.1	26.9	32.1	23.3	
Zinc	<1.9 mg/kg	TM181	103	96.8	102	68.8	80.6	
Boron, water soluble	<1 mg/kg	TM222	<1	<1	1.01	<1	<1	



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

Results Legend		Customer Sample Ref.	TP22				
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50				
M	mCERTS accredited.		Soil/Solid (S)				
aq	Aqueous / settled sample.		27/06/2024				
diss,filtr	Dissolved / filtered sample.						
tot.unfiltr	Total / unfiltered sample.						
*	Subcontracted - refer to subcontractor report for accreditation status.						
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		29/06/2024				
(F)	Trigger breach confirmed		240629-35				
1.4.6@	Sample deviation (see appendix)		30000112				
			ES				
Component	LOD/Units	Method					
Moisture Content Ratio (% of as received sample)	%	PM024	14				
Gross Calorific Value in Dry Matter Q(V/gr/d)*	MJ/kg	SUB	11.5				
Gross Calorific Value Original Q(V/gr/ar)*	MJ/kg	SUB	9.55				
Net Calorific Value in Dry Matter Q(V/net/d)*	MJ/kg	SUB	11				
Net Calorific Value in Original Q(V/net/ar)*	MJ/kg	SUB	8.77				
Water Analytical M(ad)*	%	SUB	2.93				
Water Gross M(ex)*	%	SUB	14.5				
Water Total M(ar)*	%	SUB	17				
Loss on ignition	<0.7 %	TM018	43.1				M
Soil Organic Matter (SOM)	<0.35 %	TM132	55.2				#
pH	1 pH Units	TM133	7.44				M
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6				M
Arsenic	<0.6 mg/kg	TM181	47.8				M
Barium	<0.6 mg/kg	TM181	76.6				#
Beryllium	<0.01 mg/kg	TM181	0.465				M
Cadmium	<0.02 mg/kg	TM181	0.0554				M
Chromium	<0.9 mg/kg	TM181	3.69				M
Copper	<1.4 mg/kg	TM181	23.5				M
Lead	<0.7 mg/kg	TM181	19				M
Mercury	<0.1 mg/kg	TM181	<0.1				M
Nickel	<0.2 mg/kg	TM181	12.7				M
Selenium	<1 mg/kg	TM181	<1				#
Vanadium	<0.2 mg/kg	TM181	12.2				#
Zinc	<1.9 mg/kg	TM181	30				M
Boron, water soluble	<1 mg/kg	TM222	<1				M



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

PAH by GCMS

Results Legend		Customer Sample Ref.	DS01	DS02	DS06	DS07	DS08	DS09	
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50	0.15	0.80	0.90	0.45	0.10	
M	mCERTS accredited.		Soil/Solid (S)						
aq	Aqueous / settled sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
diss,filtr	Dissolved / filtered sample.		29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024
tot.unfiltr	Total / unfiltered sample.		240629-35	240629-35	240629-35	240629-35	240629-35	240629-35	240629-35
*	Subcontracted - refer to subcontractor report for accreditation status.		30000142	30000147	30000069	30000136	30000152	30000120	ES
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		ES						
(F)	Trigger breach confirmed								
1-4*5@	Sample deviation (see appendix)								
Component	LOD/Units		Method						
Naphthalene-d8 % recovery**	%	TM218	87.5	78.2	85.8	70.2	75.7	76.7	
Acenaphthene-d10 % recovery**	%	TM218	90	79.3	88.1	73.3	80.3	81.4	
Phenanthrene-d10 % recovery**	%	TM218	92.7	78.8	87.5	70.4	79.2	80.5	
Chrysene-d12 % recovery**	%	TM218	84.9	70.3	81.3	60.2	74.6	75.4	
Perylene-d12 % recovery**	%	TM218	81.1	70.3	76.4	49.3	66.6	66.6	
Naphthalene	<0.009 mg/kg	TM218	<0.009 M	0.0287 M	<0.009 M	0.0134 3 M	<0.009 3 M	0.0694 M	
Acenaphthylene	<0.012 mg/kg	TM218	<0.012 M	<0.012 M	<0.012 M	<0.012 3 M	<0.012 3 M	<0.012 M	
Acenaphthene	<0.008 mg/kg	TM218	<0.008 M	0.0702 M	<0.008 M	<0.008 3 M	<0.008 3 M	0.134 M	
Fluorene	<0.01 mg/kg	TM218	<0.01 M	0.0445 M	<0.01 M	0.0242 3 M	<0.01 3 M	0.0935 M	
Phenanthrene	<0.015 mg/kg	TM218	0.0608 M	0.326 M	0.0415 M	0.501 3 M	0.185 3 M	1.03 M	
Anthracene	<0.016 mg/kg	TM218	<0.016 M	0.0515 M	<0.016 M	<0.016 3 M	0.181 3 M	0.204 M	
Fluoranthene	<0.017 mg/kg	TM218	<0.017 M	0.366 M	<0.017 M	0.103 3 M	0.0554 3 M	1.53 M	
Pyrene	<0.015 mg/kg	TM218	<0.015 M	0.306 M	0.0223 M	0.139 3 M	0.0575 3 M	1.31 M	
Benz(a)anthracene	<0.014 mg/kg	TM218	<0.014 M	0.137 M	0.0328 M	0.04 3 M	0.0198 3 M	0.624 M	
Chrysene	<0.01 mg/kg	TM218	<0.01 M	0.169 M	0.03 M	0.104 3 M	0.0718 3 M	0.686 M	
Benzo(b)fluoranthene	<0.015 mg/kg	TM218	0.0173 M	0.161 M	0.0374 M	0.0422 3 M	0.0349 3 M	0.645 M	
Benzo(k)fluoranthene	<0.014 mg/kg	TM218	<0.014 M	0.0534 M	<0.014 M	<0.014 3 M	<0.014 3 M	0.242 M	
Benzo(a)pyrene	<0.015 mg/kg	TM218	<0.015 M	0.1 M	<0.015 M	<0.015 3 M	<0.015 3 M	0.485 M	
Indeno(1,2,3-cd)pyrene	<0.018 mg/kg	TM218	<0.018 M	0.0557 M	<0.018 M	<0.018 3 M	<0.018 3 M	0.261 M	
Dibenzo(a,h)anthracene	<0.023 mg/kg	TM218	<0.023 M	<0.023 M	<0.023 M	<0.023 3 M	<0.023 3 M	0.0581 M	
Benzo(g,h,i)perylene	<0.024 mg/kg	TM218	<0.024 M	0.0638 M	0.0408 M	<0.024 3 M	<0.024 3 M	0.276 M	
PAH, Total Detected USEPA 16	<0.118 mg/kg	TM218	<0.118	1.93	0.205	0.967 3	0.605 3	7.65	



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

PAH by GCMS

Results Legend		Customer Sample Ref.	DS10	TP01	TP02	TP02	TP03	TP04
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.60	0.10	0.10	1.10	0.10	0.20
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
diss,filtr	Dissolved / filtered sample.		29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024
tot.unfilt	Total / unfiltered sample.		240629-35	240629-35	240629-35	240629-35	240629-35	240629-35
*	Subcontracted - refer to subcontractor report for accreditation status.		30000014	30000030	30000041	30000046	30000051	30000035
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery	ES	ES	ES	ES	ES	ES	
(F)	Trigger breach confirmed							
1-4*5@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
Naphthalene-d8 % recovery**	%	TM218	76.6	87.4	88.2	74.4	78.4	88.3
Acenaphthene-d10 % recovery**	%	TM218	84.3	89.7	88.3	80	83.7	89.9
Phenanthrene-d10 % recovery**	%	TM218	84.1	91.8	88.5	80.3	81.5	90.4
Chrysene-d12 % recovery**	%	TM218	78.3	85.7	85.1	74.2	77.1	89.8
Perylene-d12 % recovery**	%	TM218	68.9	82.5	81.1	66.4	70.7	82.9
Naphthalene	<0.009 mg/kg	TM218	<0.009	<0.009	0.0292	<0.009	<0.009	0.0423
Acenaphthylene	<0.012 mg/kg	TM218	<0.012	<0.012	<0.012	<0.012	<0.012	0.018
Acenaphthene	<0.008 mg/kg	TM218	<0.008	<0.008	0.081	<0.008	0.0116	0.0593
Fluorene	<0.01 mg/kg	TM218	<0.01	<0.01	0.054	<0.01	<0.01	0.0501
Phenanthrene	<0.015 mg/kg	TM218	0.0525	0.072	0.465	0.0353	0.0757	0.381
Anthracene	<0.016 mg/kg	TM218	<0.016	<0.016	0.0724	<0.016	<0.016	0.0736
Fluoranthene	<0.017 mg/kg	TM218	<0.017	0.0951	0.584	<0.017	0.0962	0.325
Pyrene	<0.015 mg/kg	TM218	0.0187	0.0834	0.518	0.0236	0.0842	0.268
Benz(a)anthracene	<0.014 mg/kg	TM218	<0.014	0.041	0.249	<0.014	0.0446	0.12
Chrysene	<0.01 mg/kg	TM218	0.0256	0.0597	0.264	0.0283	0.0644	0.178
Benzo(b)fluoranthene	<0.015 mg/kg	TM218	0.0187	0.0721	0.279	0.0184	0.0644	0.159
Benzo(k)fluoranthene	<0.014 mg/kg	TM218	<0.014	0.0197	0.0982	<0.014	0.0208	0.0456
Benzo(a)pyrene	<0.015 mg/kg	TM218	<0.015	0.037	0.19	<0.015	0.0357	0.0961
Indeno(1,2,3-cd)pyrene	<0.018 mg/kg	TM218	<0.018	0.027	0.113	<0.018	0.0229	0.0545
Dibenzo(a,h)anthracene	<0.023 mg/kg	TM218	<0.023	<0.023	0.0287	<0.023	<0.023	<0.023
Benzo(g,h,i)perylene	<0.024 mg/kg	TM218	<0.024	0.0303	0.108	<0.024	<0.024	0.0876
PAH, Total Detected USEPA 16	<0.118 mg/kg	TM218	<0.118	0.537	3.13	<0.118	0.52	1.96



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

PAH by GCMS

Results Legend		Customer Sample Ref.	TP05	TP05	TP06	TP09	TP15	TP15
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.20	0.90	0.10	0.30	0.10	0.50
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
diss,filtr	Dissolved / filtered sample.		29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024
tot.unfiltr	Total / unfiltered sample.		240629-35	240629-35	240629-35	240629-35	240629-35	240629-35
*	Subcontracted - refer to subcontractor report for accreditation status.		30000056	30000061	30000164	30000159	30000020	30000025
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		ES	ES	ES	ES	ES	ES
(F)	Trigger breach confirmed							
1-4*5@	Sample deviation (see appendix)							
Component	LOD/Units		Method					
Naphthalene-d8 % recovery**	%	TM218	79.2	79.4	80.4	85.6	78.9	87.5
Acenaphthene-d10 % recovery**	%	TM218	80.6	80	82.9	90.9	80.3	90.1
Phenanthrene-d10 % recovery**	%	TM218	79.5	78.5	83.1	94.9	79.1	94.8
Chrysene-d12 % recovery**	%	TM218	70.4	70.1	74.4	82.3	70.7	89.3
Perylene-d12 % recovery**	%	TM218	70.7	70.2	74.2	76.7	70.5	83.8
Naphthalene	<0.009 mg/kg	TM218	<0.009 M	<0.009 M	0.0711 M	0.0515 M	0.197 M	<0.009 M
Acenaphthylene	<0.012 mg/kg	TM218	<0.012 M					
Acenaphthene	<0.008 mg/kg	TM218	<0.008 M	<0.008 M	0.127 M	0.129 M	0.466 M	0.0296 M
Fluorene	<0.01 mg/kg	TM218	<0.01 M	<0.01 M	0.0794 M	0.0921 M	0.319 M	0.0263 M
Phenanthrene	<0.015 mg/kg	TM218	0.0689 M	<0.015 M	0.916 M	0.793 M	2.28 M	0.197 M
Anthracene	<0.016 mg/kg	TM218	<0.016 M	<0.016 M	0.174 M	0.134 M	0.409 M	0.024 M
Fluoranthene	<0.017 mg/kg	TM218	0.122 M	<0.017 M	1.26 M	1.02 M	2.45 M	0.167 M
Pyrene	<0.015 mg/kg	TM218	0.109 M	<0.015 M	1.06 M	0.893 M	2.05 M	0.146 M
Benz(a)anthracene	<0.014 mg/kg	TM218	0.0542 M	<0.014 M	0.466 M	0.412 M	0.976 M	0.0638 M
Chrysene	<0.01 mg/kg	TM218	0.0678 M	<0.01 M	0.533 M	0.426 M	1.11 M	0.0943 M
Benzo(b)fluoranthene	<0.015 mg/kg	TM218	0.0852 M	<0.015 M	0.607 M	0.438 M	1.03 M	0.0818 M
Benzo(k)fluoranthene	<0.014 mg/kg	TM218	0.0281 M	<0.014 M	0.192 M	0.144 M	0.361 M	0.0216 M
Benzo(a)pyrene	<0.015 mg/kg	TM218	0.0553 M	<0.015 M	0.435 M	0.307 M	0.761 M	0.0493 M
Indeno(1,2,3-cd)pyrene	<0.018 mg/kg	TM218	0.0406 M	<0.018 M	0.281 M	0.186 M	0.369 M	0.0236 M
Dibenzo(a,h)anthracene	<0.023 mg/kg	TM218	<0.023 M	<0.023 M	0.0574 M	0.0457 M	0.107 M	<0.023 M
Benzo(g,h,i)perylene	<0.024 mg/kg	TM218	0.0481 M	<0.024 M	0.317 M	0.178 M	0.428 M	0.0423 M
PAH, Total Detected USEPA 16	<0.118 mg/kg	TM218	0.68 M	<0.118 M	6.58 M	5.25 M	13.3 M	0.966 M



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

PAH by GCMS

Results Legend		Customer Sample Ref.	TP16	TP17	TP18	TP19	TP20	TP21
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.20	0.30	0.20	0.20	1.20	0.40
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
diss,filtr	Dissolved / filtered sample.		29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024
tot.unfilt	Total / unfiltered sample.		240629-35	240629-35	240629-35	240629-35	240629-35	240629-35
*	Subcontracted - refer to subcontractor report for accreditation status.		30000099	30000088	30000093	30000131	30000125	30000104
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		ES	ES	ES	ES	ES	ES
(F)	Trigger breach confirmed							
1-4-5@	Sample deviation (see appendix)							
Component	LOD/Units		Method					
Naphthalene-d8 % recovery**	%	TM218	80.1	86.5	76.9	77.4	77.4	76.3
Acenaphthene-d10 % recovery**	%	TM218	87.1	88.6	81.7	81.8	77.4	81
Phenanthrene-d10 % recovery**	%	TM218	94.7	88.9	81.8	82.1	76.8	80.1
Chrysene-d12 % recovery**	%	TM218	82.8	93.7	76.4	74.9	70.1	75
Perylene-d12 % recovery**	%	TM218	71.9	89.9	68.7	67.1	71.2	67.3
Naphthalene	<0.009 mg/kg	TM218	0.229	0.0646	0.0751	0.0653	<0.009	<0.009
Acenaphthylene	<0.012 mg/kg	TM218	0.116	0.0321	<0.012	<0.012	<0.012	<0.012
Acenaphthene	<0.008 mg/kg	TM218	0.349	0.105	0.131	0.141	<0.008	0.0175
Fluorene	<0.01 mg/kg	TM218	0.245	0.0745	0.0966	0.106	<0.01	<0.01
Phenanthrene	<0.015 mg/kg	TM218	2.98	0.889	1.13	1.22	<0.015	0.118
Anthracene	<0.016 mg/kg	TM218	0.47	0.17	0.207	0.241	<0.016	<0.016
Fluoranthene	<0.017 mg/kg	TM218	4.11	1.36	1.77	1.74	<0.017	0.136
Pyrene	<0.015 mg/kg	TM218	3.44	1.16	1.54	1.49	<0.015	0.117
Benz(a)anthracene	<0.014 mg/kg	TM218	1.69	0.584	0.742	0.701	<0.014	0.0629
Chrysene	<0.01 mg/kg	TM218	1.9	0.631	0.882	0.796	<0.01	0.0769
Benzo(b)fluoranthene	<0.015 mg/kg	TM218	2.14	0.779	0.952	0.832	<0.015	0.0673
Benzo(k)fluoranthene	<0.014 mg/kg	TM218	0.704	0.238	0.303	0.292	<0.014	0.0232
Benzo(a)pyrene	<0.015 mg/kg	TM218	1.38	0.529	0.663	0.588	<0.015	0.0456
Indeno(1,2,3-cd)pyrene	<0.018 mg/kg	TM218	0.949	0.293	0.393	0.338	<0.018	0.0247
Dibenzo(a,h)anthracene	<0.023 mg/kg	TM218	0.2	0.0724	0.0859	0.0762	<0.023	<0.023
Benzo(g,h,i)perylene	<0.024 mg/kg	TM218	0.907	0.338	0.427	0.37	<0.024	<0.024
PAH, Total Detected USEPA 16	<0.118 mg/kg	TM218	21.8	7.32	9.4	9	<0.118	0.69



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

PAH by GCMS

Results Legend		Customer Sample Ref.	TP22					
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50					
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		27/06/2024					
diss,filtr	Dissolved / filtered sample.							
tot.unfiltr	Total / unfiltered sample.		29/06/2024					
*	Subcontracted - refer to subcontractor report for accreditation status.		240629-35					
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		30000112					
(F)	Trigger breach confirmed		ES					
1.4.5@	Sample deviation (see appendix)							
Component	LOD/Units		Method					
Naphthalene-d8 % recovery**	%	TM218	74.5	3				
Acenaphthene-d10 % recovery**	%	TM218	76.7	3				
Phenanthrene-d10 % recovery**	%	TM218	73.2	3				
Chrysene-d12 % recovery**	%	TM218	63.1	3				
Perylene-d12 % recovery**	%	TM218	53.5	3				
Naphthalene	<0.009 mg/kg	TM218	0.0126	3 M				
Acenaphthylene	<0.012 mg/kg	TM218	<0.012	3 M				
Acenaphthene	<0.008 mg/kg	TM218	0.0145	3 M				
Fluorene	<0.01 mg/kg	TM218	0.0133	3 M				
Phenanthrene	<0.015 mg/kg	TM218	0.222	3 M				
Anthracene	<0.016 mg/kg	TM218	<0.016	3 M				
Fluoranthene	<0.017 mg/kg	TM218	0.127	3 M				
Pyrene	<0.015 mg/kg	TM218	0.117	3 M				
Benz(a)anthracene	<0.014 mg/kg	TM218	0.0583	3 M				
Chrysene	<0.01 mg/kg	TM218	0.0972	3 M				
Benzo(b)fluoranthene	<0.015 mg/kg	TM218	0.0716	3 M				
Benzo(k)fluoranthene	<0.014 mg/kg	TM218	0.0198	3 M				
Benzo(a)pyrene	<0.015 mg/kg	TM218	0.0402	3 M				
Indeno(1,2,3-cd)pyrene	<0.018 mg/kg	TM218	0.0211	3 M				
Dibenzo(a,h)anthracene	<0.023 mg/kg	TM218	<0.023	3 M				
Benzo(g,h,i)perylene	<0.024 mg/kg	TM218	0.0307	3 M				
PAH, Total Detected USEPA 16	<0.118 mg/kg	TM218	0.845	3				



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

TPH CWG (S)

Results Legend		Customer Sample Ref.	DS01	DS08	DS10	TP05	TP09	TP15
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50	0.45	0.60	0.90	0.30	0.50
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
diss,filtr	Dissolved / filtered sample.		29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024	29/06/2024
tot.unfiltr	Total / unfiltered sample.		240629-35	240629-35	240629-35	240629-35	240629-35	240629-35
*	Subcontracted - refer to subcontractor report for accreditation status.		30000142	30000152	30000014	30000061	30000159	30000025
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		ES	ES	ES	ES	ES	ES
(F)	Trigger breach confirmed							
1-4456	Sample deviation (see appendix)							
Component	LOD/Units		Method					
GRO Surrogate % recovery**	%	TM089	67.6	50.3	91.1	100	90.2	79
Aliphatics >C5-C6 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aliphatics >C6-C8 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aliphatics >C8-C10 (HS_1D_AL)	<0.01 mg/kg	TM089	0.0113	<0.01	<0.01	<0.01	<0.01	<0.01
Aliphatics >C10-C12 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1	3.78	<1	<1	<1	<1
Aliphatics >C12-C16 (EH_2D_AL_#1)	<1 mg/kg	TM414	1.36	9.52	2.11	<1	<1	3.82
Aliphatics >C16-C21 (EH_2D_AL_#1)	<1 mg/kg	TM414	1.42	11.8	3.2	<1	<1	8.64
Aliphatics >C16-C35 (EH_2D_AL_#1)	<1 mg/kg	TM414	3.26	34.5	7.52	<1	9.8	13.7
Aliphatics >C21-C35 (EH_2D_AL_#1)	<1 mg/kg	TM414	1.84	22.8	4.32	<1	9.73	5.1
Aliphatics >C35-C44 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1	1.74	<1	<1	<1	<1
Total Aliphatics >C10-C44 (EH_2D_AR_#1)	<5 mg/kg	TM414	5.37	49.6	9.9	<5	10.5	17.9
Total Aliphatics & Aromatics >C10-C44 (EH_2D_Total_#1)	<10 mg/kg	TM414	<10	54.7	11.6	<10	29.2	20.8
Aromatics >EC5-EC7 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aromatics >EC7-EC8 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aromatics >EC8-EC10 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aromatics > EC10-EC12 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	<1	<1	<1	<1	<1
Aromatics > EC12-EC16 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	1.94	<1	<1	<1	<1
Aromatics > EC16-EC21 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	1.04	<1	<1	1.68	1.2
Aromatics > EC16-EC35 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	2.16	<1	<1	17.5	1.62
Aromatics > EC21-EC35 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	1.11	<1	<1	15.8	<1
Aromatics >EC35-EC44 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	<1	<1	<1	<1	<1
Aromatics > EC40-EC44 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	<1	<1	<1	<1	<1
Total Aromatics > EC10-EC44 (EH_2D_AR_#1)	<5 mg/kg	TM414	<5	5.17	<5	<5	18.6	<5
Total Aliphatics & Aromatics >C5-C44 (EH_2D_Total_#1+HS_1D_Total)	<10 mg/kg	TM414	<10	54.7	<10	<10	29.2	17.9
Total Aliphatics >C5-C10 (HS_1D_AL_TOTAL)	<0.05 mg/kg	TM089	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Total Aromatics >EC5-EC10 (HS_1D_AR_TOTAL)	<0.05 mg/kg	TM089	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
GRO >C5-C10 (HS_1D_TOTAL)	<0.02 mg/kg	TM089	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

TPH CWG (S)

Results Legend		Customer Sample Ref.	TP18	TP20	TP21			
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.20	1.20	0.40			
M	mCERTS accredited.		Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)			
aq	Aqueous / settled sample.		27/06/2024	27/06/2024	27/06/2024			
diss,filtr	Dissolved / filtered sample.		29/06/2024	29/06/2024	29/06/2024			
tot.unfiltr	Total / unfiltered sample.		240629-35	240629-35	240629-35			
*	Subcontracted - refer to subcontractor report for accreditation status.		30000093	30000125	30000104			
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		ES	ES	ES			
(F)	Trigger breach confirmed							
1-4*5@	Sample deviation (see appendix)							
Component	LOD/Units		Method					
GRO Surrogate % recovery**	%	TM089	72.6	89.4	86.5			
Aliphatics >C5-C6 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01			
Aliphatics >C6-C8 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01			
Aliphatics >C8-C10 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01			
Aliphatics >C10-C12 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1 #	<1 #	<1 #			
Aliphatics >C12-C16 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1 #	<1 #	<1 #			
Aliphatics >C16-C21 (EH_2D_AL_#1)	<1 mg/kg	TM414	2.43 #	<1 #	<1 #			
Aliphatics >C16-C35 (EH_2D_AL_#1)	<1 mg/kg	TM414	26.2	<1	4.36			
Aliphatics >C21-C35 (EH_2D_AL_#1)	<1 mg/kg	TM414	23.7 #	<1 #	3.9 #			
Aliphatics >C35-C44 (EH_2D_AL_#1)	<1 mg/kg	TM414	2.05	<1	<1			
Total Aliphatics >C10-C44 (EH_2D_AR_#1)	<5 mg/kg	TM414	29.3	<5	<5			
Total Aliphatics & Aromatics >C10-C44 (EH_2D_Total_#1)	<10 mg/kg	TM414	85.2	<10	<10			
Aromatics >EC5-EC7 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01			
Aromatics >EC7-EC8 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01			
Aromatics >EC8-EC10 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01	<0.01			
Aromatics > EC10-EC12 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1 #	<1 #	<1 #			
Aromatics > EC12-EC16 (EH_2D_AR_#1)	<1 mg/kg	TM414	1.92 #	<1 #	<1 #			
Aromatics > EC16-EC21 (EH_2D_AR_#1)	<1 mg/kg	TM414	12.2 #	<1 #	1.13 #			
Aromatics > EC16-EC35 (EH_2D_AR_#1)	<1 mg/kg	TM414	50.8	<1	3.16			
Aromatics > EC21-EC35 (EH_2D_AR_#1)	<1 mg/kg	TM414	38.6 #	<1 #	2.04 #			
Aromatics >EC35-EC44 (EH_2D_AR_#1)	<1 mg/kg	TM414	3.08	<1	<1			
Aromatics > EC40-EC44 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	<1	<1			
Total Aromatics > EC10-EC44 (EH_2D_AR_#1)	<5 mg/kg	TM414	55.8	<5	<5			
Total Aliphatics & Aromatics >C5-C44 (EH_2D_Total_#1+HS_1D_Total)	<10 mg/kg	TM414	85.2	<10	<10			
Total Aliphatics >C5-C10 (HS_1D_AL_TOTAL)	<0.05 mg/kg	TM089	<0.05	<0.05	<0.05			
Total Aromatics >EC5-EC10 (HS_1D_AR_TOTAL)	<0.05 mg/kg	TM089	<0.05	<0.05	<0.05			
GRO >C5-C10 (HS_1D_TOTAL)	<0.02 mg/kg	TM089	<0.02	<0.02	<0.02			



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

Asbestos Identification - Solid Samples

Results Legend

- # ISO17025 accredited.
- M mCERTS accredited.
- * Subcontracted test.
- (F) Trigger breach confirmed
- 1-5&*\$@ Sample deviation (see appendix)

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Asbestos Actinolite	Asbestos Anthophyllite	Asbestos Tremolite	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	DS01ES 0.50 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000142 TM048	04/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	DS02ES 0.15 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000147 TM048	02/07/2024	Alex Horner	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	DS06ES 0.80 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000069 TM048	02/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	DS07ES 0.90 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000136 TM048	02/07/2024	Alex Horner	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	DS08ES 0.45 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000152 TM048	02/07/2024	Alex Horner	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	DS09ES 0.10 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000120 TM048	04/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	DS10ES 0.60 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000014 TM048	02/07/2024	Alex Horner	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP01ES 0.10 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000030 TM048	01/07/2024	Alex Horner	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Asbestos Actinolite	Asbestos Anthophyllite	Asbestos Tremolite	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP02ES 0.10 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000041 TM048	04/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP02ES 1.10 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000046 TM048	04/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP03ES 0.10 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000051 TM048	04/07/2024	Paul Poynton	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP04ES 0.20 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000035 TM048	04/07/2024	Paul Poynton	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP05ES 0.20 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000056 TM048	04/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP05ES 0.90 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000061 TM048	04/07/2024	Renata Bozhkov	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP06ES 0.10 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000164 TM048	02/07/2024	Alex Horner	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP09ES 0.30 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000159 TM048	04/07/2024	Paul Poynton	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP15ES 0.10 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000020 TM048	02/07/2024	Alex Horner	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Asbestos Actinolite	Asbestos Anthophyllite	Asbestos Tremolite	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP15ES 0.50 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000025 TM048	04/07/2024	Renata Bozhkov	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP16ES 0.20 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000099 TM048	02/07/2024	Alex Horner	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP17ES 0.30 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000088 TM048	04/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP18ES 0.20 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000093 TM048	02/07/2024	Alex Horner	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP19ES 0.20 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000131 TM048	02/07/2024	Alex Horner	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP20ES 1.20 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000125 TM048	02/07/2024	Alex Horner	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP21ES 0.40 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000104 TM048	04/07/24	Danielle Duncan	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TP22ES 0.50 SOLID 27/06/2024 00:00:00 29/06/2024 09:00:00 240629-35 30000112 TM048	04/07/2024	Renata Bozhkov	N/A	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

Table of Results - Appendix

Method No	Description
TM414	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GCxGC-FID
TM089	Determination of Gasoline Range Hydrocarbons (GRO) by Headspace GC-FID (C4-C12)
TM151	Determination of Hexavalent Chromium using Kone analyser
TM181	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES
PM024	Soil preparation including homogenisation, moisture, screens of soils for Asbestos Containing Material
TM018	Determination of Loss on Ignition
TM116	Determination of Volatile Organic Compounds by Headspace / GC-MS
TM132	ELTRA CS800 Operators Guide
TM133	Determination of pH in Soil and Water using the GLpH pH Meter
SUB	Subcontracted Test
TM048	Identification of Asbestos in Bulk Material
TM218	The determination of PAH in soil samples by GC-MS
TM222	Determination of Hot Water Soluble Boron in Soils (10:1 Water:Soil) by ICP OES.

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

Test Completion Dates

	Lab Sample No(s)	30000082	30000142	30000147	30000069	30000074	30000136	30000085	30000152	30000077	30000120
	Customer Sample Ref.	DS01	DS01	DS02	DS06	DS06	DS07	DS08	DS08	DS09	DS09
	AGS Ref.	ES									
	Depth	2.00	0.50	0.15	0.80	1.40	0.90	1.30	0.45	0.60	0.10
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Asbestos ID in Solid Samples		04-Jul-2024	03-Jul-2024	02-Jul-2024			03-Jul-2024		03-Jul-2024		04-Jul-2024
Boron Water Soluble		04-Jul-2024	04-Jul-2024				04-Jul-2024		05-Jul-2024		04-Jul-2024
Calorific Value (S)*	25-Jul-2024					25-Jul-2024		25-Jul-2024		25-Jul-2024	
EPH CWG GC (S)		04-Jul-2024							04-Jul-2024		
GRO by GC-FID (S)		08-Jul-2024							08-Jul-2024		
Hexavalent Chromium (s)		02-Jul-2024	02-Jul-2024	02-Jul-2024		02-Jul-2024			02-Jul-2024		02-Jul-2024
Loss on Ignition in soils	03-Jul-2024					03-Jul-2024		03-Jul-2024		04-Jul-2024	
Metals in solid samples by OES		04-Jul-2024	04-Jul-2024	04-Jul-2024		04-Jul-2024		04-Jul-2024		04-Jul-2024	04-Jul-2024
PAH by GCMS		10-Jul-2024	08-Jul-2024	10-Jul-2024		09-Jul-2024		09-Jul-2024		09-Jul-2024	09-Jul-2024
pH		02-Jul-2024	02-Jul-2024	02-Jul-2024		02-Jul-2024		02-Jul-2024		02-Jul-2024	02-Jul-2024
Sample description	01-Jul-2024	01-Jul-2024	01-Jul-2024	01-Jul-2024	01-Jul-2024	01-Jul-2024	01-Jul-2024	01-Jul-2024	01-Jul-2024	01-Jul-2024	01-Jul-2024
Total Organic Carbon		05-Jul-2024	05-Jul-2024	05-Jul-2024		05-Jul-2024		05-Jul-2024		05-Jul-2024	05-Jul-2024
TPH CWG GC (S)		08-Jul-2024							08-Jul-2024		
VOC MS (S)		04-Jul-2024							04-Jul-2024		

	Lab Sample No(s)	30000014	30000066	30000030	30000041	30000046	30000051	30000035	30000056	30000061	30000164
	Customer Sample Ref.	DS10	DS10	TP01	TP02	TP02	TP03	TP04	TP05	TP05	TP06
	AGS Ref.	ES									
	Depth	0.60	2.80	0.10	0.10	1.10	0.10	0.20	0.20	0.90	0.10
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Asbestos ID in Solid Samples	03-Jul-2024		02-Jul-2024	04-Jul-2024	03-Jul-2024						
Boron Water Soluble	04-Jul-2024		04-Jul-2024								
Calorific Value (S)*		24-Jul-2024									
EPH CWG GC (S)	04-Jul-2024									04-Jul-2024	
GRO by GC-FID (S)	03-Jul-2024									04-Jul-2024	
Hexavalent Chromium (s)	02-Jul-2024		03-Jul-2024	03-Jul-2024	02-Jul-2024						
Loss on Ignition in soils		04-Jul-2024									
Metals in solid samples by OES	04-Jul-2024		04-Jul-2024	03-Jul-2024	04-Jul-2024						
PAH by GCMS	09-Jul-2024		11-Jul-2024	10-Jul-2024	09-Jul-2024	09-Jul-2024	12-Jul-2024	08-Jul-2024	08-Jul-2024	08-Jul-2024	08-Jul-2024
pH	02-Jul-2024		04-Jul-2024	04-Jul-2024	02-Jul-2024						
Sample description	01-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	01-Jul-2024						
Total Organic Carbon	05-Jul-2024		05-Jul-2024								
TPH CWG GC (S)	04-Jul-2024									04-Jul-2024	
VOC MS (S)	03-Jul-2024									04-Jul-2024	

	Lab Sample No(s)	30000159	30000020	30000025	30000099	30000088	30000093	30000131	30000125	30000104	30000109
	Customer Sample Ref.	TP09	TP15	TP15	TP16	TP17	TP18	TP19	TP20	TP21	TP21
	AGS Ref.	ES									
	Depth	0.30	0.10	0.50	0.20	0.30	0.20	0.20	1.20	0.40	1.10
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Asbestos ID in Solid Samples	04-Jul-2024	03-Jul-2024	04-Jul-2024	03-Jul-2024	04-Jul-2024	03-Jul-2024	03-Jul-2024	03-Jul-2024	03-Jul-2024	04-Jul-2024	
Boron Water Soluble	05-Jul-2024	04-Jul-2024									
Calorific Value (S)*											25-Jul-2024
EPH CWG GC (S)	04-Jul-2024		04-Jul-2024				04-Jul-2024		05-Jul-2024	04-Jul-2024	
GRO by GC-FID (S)	03-Jul-2024		04-Jul-2024				03-Jul-2024		03-Jul-2024	03-Jul-2024	
Hexavalent Chromium (s)	03-Jul-2024	02-Jul-2024									
Loss on Ignition in soils											04-Jul-2024
Metals in solid samples by OES	04-Jul-2024	03-Jul-2024	03-Jul-2024	04-Jul-2024	04-Jul-2024	04-Jul-2024	04-Jul-2024	03-Jul-2024	04-Jul-2024	04-Jul-2024	
PAH by GCMS	10-Jul-2024	08-Jul-2024	11-Jul-2024	05-Jul-2024	10-Jul-2024	09-Jul-2024	09-Jul-2024	08-Jul-2024	08-Jul-2024	09-Jul-2024	
pH	04-Jul-2024	02-Jul-2024									
Sample description	02-Jul-2024	01-Jul-2024									
Total Organic Carbon	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024	
TPH CWG GC (S)	04-Jul-2024		04-Jul-2024				04-Jul-2024		05-Jul-2024	04-Jul-2024	
VOC MS (S)	03-Jul-2024		04-Jul-2024				03-Jul-2024		02-Jul-2024	03-Jul-2024	



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

Lab Sample No(s)	30000112
Customer Sample Ref.	TP22
AGS Ref.	ES
Depth	0.50
Type	Soil/Solid (S)

Asbestos ID in Solid Samples	04-Jul-2024
Boron Water Soluble	04-Jul-2024
Calorific Value (S)*	25-Jul-2024
Hexavalent Chromium (s)	02-Jul-2024
Loss on Ignition in soils	03-Jul-2024
Metals in solid samples by OES	04-Jul-2024
PAH by GCMS	09-Jul-2024
pH	02-Jul-2024
Sample description	01-Jul-2024
Total Organic Carbon	05-Jul-2024



CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

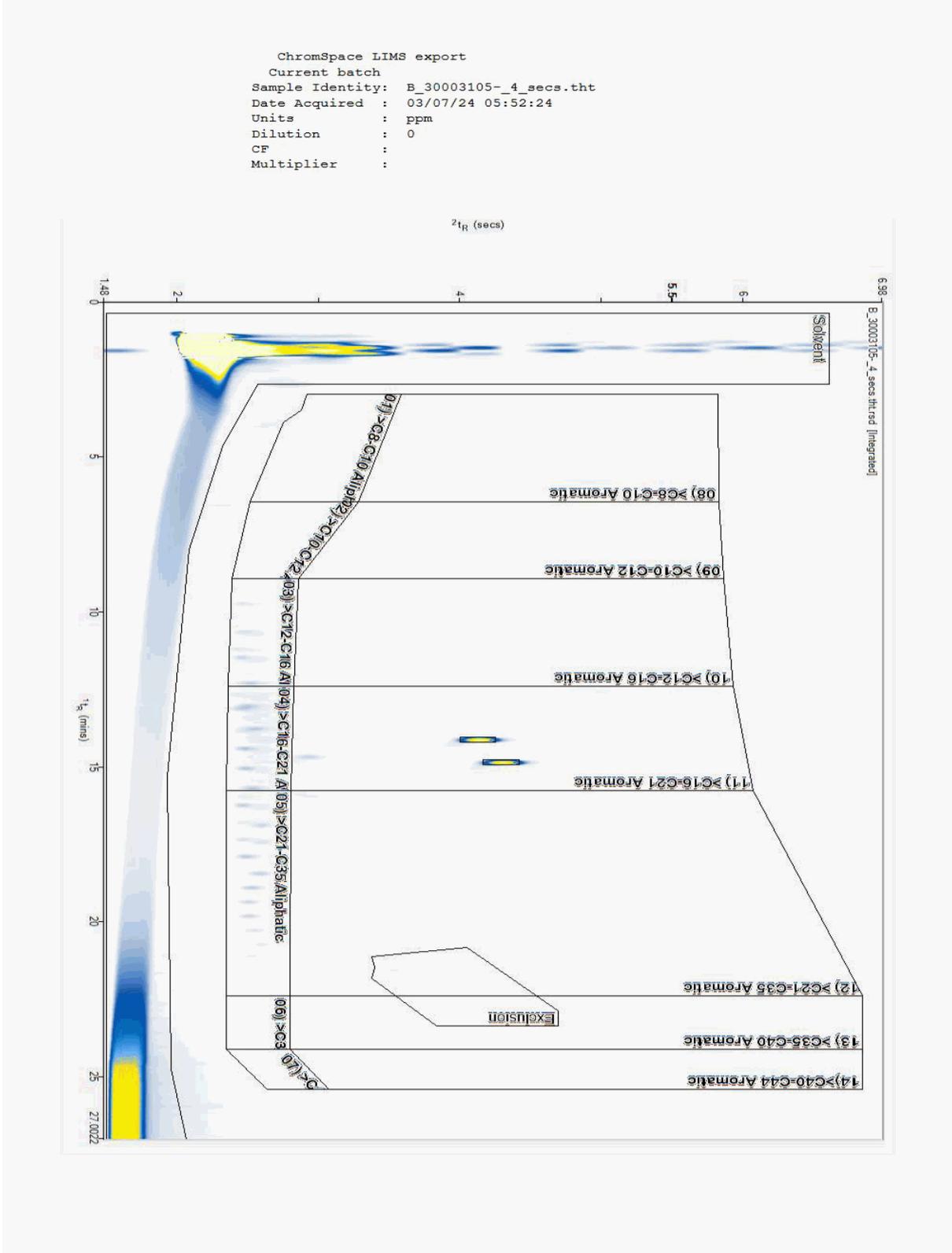
Superseded Report: 734510

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 30003105
Sample ID : TP15

Depth : 0.50





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

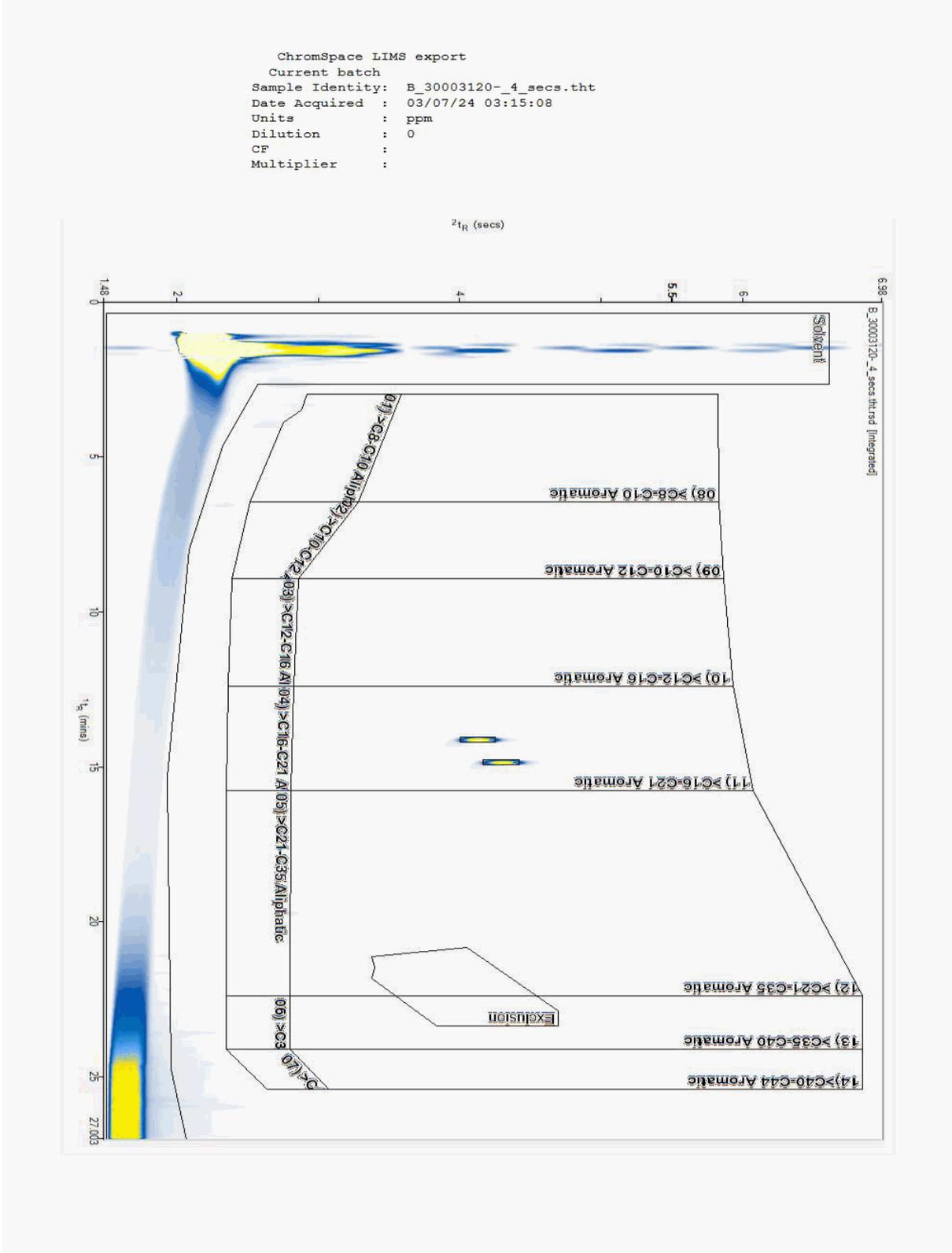
Superseded Report: 734510

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 30003120
Sample ID : TP05

Depth : 0.90





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

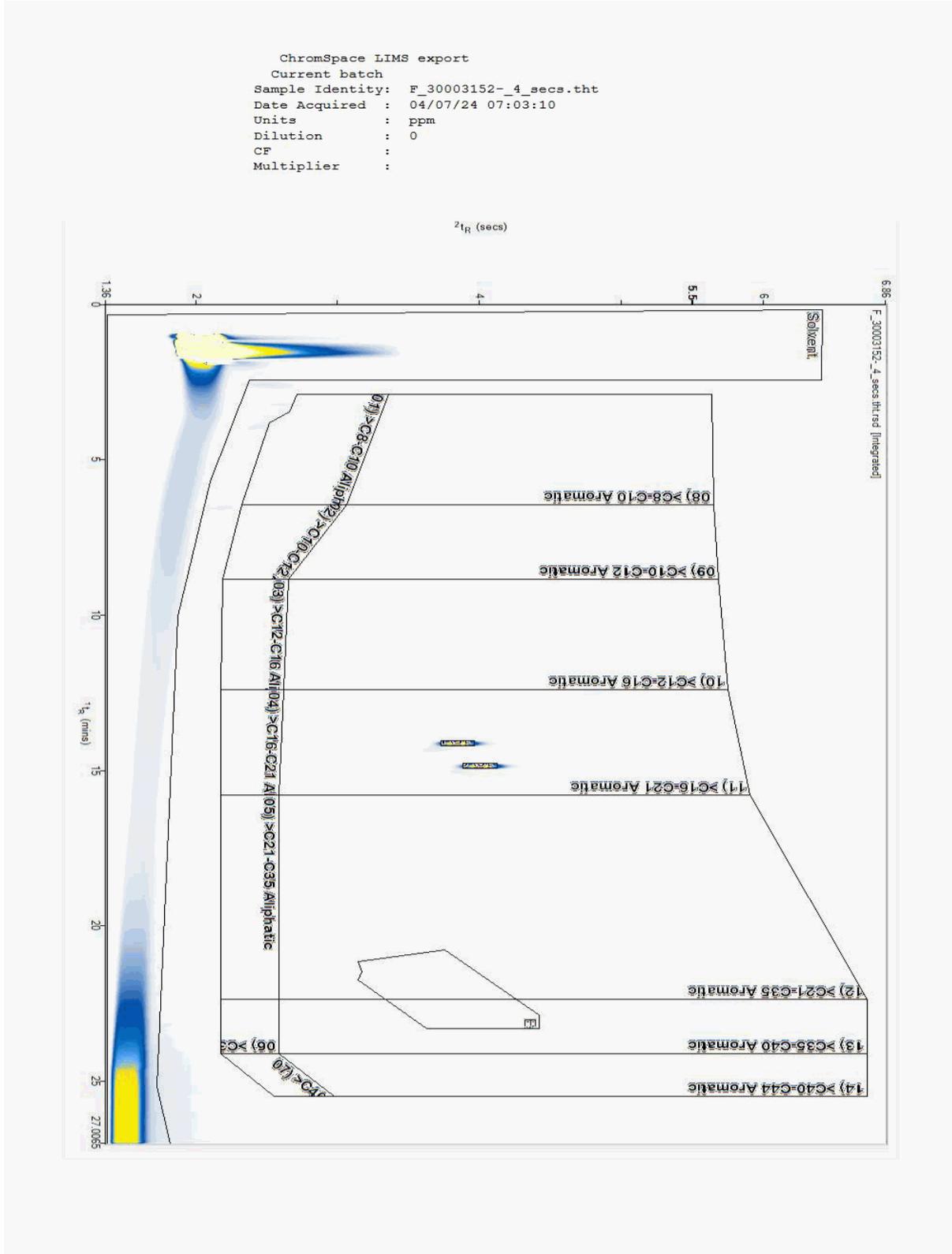
Superseded Report: 734510

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 30003152
Sample ID : TP20

Depth : 1.20





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

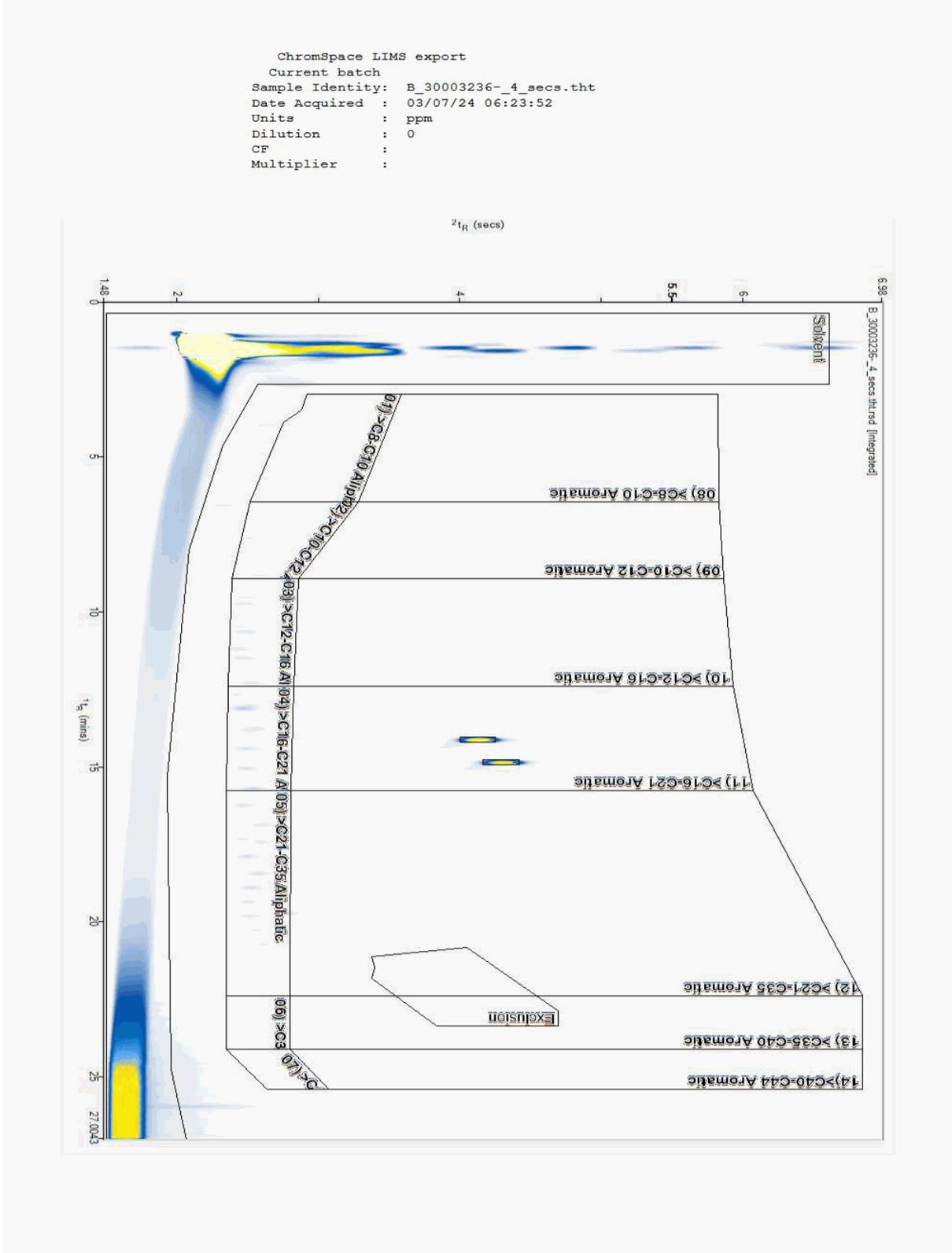
Superseded Report: 734510

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 30003236
Sample ID : DS01

Depth : 0.50





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

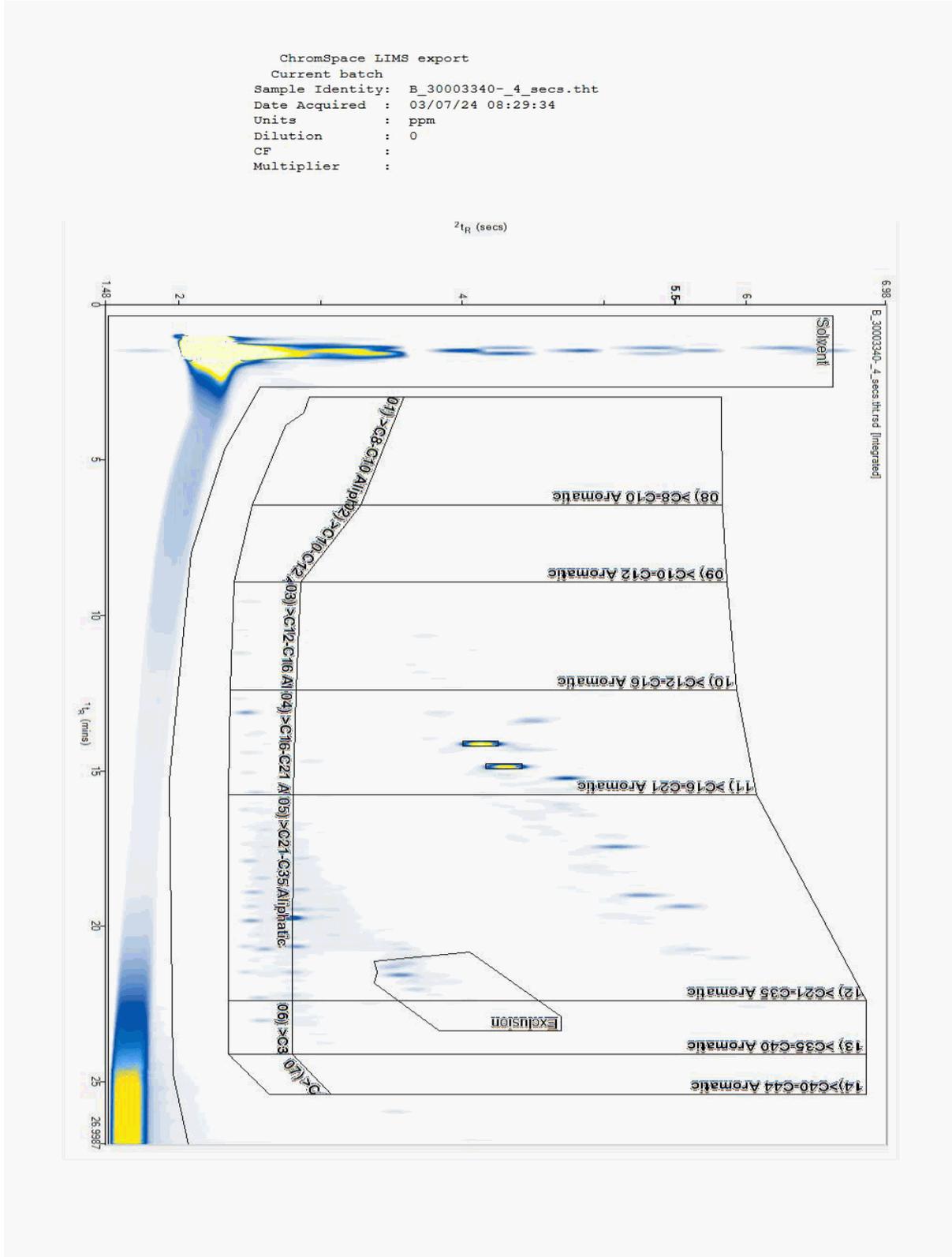
Superseded Report: 734510

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 30003340
Sample ID : TP18

Depth : 0.20





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

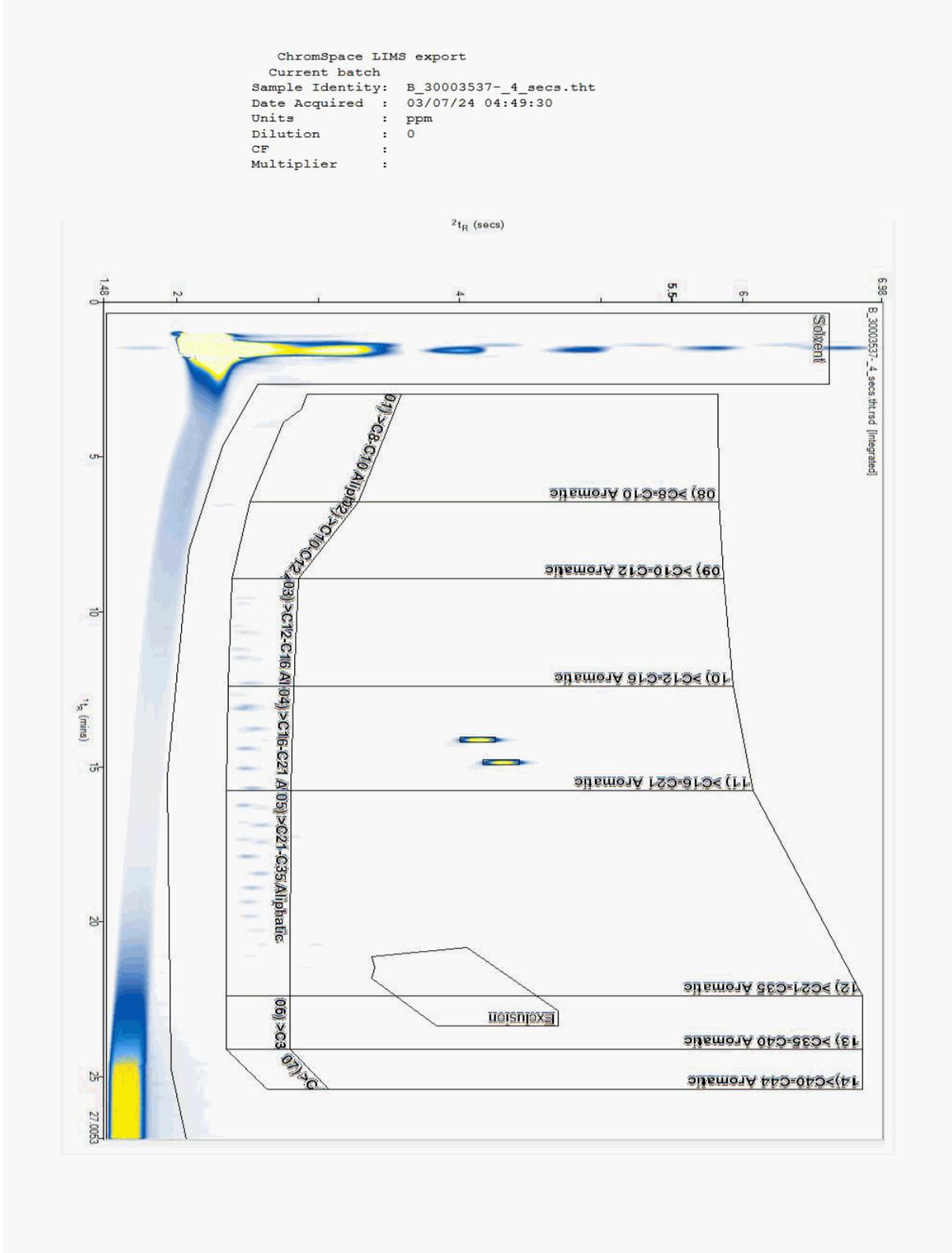
Superseded Report: 734510

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 30003537
Sample ID : DS10

Depth : 0.60





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

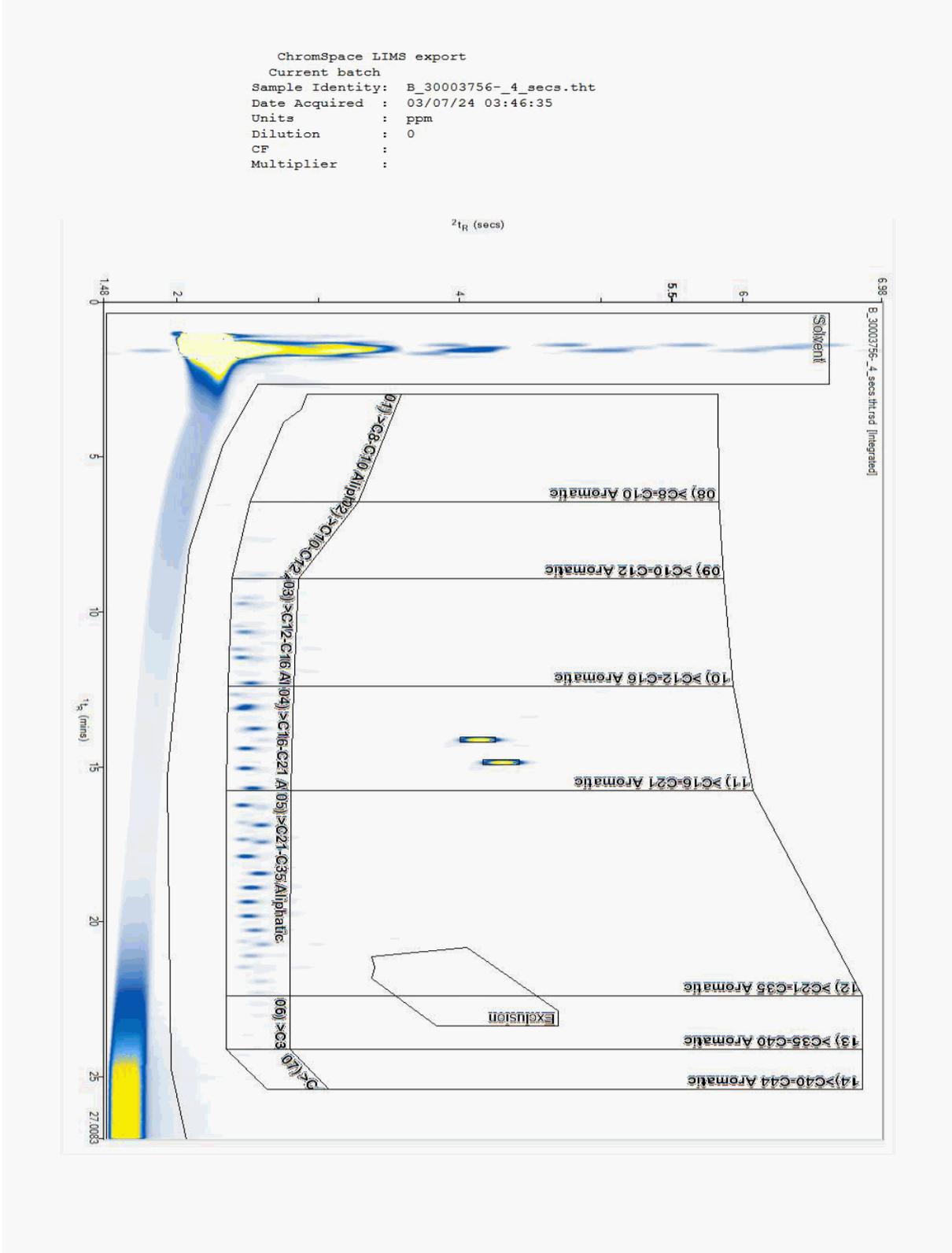
Superseded Report: 734510

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 30003756
Sample ID : DS08

Depth : 0.45





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

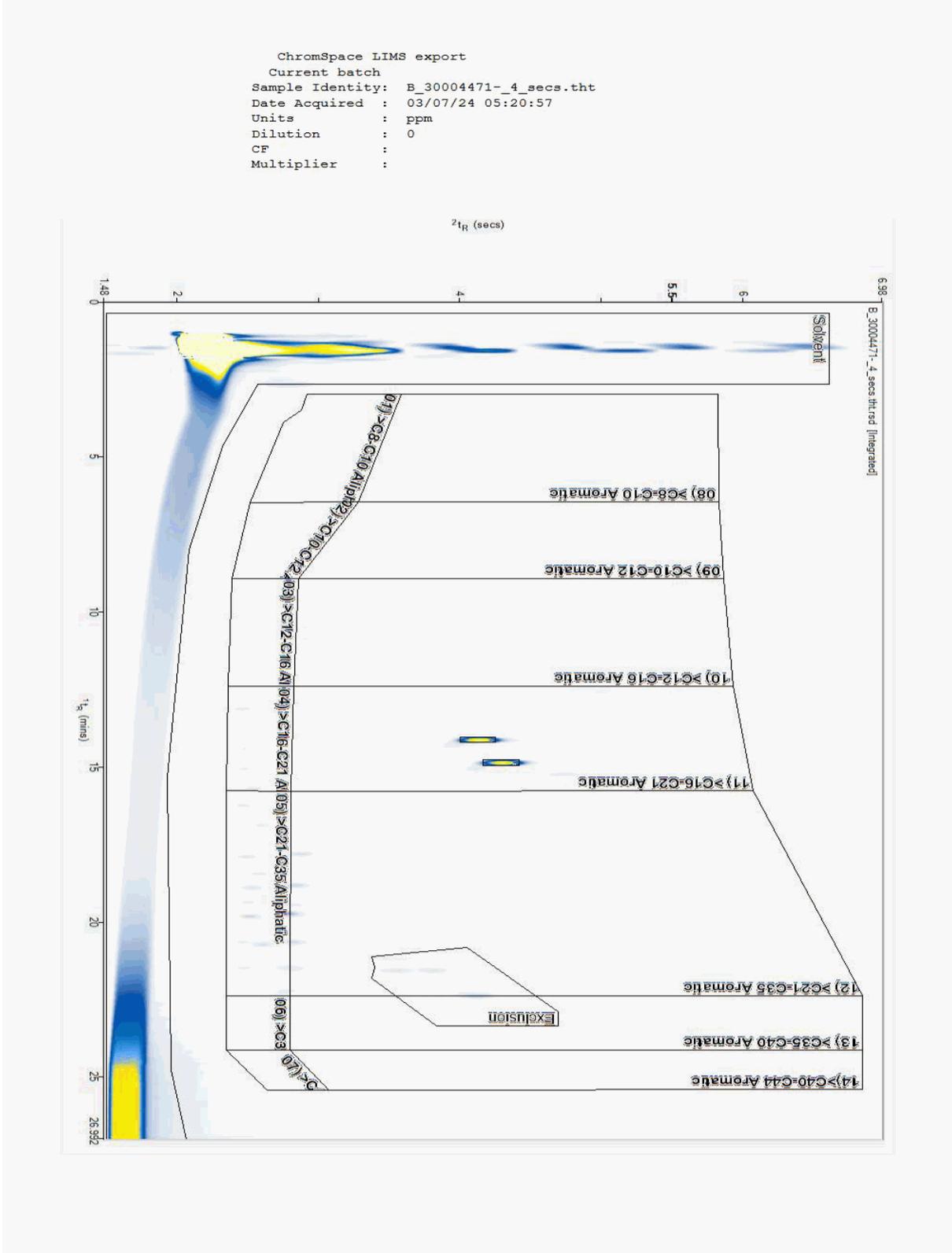
Superseded Report: 734510

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 30004471
Sample ID : TP21

Depth : 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

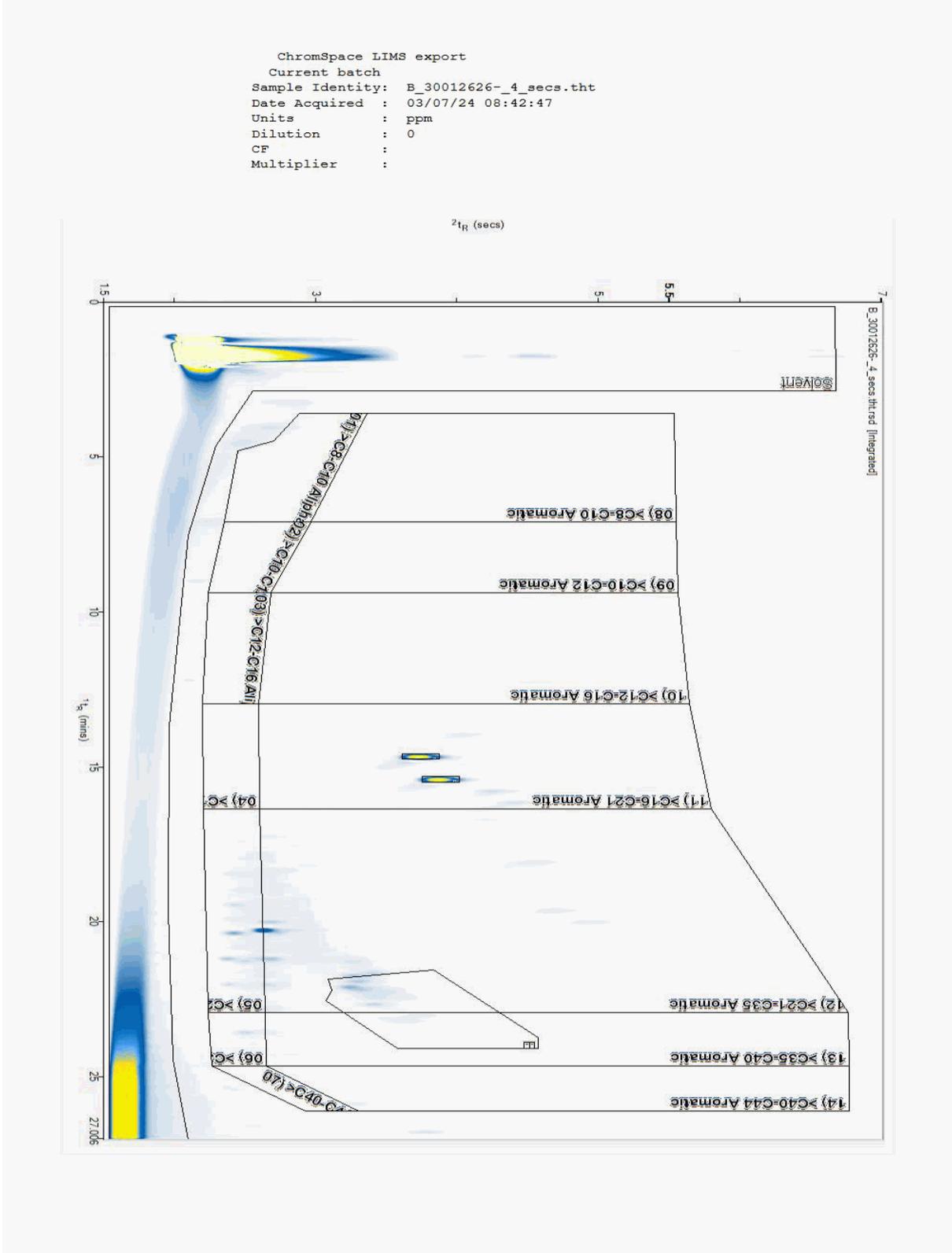
Superseded Report: 734510

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 30012626
Sample ID : TP09

Depth : 0.30





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

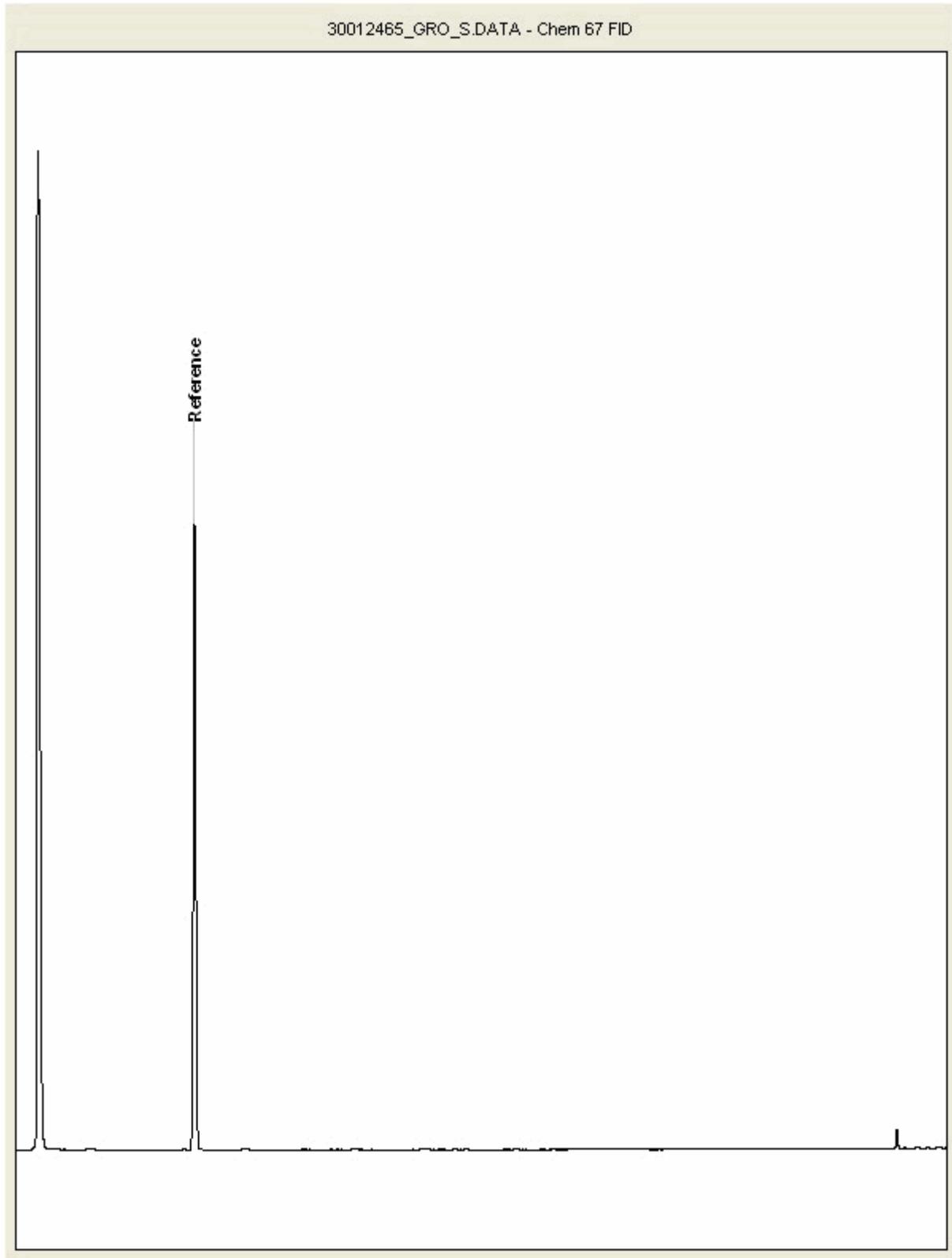
Superseded Report: 734510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 30012465
Sample ID : TP20

Depth : 1.20





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

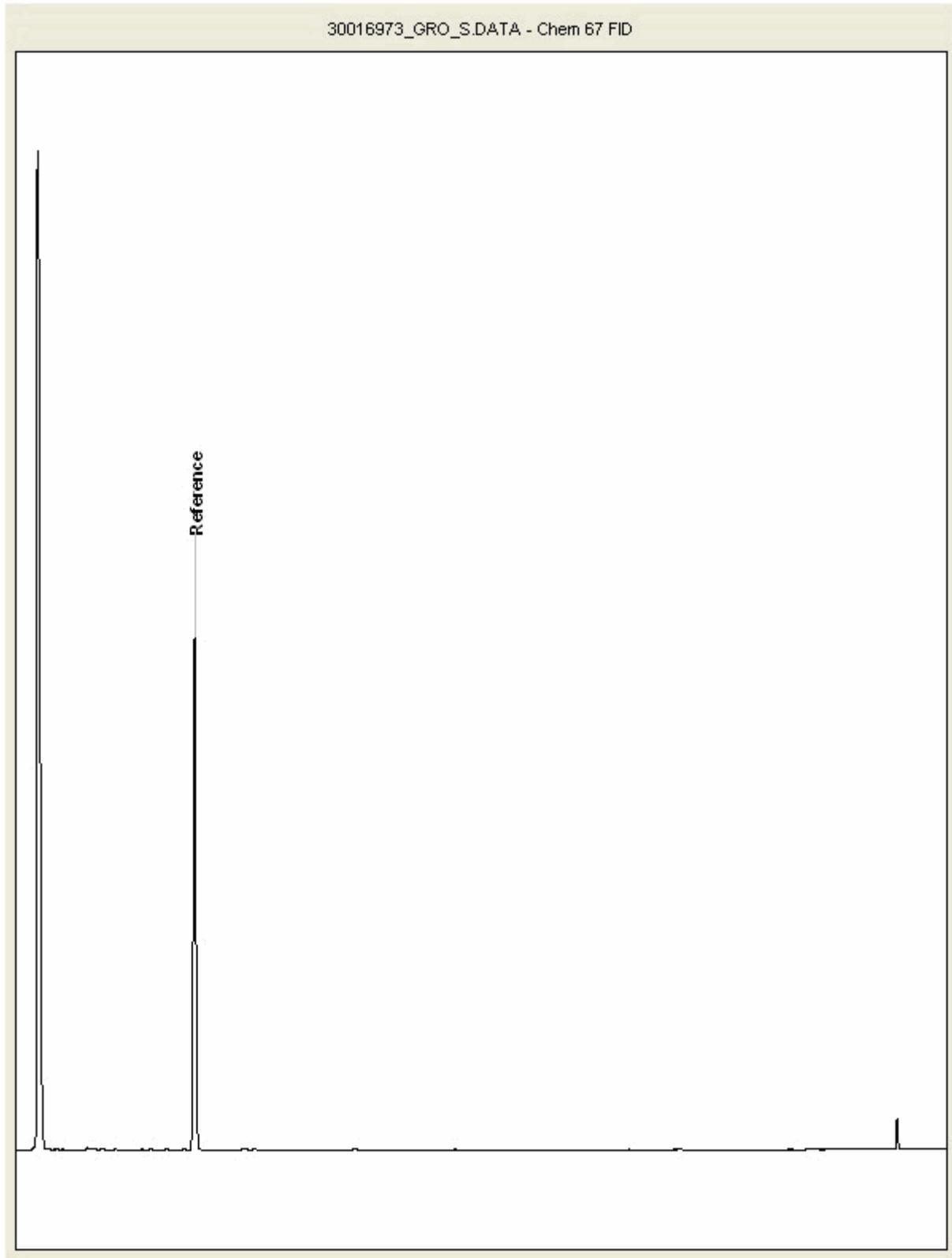
Superseded Report: 734510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 30016973
Sample ID : DS10

Depth : 0.60





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

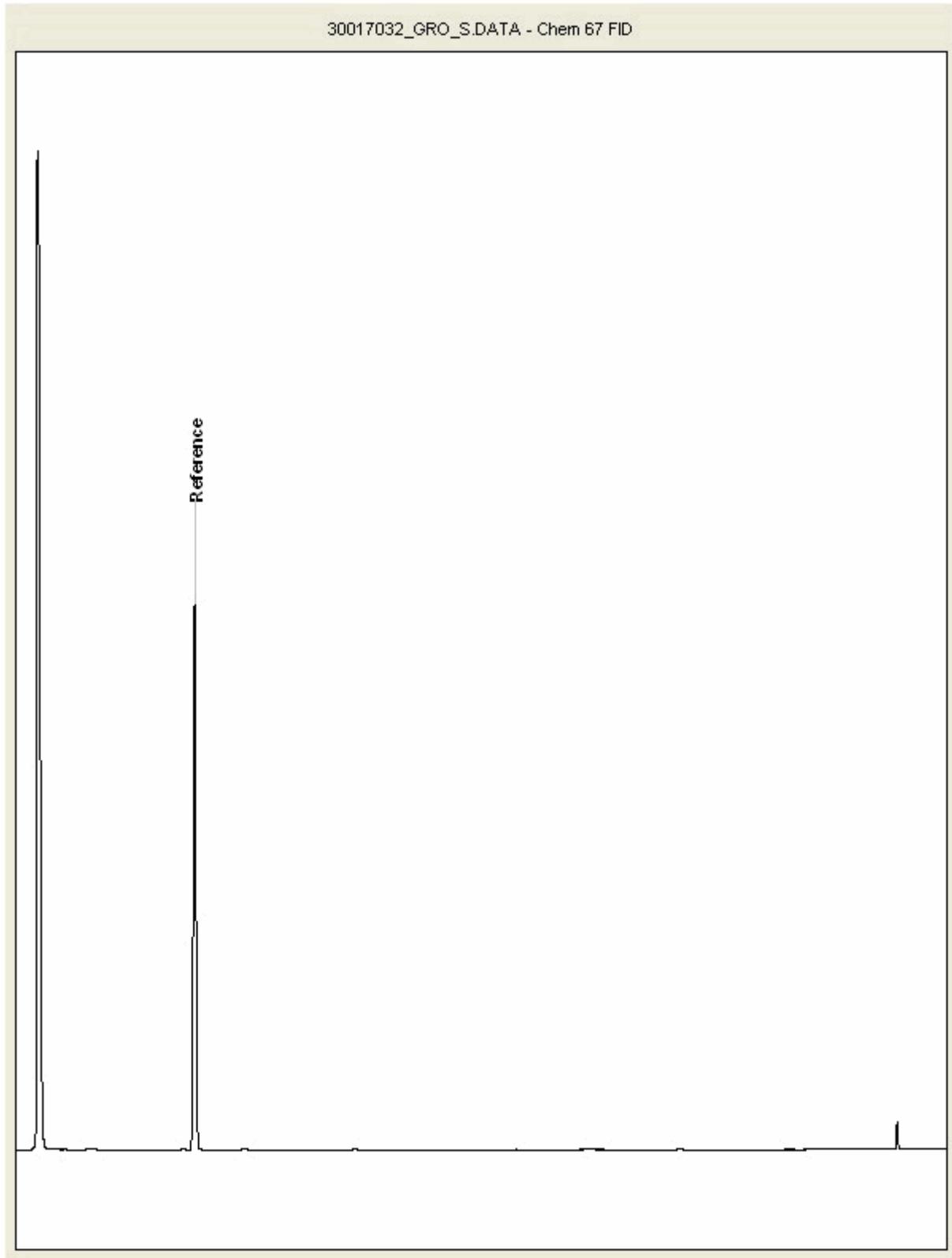
Superseded Report: 734510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 30017032
Sample ID : TP21

Depth : 0.40





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

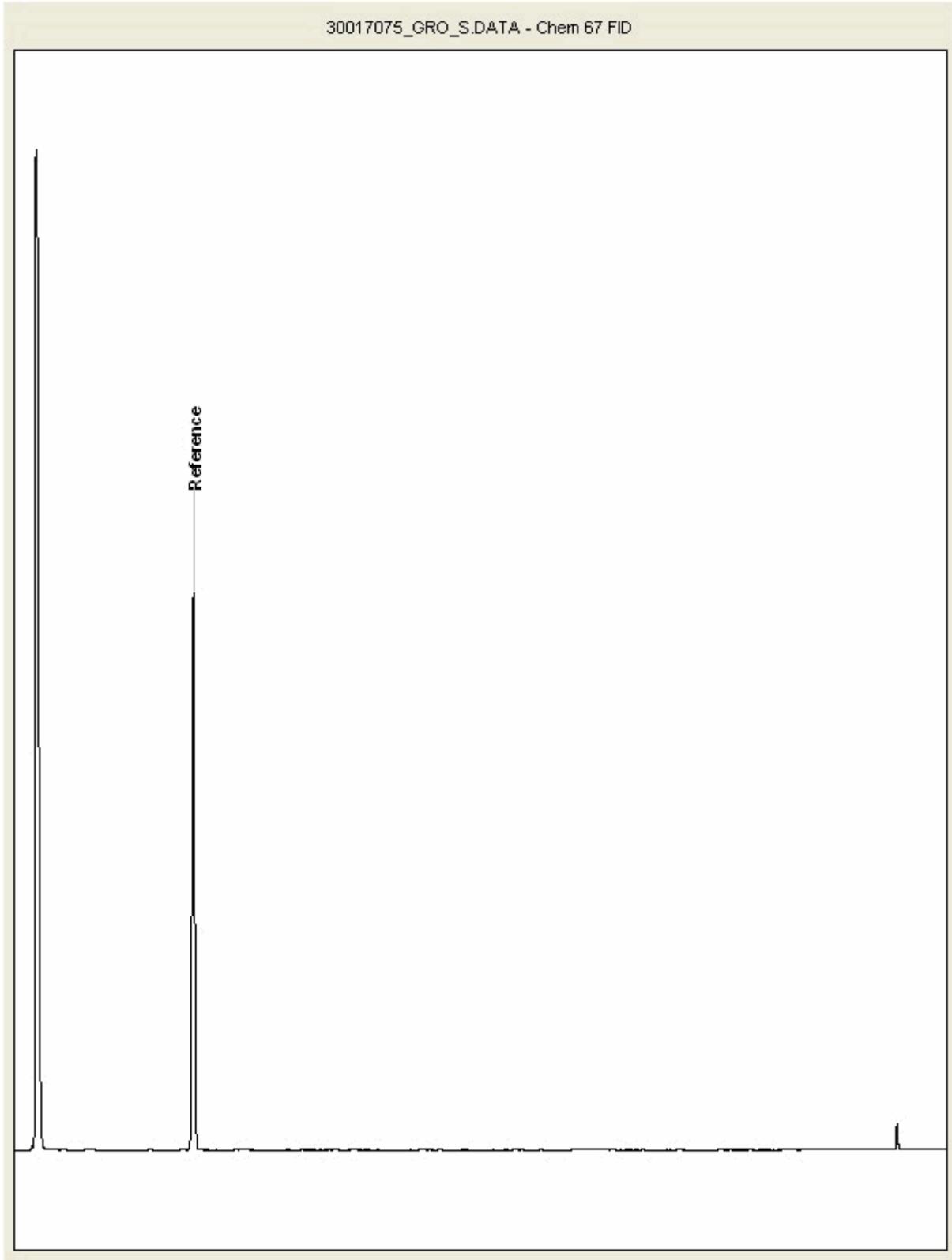
Superseded Report: 734510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 30017075
Sample ID : TP09

Depth : 0.30





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

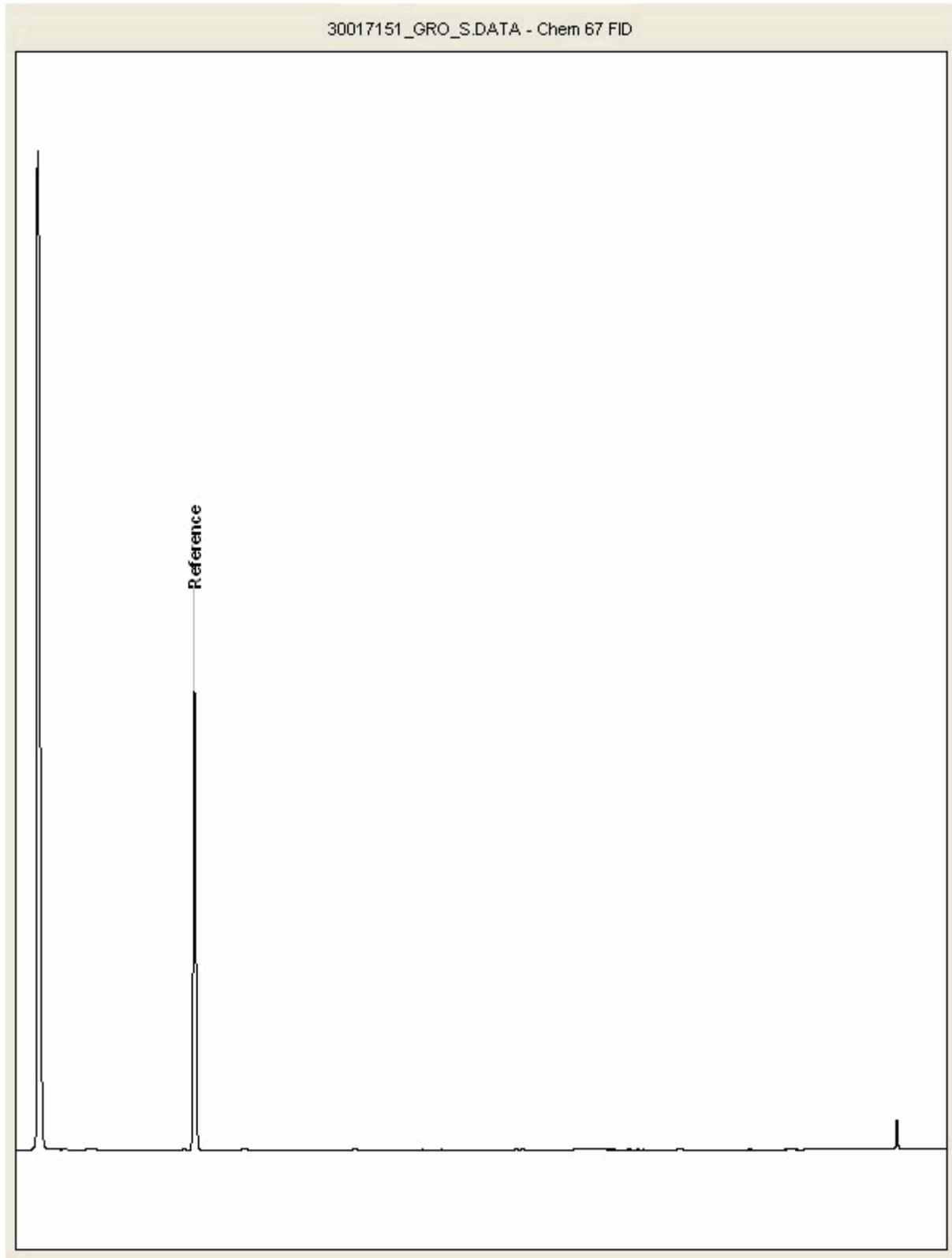
Superseded Report: 734510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 30017151
Sample ID : TP18

Depth : 0.20





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

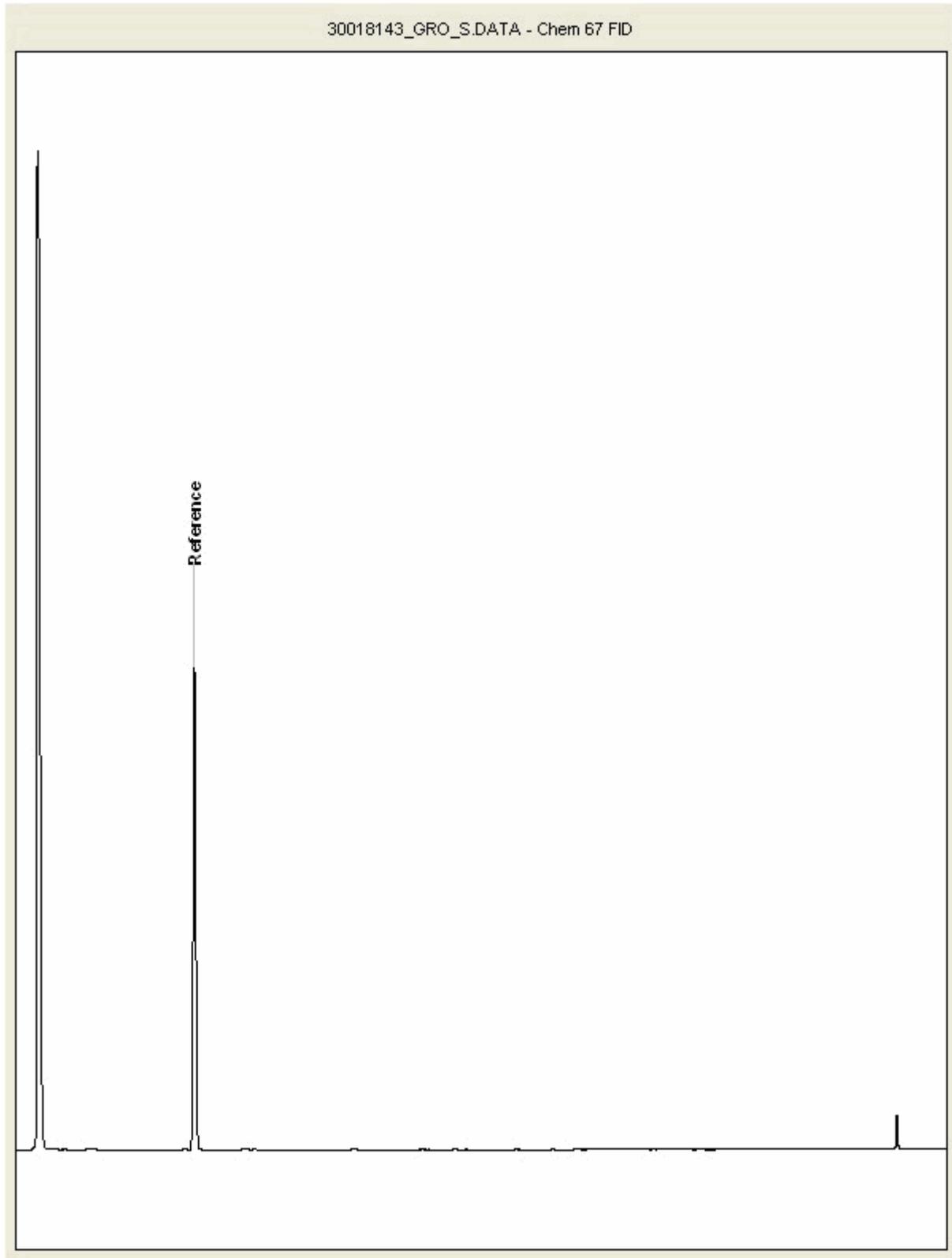
Superseded Report: 734510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 30018143
Sample ID : TP15

Depth : 0.50





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

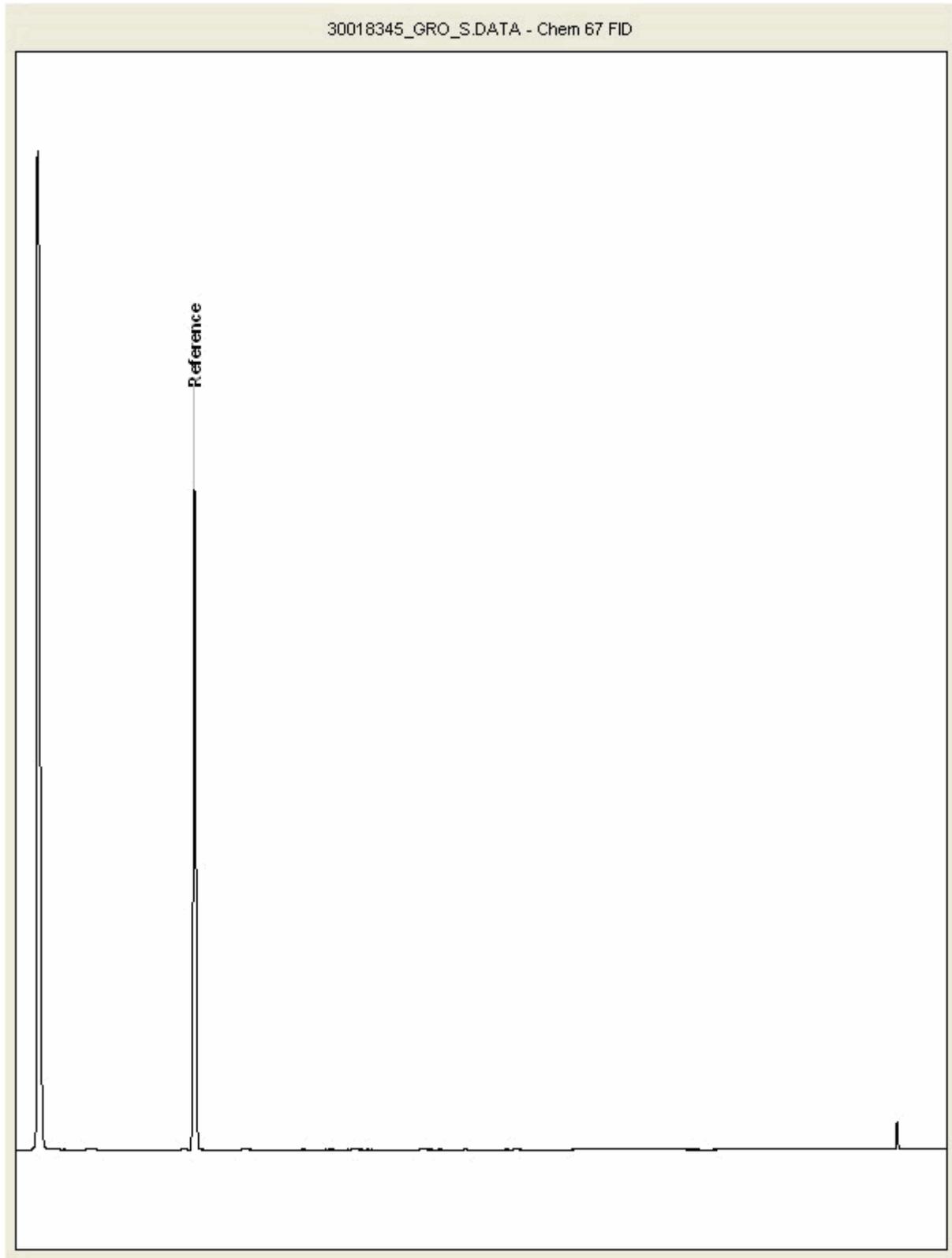
Superseded Report: 734510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 30018345
Sample ID : TP05

Depth : 0.90





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

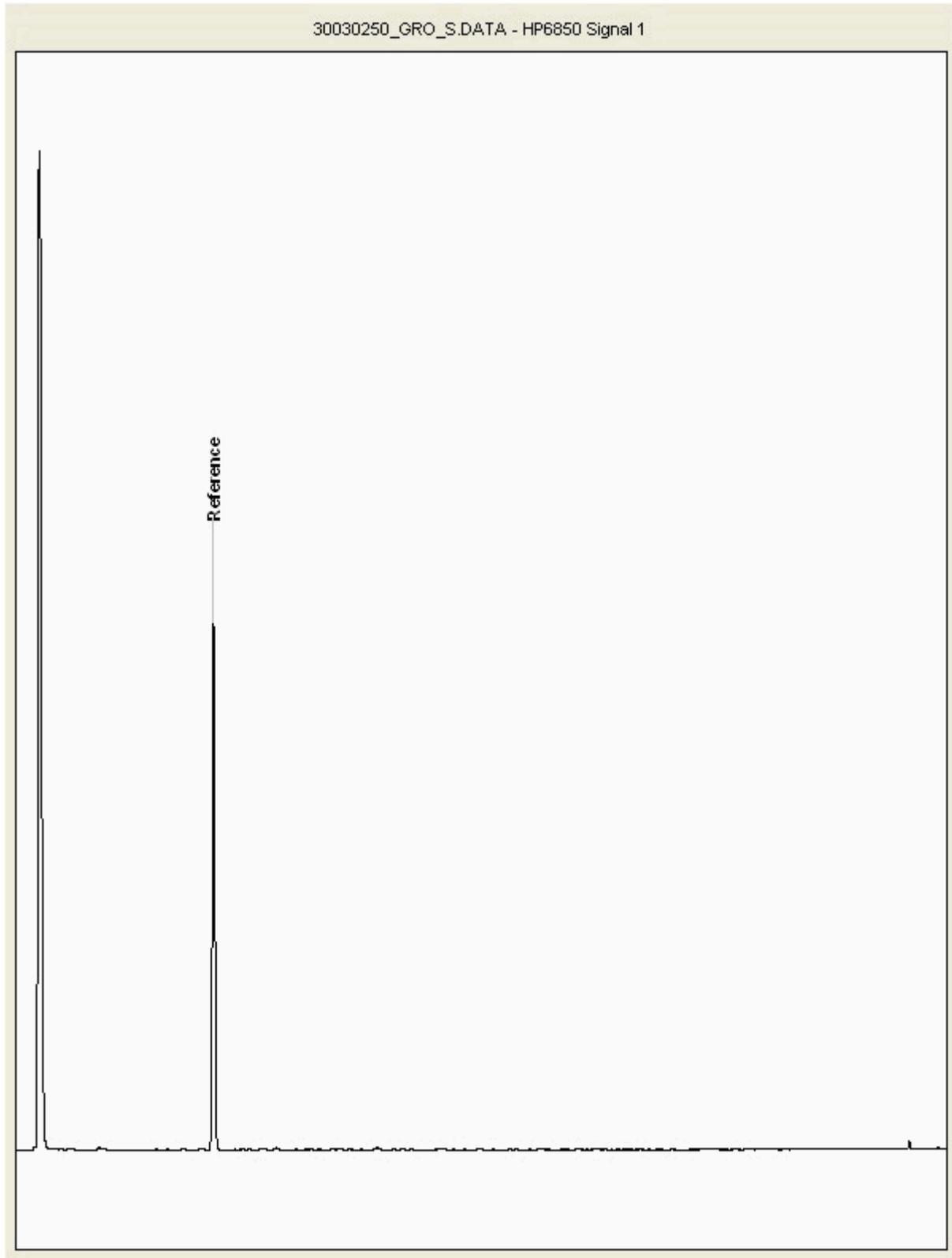
Superseded Report: 734510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 30030250
Sample ID : DS01

Depth : 0.50





CERTIFICATE OF ANALYSIS

Validated

SDG: 240629-35
Client Ref.: Low Farm

Report Number: 735811
Location: Low Farm

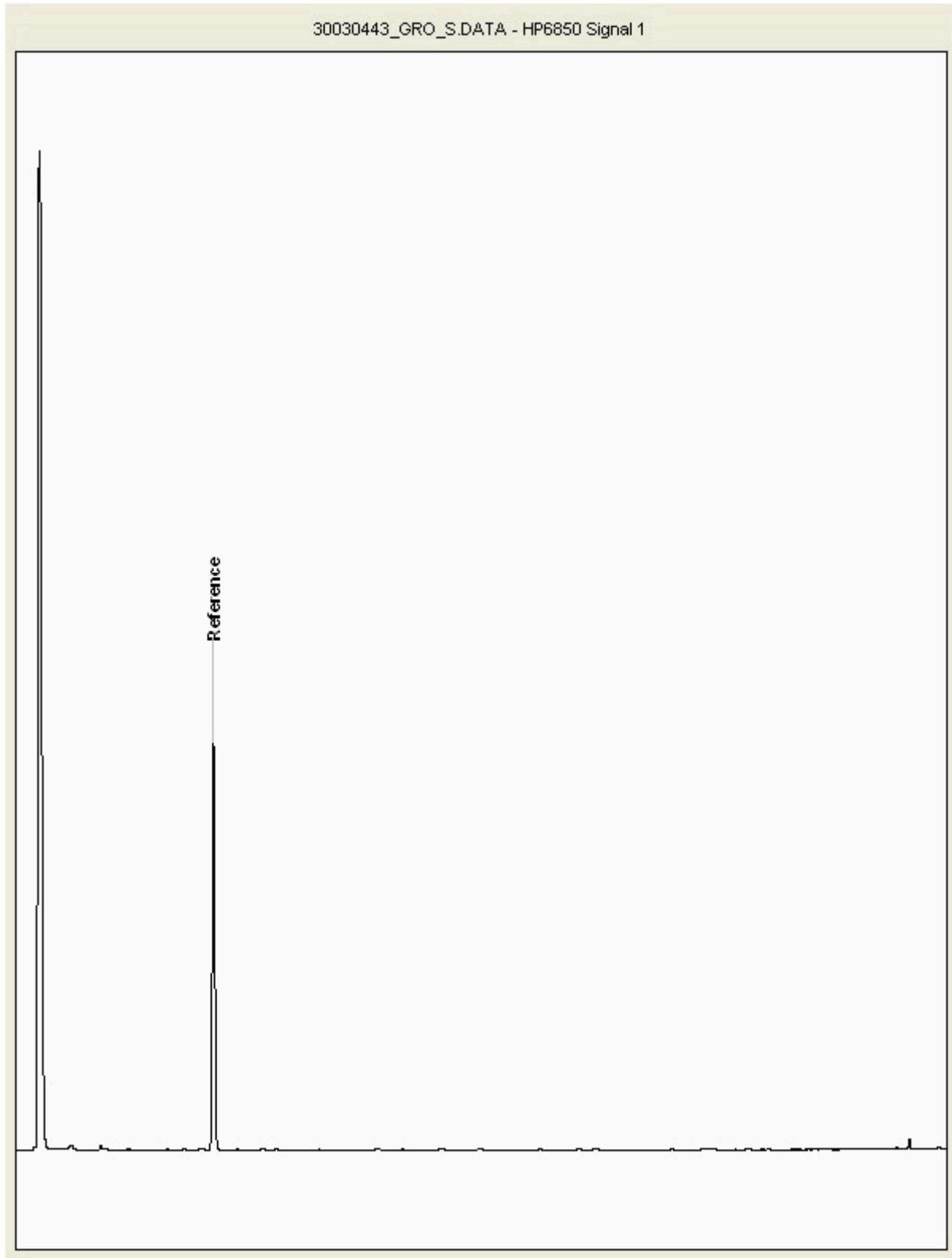
Superseded Report: 734510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 30030443
Sample ID : DS08

Depth : 0.45





CERTIFICATE OF ANALYSIS

Work Order	: PR2481162	Issue Date	: 24-Jul-2024
Customer	: ALS Laboratories (UK) Limited	Laboratory	: ALS Czech Republic, s.r.o.
Contact	: ALS Hawarden Reporting	Contact	: Client Service
Address	: Unit 7-8 Hawarden Business Park Manor Road, Hawarden CH5 3US Deeside	Address	: Na Harfe 336/9 Prague 9 - Vysocany 190 00 Czech Republic
E-mail	: euhdsubconresults@ALSGlobal.com	E-mail	: customer.support@alsglobal.com
Telephone	: ----	Telephone	: +420 226 226 228
Project	: 240629-35	Page	: 1 of 2
Order number	: ----	Date Samples Received	: 08-Jul-2024
		Quote number	: PR2022ALSEC-GB0002 (CZ-256-18-0022)
Site	: ----	Date of test	: 08-Jul-2024 - 23-Jul-2024
Sampled by	: customer	QC Level	: ALS CR Standard Quality Control Schedule

General Comments

This report shall not be reproduced except in full, without prior written approval from the laboratory. The laboratory is not responsible for the sample data supplied by the customer and their impact on the validity of the result.

The laboratory declares that the test results relate only to the listed samples. If "ALS" is not included in the test report in the "Sampled by" section, then the results refer to the sample as received.

Responsible for accuracy

Testing Laboratory No. 1163
Accredited by CAI according to
CSN EN ISO/IEC 17025:2018

Signatories

Lubomír Pokorný

Position

Country Manager



The company is certified according to ČSN EN ISO 14001 (Environmental management systems) and ČSN ISO 45001 (Occupational health and safety management systems)



Analytical Results

Sub-Matrix: SOIL				Client sample ID		30012500		----		----	
				Laboratory sample ID		DS10					
				Client sampling date / time		PR2481162001		----		----	
						02-Jul-2024 13:24		----		----	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU	Result	MU
Physical Parameters											
Gross Calorific Value in Dry Matter Q(V/gr/d)	I-CV-CALS	0.50	MJ/kg DW	4.80	± 12.2%	----	----	----	----	----	----
Gross Calorific Value Original Q(V/gr/ar)	I-CV-CALS	0.50	MJ/kg	3.89	± 13.2%	----	----	----	----	----	----
Net Calorific Value in Dry Matter Q(V/net/d)	I-CV-CALS	0.50	MJ/kg DW	4.46	± 12.5%	----	----	----	----	----	----
Net Calorific Value Original Q(V/net/ar)	I-CV-CALS	0.50	MJ/kg	3.18	± 14.5%	----	----	----	----	----	----
Water Analytical M(ad)	I-WA-GR	0.50	%	3.81	± 21.8%	----	----	----	----	----	----
Water Gross M(ex)	I-WG-GR	0.50	%	15.8	± 20.1%	----	----	----	----	----	----
Water Total M(ar)	I-WT-CC	0.50	%	19.0	---	----	----	----	----	----	----

When sampling date is not provided by the client, the laboratory determines it for procedural reasons, then it is equal to the date of receipt of the sample to the laboratory and is displayed in brackets. Measurement uncertainty is expressed as expanded measurement uncertainty with coverage factor $k = 2$, representing 95% confidence level.

Key: LOR = Limit of reporting; MU = Measurement Uncertainty. The MU does not include sampling uncertainty.

Brief Method Summaries

Analytical Methods	Method Descriptions
<i>Location of test performance: Bendlova 1687/7 Ceska Lipa Czech Republic 470 01</i>	
I-CV-CALS	CZ_SOP_D06_07_124.A (CSN ISO 1928, CSN EN ISO 18125, CSN EN ISO 21654, CSN EN 15170, CSN DIN 51900-1, CSN DIN 51900-2, CSN DIN 51900-3, CSN P CEN/TS 16023) Determination of gross calorific value by calorimetric method and calculation of net calorific value and emission factor from measured values.
I-WA-GR	CZ_SOP_D06_07_041 (CSN 44 1377, CSN EN ISO 18134-1, CSN EN ISO 18134-2, CSN EN ISO 18134-3, CSN P CEN/TS 15414-1, CSN P CEN/TS 15414-2, CSN EN ISO 21660-3, CSN EN12880, CSN EN14346:2007, CSN EN 15002) Determination of analytical water and gross water by gravimetry and determination of total water by calculation from measured values.
I-WG-GR	CZ_SOP_D06_07_041 (CSN 44 1377, CSN EN ISO 18134-1, CSN EN ISO 18134-2, CSN EN ISO 18134-3, CSN P CEN/TS 15414-1, CSN P CEN/TS 15414-2, CSN EN ISO 21660-3, CSN EN12880, CSN EN14346:2007, CSN EN 15002) Determination of analytical water and gross water by gravimetry and determination of total water by calculation from measured values.
I-WT-CC	CZ_SOP_D06_07_041 (CSN 44 1377, CSN EN ISO 18134-1, CSN EN ISO 18134-2, CSN EN ISO 18134-3, CSN P CEN/TS 15414-1, CSN P CEN/TS 15414-2, CSN EN ISO 21660-3, CSN EN12880, CSN EN14346:2007, CSN EN 15002) Determination of analytical water and gross water by gravimetry and determination of total water by calculation from measured values.
Preparation Methods	Method Descriptions
<i>Location of test performance: Bendlova 1687/7 Ceska Lipa Czech Republic 470 01</i>	
I-PPBURN	Sample combustion in a calorimetric bomb for fuel tests
*S-PPHOM.07	CZ_SOP_D06_07_P01 Preparation of solid samples for analysis (crushing, milling and pulverizing).
*S-PPHOM0.3	CZ_SOP_D06_07_P01 Preparation of solid samples for analysis (crushing, milling and pulverizing).

The symbol "*" for the method indicates a test outside the scope of accreditation of the laboratory or subcontractor. If the UNICO-SUB code is stated in the method table, this only informs that the tests have been performed by a subcontractor and the results are given in an annex to the test report, including information on test accreditation. If the lab used for matrix outside the scope of accreditation or non-standard sample matrix procedure specified in the accredited method and issues non-accredited results, this fact is stated on the title page of this protocol in the section "Notes". If the test report shows the results of subcontracting, the place of performance of the test is outside the laboratories of ALS Czech Republic, s.r.o.

The method for calculating of the summation parameters is available on request in the customer service.

The end of the certificate of analysis



CERTIFICATE OF ANALYSIS

Work Order	: PR2478943	Issue Date	: 25-Jul-2024
Customer	: ALS Laboratories (UK) Limited	Laboratory	: ALS Czech Republic, s.r.o.
Contact	: ALS Hawarden Reporting	Contact	: Client Service
Address	: Unit 7-8 Hawarden Business Park Manor Road, Hawarden CH5 3US Deeside	Address	: Na Harfe 336/9 Prague 9 - Vysocany 190 00 Czech Republic
E-mail	: euhdsubconresults@ALSGlobal.com	E-mail	: customer.support@alsglobal.com
Telephone	: ----	Telephone	: +420 226 226 228
Project	: 240629-35	Page	: 1 of 3
Order number	: ----	Date Samples Received	: 08-Jul-2024
		Quote number	: PR2022ALSEC-GB0002 (CZ-256-18-0022)
Site	: ----	Date of test	: 08-Jul-2024 - 23-Jul-2024
Sampled by	: customer	QC Level	: ALS CR Standard Quality Control Schedule

General Comments

This report shall not be reproduced except in full, without prior written approval from the laboratory. The laboratory is not responsible for the sample data supplied by the customer and their impact on the validity of the result.

The laboratory declares that the test results relate only to the listed samples. If "ALS" is not included in the test report in the "Sampled by" section, then the results refer to the sample as received.

Responsible for accuracy

Testing Laboratory No. 1163
Accredited by CAI according to
CSN EN ISO/IEC 17025:2018

Signatories

Lubomír Pokorný

Position

Country Manager



The company is certified according to ČSN EN ISO 14001 (Environmental management systems) and ČSN ISO 45001 (Occupational health and safety management systems)



Analytical Results

Sub-Matrix: SOLID				Client sample ID		30003225 DS01		30003729 DS06		30003322 DS08	
				Laboratory sample ID		PR2478943001		PR2478943002		PR2478943003	
				Client sampling date / time		01-Jul-2024 07:16		01-Jul-2024 08:14		01-Jul-2024 07:30	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Physical Parameters											
Gross Calorific Value in Dry Matter Q(V/gr/d)	I-CV-CALS	0.50	MJ/kg DW	1.28	± 28.0%	<0.50	----	3.25	± 14.3%		
Gross Calorific Value Original Q(V/gr/ar)	I-CV-CALS	0.50	MJ/kg	1.13	± 31.2%	<0.50	----	2.61	± 16.2%		
Net Calorific Value in Dry Matter Q(V/net/d)	I-CV-CALS	0.50	MJ/kg DW	1.08	± 32.4%	<0.50	----	3.01	± 14.9%		
Net Calorific Value Original Q(V/net/ar)	I-CV-CALS	0.50	MJ/kg	0.68	± 49.8%	<0.50	----	1.96	± 19.7%		
Water Analytical M(ad)	I-WA-GR	0.50	%	1.90	± 26.6%	1.69	± 28.1%	3.23	± 22.5%		
Water Gross M(ex)	I-WG-GR	0.50	%	10.0	± 20.3%	11.7	± 20.2%	17.0	± 20.1%		
Water Total M(ar)	I-WT-CC	0.50	%	11.7	----	13.2	----	19.7	----		

Sub-Matrix: SOLID				Client sample ID		30003574 DS09		30003165 TP21		30004535 TP22	
				Laboratory sample ID		PR2478943004		PR2478943005		PR2478943006	
				Client sampling date / time		01-Jul-2024 07:53		01-Jul-2024 06:31		01-Jul-2024 09:45	
Parameter	Method	LOR	Unit	Result	MU	Result	MU	Result	MU		
Physical Parameters											
Gross Calorific Value in Dry Matter Q(V/gr/d)	I-CV-CALS	0.50	MJ/kg DW	11.4	± 10.4%	17.2	± 10.2%	11.5	± 10.4%		
Gross Calorific Value Original Q(V/gr/ar)	I-CV-CALS	0.50	MJ/kg	9.88	± 10.6%	11.2	± 10.4%	9.55	± 10.6%		
Net Calorific Value in Dry Matter Q(V/net/d)	I-CV-CALS	0.50	MJ/kg DW	10.9	± 10.4%	16.6	± 10.2%	11.0	± 10.4%		
Net Calorific Value Original Q(V/net/ar)	I-CV-CALS	0.50	MJ/kg	9.14	± 10.6%	9.98	± 10.5%	8.77	± 10.7%		
Water Analytical M(ad)	I-WA-GR	0.50	%	2.43	± 24.2%	8.86	± 20.4%	2.93	± 23.0%		
Water Gross M(ex)	I-WG-GR	0.50	%	11.2	± 20.2%	28.7	± 20.0%	14.5	± 20.1%		
Water Total M(ar)	I-WT-CC	0.50	%	13.4	----	35.0	----	17.0	----		

When sampling date is not provided by the client, the laboratory determines it for procedural reasons, then it is equal to the date of receipt of the sample to the laboratory and is displayed in brackets. Measurement uncertainty is expressed as expanded measurement uncertainty with coverage factor $k = 2$, representing 95% confidence level.

Key: LOR = Limit of reporting; MU = Measurement Uncertainty. The MU does not include sampling uncertainty.

Brief Method Summaries

Analytical Methods	Method Descriptions
Location of test performance: Bendlova 1687/7 Ceska Lipa Czech Republic 470 01	
I-CV-CALS	CZ_SOP_D06_07_124.A (CSN ISO 1928, CSN EN ISO 18125, CSN EN ISO 21654, CSN EN 15170, CSN DIN 51900-1, CSN DIN 51900-2, CSN DIN 51900-3, CSN P CEN/TS 16023) Determination of gross calorific value by calorimetric method and calculation of net calorific value and emission factor from measured values.
I-WA-GR	CZ_SOP_D06_07_041 (CSN 44 1377, CSN EN ISO 18134-1, CSN EN ISO 18134-2, CSN EN ISO 18134-3, CSN P CEN/TS 15414-1, CSN P CEN/TS 15414-2, CSN EN ISO 21660-3, CSN EN12880, CSN EN14346:2007, CSN EN 15002) Determination of analytical water and gross water by gravimetry and determination of total water by calculation from measured values.
I-WG-GR	CZ_SOP_D06_07_041 (CSN 44 1377, CSN EN ISO 18134-1, CSN EN ISO 18134-2, CSN EN ISO 18134-3, CSN P CEN/TS 15414-1, CSN P CEN/TS 15414-2, CSN EN ISO 21660-3, CSN EN12880, CSN EN14346:2007, CSN EN 15002) Determination of analytical water and gross water by gravimetry and determination of total water by calculation from measured values.
I-WT-CC	CZ_SOP_D06_07_041 (CSN 44 1377, CSN EN ISO 18134-1, CSN EN ISO 18134-2, CSN EN ISO 18134-3, CSN P CEN/TS 15414-1, CSN P CEN/TS 15414-2, CSN EN ISO 21660-3, CSN EN12880, CSN EN14346:2007, CSN EN 15002) Determination of analytical water and gross water by gravimetry and determination of total water by calculation from measured values.
Preparation Methods	Method Descriptions



<i>Preparation Methods</i>	<i>Method Descriptions</i>
<i>Location of test performance: Bendlova 1687/7 Ceska Lipa Czech Republic 470 01</i>	
I-PPBURN	Sample combustion in a calorimetric bomb for fuel tests
*S-PPHOM.07	CZ_SOP_D06_07_P01 Preparation of solid samples for analysis (crushing, milling and pulverizing).
*S-PPHOM0.3	CZ_SOP_D06_07_P01 Preparation of solid samples for analysis (crushing, milling and pulverizing).

The symbol "*" for the method indicates a test outside the scope of accreditation of the laboratory or subcontractor. If the UNICO-SUB code is stated in the method table, this only informs that the tests have been performed by a subcontractor and the results are given in an annex to the test report, including information on test accreditation. If the lab used for matrix outside the scope of accreditation or non-standard sample matrix procedure specified in the accredited method and issues non-accredited results, this fact is stated on the title page of this protocol in the section "Notes". If the test report shows the results of subcontracting, the place of performance of the test is outside the laboratories of ALS Czech Republic, s.r.o.

The method for calculating of the summation parameters is available on request in the customer service.

The end of the certificate of analysis



CERTIFICATE OF ANALYSIS

SDG: 240629-35
Client Ref: Low Farm

Report Number: 735811
Location: Low Farm

Superseded Report: 734510

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur e.g volatile mercury

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as "mixed hydrocarbons". Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	Container with Headspace provided for volatiles analysis
2	Incorrect container received
3	Deviation from method
4	Matrix interference
♦	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to late arrival of instructions or samples
§	Sampled on date not provided

20. Asbestos

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as "Not detected". If no asbestos fibre types are found all will be reported as "Not detected" and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.



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WSP UK Limited
8 First Street
Main
Lancashire
M15 4RP

Attention: Fay Chappel

CERTIFICATE OF ANALYSIS

Date of report Generation: 09 July 2024
Customer: WSP UK Limited
Sample Delivery Group (SDG): 240701-33
Your Reference: Low Farm
Location: Low Farm
Report No: 734084
Order Number: UK0037228.1558-200

We received 6 samples on Monday July 01, 2024 and 6 of these samples were scheduled for analysis which was completed on Tuesday July 09, 2024. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.

Incorrect sampling dates and/or sample information will affect the validity of results.

The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Sonia McWhan
Operations Manager





CERTIFICATE OF ANALYSIS

Validated

SDG: 240701-33
Client Ref.: Low Farm

Report Number: 734084
Location: Low Farm

Superseded Report:

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
30006508	DS11	ES	0.10	28/06/2024
30006515	DS11	ES	1.00	28/06/2024
30006519	DS12	ES	0.40	28/06/2024
30006525	TP29	ES	0.10 - 0.20	28/06/2024
30006530	TP29	ES	0.90 - 1.00	28/06/2024
30006533	TP30	ES	0.20 - 0.30	28/06/2024

Only received samples which have had analysis scheduled will be shown on the following pages.



CERTIFICATE OF ANALYSIS

Validated

SDG: 240701-33
Client Ref.: Low Farm

Report Number: 734084
Location: Low Farm

Superseded Report:

Results Legend X Test N No Determination Possible Sample Types - S - Soil/Solid UNS - Unspecified Solid GW - Ground Water SW - Surface Water LE - Land Leachate PL - Prepared Leachate PR - Process Water SA - Saline Water TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water DW - Drinking Water Non-regulatory UNL - Unspecified Liquid SL - Sludge G - Gas OTH - Other	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type	
		30006533	TP30	ES	0.20 - 0.30	60g VOC (ALE215)	S
		30006530	TP29	ES	0.90 - 1.00	250g Amber Jar (ALE210)	S
		30006525	TP29	ES	0.10 - 0.20	250g Amber Jar (ALE210)	S
		30006519	DS12	ES	0.40	250g Amber Jar (ALE210)	S
		30006515	DS11	ES	1.00	250g Amber Jar (ALE210)	S
		30006508	DS11	ES	0.10	250g Amber Jar (ALE210)	S
Boron Water Soluble	All	NDPs: 0 Tests: 6					X X X X X X
EPH CWG GC (S)	All	NDPs: 0 Tests: 2					X X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 2					X X
Hexavalent Chromium (s)	All	NDPs: 0 Tests: 6					X X X X X X
Metals in solid samples by OES	All	NDPs: 0 Tests: 6					X X X X X X
PAH by GCMS	All	NDPs: 0 Tests: 6					X X X X X X
pH	All	NDPs: 0 Tests: 6					X X X X X X
Sample description	All	NDPs: 0 Tests: 6					X X X X X X
Total Organic Carbon	All	NDPs: 0 Tests: 6					X X X X X X
TPH CWG GC (S)	All	NDPs: 0 Tests: 2					X X
VOC MS (S)	All	NDPs: 0 Tests: 2					X X



CERTIFICATE OF ANALYSIS

Validated

SDG: 240701-33
Client Ref.: Low Farm

Report Number: 734084
Location: Low Farm

Superseded Report:

Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm
------------------	----------	-------------	-----------------	---------------	-------------	---------------	------------	--------------------	-------

Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Inclusions	Inclusions 2
30006508	DS11	0.10	Dark Brown	Sandy Loam	Stones	Vegetation
30006515	DS11	1.00	Dark Brown	Clay Loam	Stones	Vegetation
30006519	DS12	0.40	Light Brown	Clay	Vegetation	None
30006525	TP29	0.10 - 0.20	Dark Brown	Sandy Loam	Stones	Vegetation
30006530	TP29	0.90 - 1.00	Dark Brown	Clay Loam	Stones	None
30006533	TP30	0.20 - 0.30	Dark Brown	Sandy Loam	Vegetation	Stones

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.



CERTIFICATE OF ANALYSIS

Validated

SDG: 240701-33
Client Ref.: Low Farm

Report Number: 734084
Location: Low Farm

Superseded Report:

Results Legend		Customer Sample Ref.	DS11	DS11	DS12	TP29	TP29	TP30
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.10	1.00	0.40	0.10 - 0.20	0.90 - 1.00	0.20 - 0.30
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		28/06/2024	28/06/2024	28/06/2024	28/06/2024	28/06/2024	28/06/2024
diss,filtr	Dissolved / filtered sample.		01/07/2024	01/07/2024	01/07/2024	01/07/2024	01/07/2024	01/07/2024
tot.unfilt	Total / unfiltered sample.		240701-33	240701-33	240701-33	240701-33	240701-33	240701-33
*	Subcontracted - refer to subcontractor report for accreditation status.		30006508	30006515	30006519	30006525	30006530	30006533
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		ES	ES	ES	ES	ES	ES
(F)	Trigger breach confirmed							
1.4.5@	Sample deviation (see appendix)							
Component	LOD/Units		Method					
Moisture Content Ratio (% of as received sample)	%	PM024	20	10	20	22	14	20
Soil Organic Matter (SOM)	<0.35 %	TM132	6.29 #	3.47 #	1.09 #	8.38 #	0.734 #	12.6 #
pH	1 pH Units	TM133	7.86 M	7.89 M	7.98 M	8.22 M	7.11 M	7.51 M
Chromium, Hexavalent	<0.6 mg/kg	TM151	<0.6 M					
Arsenic	<0.6 mg/kg	TM181	20 M	5.25 M	4.08 M	31.3 M	3.32 M	23.5 M
Barium	<0.6 mg/kg	TM181	120 #	52.8 #	57.4 #	135 #	125 #	140 #
Beryllium	<0.01 mg/kg	TM181	0.986 M	1.13 M	0.681 M	1.17 M	1.4 M	1.71 M
Cadmium	<0.02 mg/kg	TM181	0.0405 M	<0.02 M	<0.02 M	0.107 M	<0.02 M	<0.2 M
Chromium	<0.9 mg/kg	TM181	<0.9 M	7.93 M	5.92 M	<0.9 M	12.1 M	<9 M
Copper	<1.4 mg/kg	TM181	23.5 M	26.9 M	21.4 M	30 M	33.1 M	42.5 M
Lead	<0.7 mg/kg	TM181	47.8 M	17.5 M	14.3 M	60.5 M	19 M	63.9 M
Mercury	<0.1 mg/kg	TM181	<0.1 M	<0.1 M	<0.1 M	0.242 M	<0.1 M	<1 M
Nickel	<0.2 mg/kg	TM181	15.6 M	25.8 M	16.8 M	16.2 M	52.8 M	26.5 M
Selenium	<1 mg/kg	TM181	1.61 #	1.15 #	<1 #	1.59 #	<1 #	<10 #
Vanadium	<0.2 mg/kg	TM181	31.1 #	22.1 #	27 #	36.5 #	19.9 #	34.1 #
Zinc	<1.9 mg/kg	TM181	88.7 M	96.3 M	65.3 M	100 M	108 M	98.3 M
Boron, water soluble	<1 mg/kg	TM222	<1 M					



CERTIFICATE OF ANALYSIS

Validated

SDG: 240701-33
Client Ref.: Low Farm

Report Number: 734084
Location: Low Farm

Superseded Report:

PAH by GCMS

Results Legend		Customer Sample Ref.	DS11	DS11	DS12	TP29	TP29	TP30
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.10	1.00	0.40	0.10 - 0.20	0.90 - 1.00	0.20 - 0.30
M	mCERTS accredited.		Soil/Solid (S)					
aq	Aqueous / settled sample.		28/06/2024	28/06/2024	28/06/2024	28/06/2024	28/06/2024	28/06/2024
diss,filtr	Dissolved / filtered sample.		01/07/2024	01/07/2024	01/07/2024	01/07/2024	01/07/2024	01/07/2024
tot.unfiltr	Total / unfiltered sample.		240701-33	240701-33	240701-33	240701-33	240701-33	240701-33
*	Subcontracted - refer to subcontractor report for accreditation status.		30006508	30006515	30006519	30006525	30006530	30006533
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		ES	ES	ES	ES	ES	ES
(F)	Trigger breach confirmed							
1-4*5@	Sample deviation (see appendix)							
Component	LOD/Units		Method					
Naphthalene-d8 % recovery**	%	TM218	95.5	84.1	93.3	84.7	93.5	79.5
Acenaphthene-d10 % recovery**	%	TM218	88.1	85.3	84	85.2	83.5	85.8
Phenanthrene-d10 % recovery**	%	TM218	94.6	86	84.9	87	83.4	85.5
Chrysene-d12 % recovery**	%	TM218	82.2	80.1	87.2	76.4	82.9	82.4
Perylene-d12 % recovery**	%	TM218	74.2	74.6	80.9	70.7	71.1	74.3
Naphthalene	<0.009 mg/kg	TM218	0.68	0.0137	<0.009	0.256	<0.009	1.09
Acenaphthylene	<0.012 mg/kg	TM218	<0.012	<0.012	<0.012	0.125	<0.012	<0.024
Acenaphthene	<0.008 mg/kg	TM218	0.842	0.0497	<0.008	0.397	<0.008	1.72
Fluorene	<0.01 mg/kg	TM218	0.669	<0.01	<0.01	0.572	<0.01	1.16
Phenanthrene	<0.015 mg/kg	TM218	5.87	0.276	<0.015	1.25	<0.015	7.92
Anthracene	<0.016 mg/kg	TM218	0.879	0.0411	<0.016	0.0823	<0.016	1.45
Fluoranthene	<0.017 mg/kg	TM218	5.39	0.331	0.0275	0.192	<0.017	8.19
Pyrene	<0.015 mg/kg	TM218	4.38	0.278	0.0261	0.405	<0.015	6.91
Benz(a)anthracene	<0.014 mg/kg	TM218	1.91	0.151	<0.014	0.0775	<0.014	3.49
Chrysene	<0.01 mg/kg	TM218	1.96	0.162	0.0165	0.0714	0.0132	3.95
Benzo(b)fluoranthene	<0.015 mg/kg	TM218	1.89	0.153	<0.015	0.0589	<0.015	3.5
Benzo(k)fluoranthene	<0.014 mg/kg	TM218	0.606	0.0478	<0.014	<0.014	<0.014	1.24
Benzo(a)pyrene	<0.015 mg/kg	TM218	1.31	0.107	<0.015	0.0535	<0.015	2.59
Indeno(1,2,3-cd)pyrene	<0.018 mg/kg	TM218	0.67	0.0638	<0.018	0.0295	<0.018	1.3
Dibenzo(a,h)anthracene	<0.023 mg/kg	TM218	0.169	<0.023	<0.023	<0.023	<0.023	0.362
Benzo(g,h,i)perylene	<0.024 mg/kg	TM218	0.635	0.0617	<0.024	0.0534	<0.024	1.39
PAH, Total Detected USEPA 16	<0.118 mg/kg	TM218	27.9	1.73	<0.118	28.9	<0.118	46.3



CERTIFICATE OF ANALYSIS

Validated

SDG: 240701-33
Client Ref.: Low Farm

Report Number: 734084
Location: Low Farm

Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample Ref.	DS11	TP30			
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sampled Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	1.00	0.20 - 0.30			
M	mCERTS accredited.		Soil/Solid (S)	Soil/Solid (S)			
aq	Aqueous / settled sample.		28/06/2024	28/06/2024			
diss,filtr	Dissolved / filtered sample.						
tot.unfilt	Total / unfiltered sample.		01/07/2024	01/07/2024			
*	Subcontracted - refer to subcontractor report for accreditation status.		240701-33	240701-33			
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		30006515	30006533			
(F)	Trigger breach confirmed		ES	ES			
1-4456	Sample deviation (see appendix)						
Component	LOD/Units		Method				
GRO Surrogate % recovery**	%	TM089	98.6	77			
Aliphatics >C5-C6 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01			
Aliphatics >C6-C8 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01			
Aliphatics >C8-C10 (HS_1D_AL)	<0.01 mg/kg	TM089	<0.01	<0.01			
Aliphatics >C10-C12 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1	<1			
Aliphatics >C12-C16 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1	<1			
Aliphatics >C16-C21 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1	1.07			
Aliphatics >C16-C35 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1	10.5			
Aliphatics >C21-C35 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1	9.39			
Aliphatics >C35-C44 (EH_2D_AL_#1)	<1 mg/kg	TM414	<1	<1			
Total Aliphatics >C10-C44 (EH_2D_AR_#1)	<5 mg/kg	TM414	<5	10.8			
Total Aliphatics & Aromatics >C10-C44 (EH_2D_Total_#1)	<10 mg/kg	TM414	<10	247			
Aromatics >EC5-EC7 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01			
Aromatics >EC7-EC8 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01			
Aromatics >EC8-EC10 (HS_1D_AR)	<0.01 mg/kg	TM089	<0.01	<0.01			
Aromatics > EC10-EC12 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	<1			
Aromatics > EC12-EC16 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	10.6			
Aromatics > EC16-EC21 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	56.6			
Aromatics > EC16-EC35 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	203			
Aromatics > EC21-EC35 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	146			
Aromatics >EC35-EC44 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	22.6			
Aromatics > EC40-EC44 (EH_2D_AR_#1)	<1 mg/kg	TM414	<1	3.65			
Total Aromatics > EC10-EC44 (EH_2D_AR_#1)	<5 mg/kg	TM414	<5	236			
Total Aliphatics & Aromatics >C5-C44 (EH_2D_Total_#1+HS_1D_Total)	<10 mg/kg	TM414	<10	247			
Total Aliphatics >C5-C10 (HS_1D_AL_TOTAL)	<0.05 mg/kg	TM089	<0.05	<0.05			
Total Aromatics >EC5-EC10 (HS_1D_AR_TOTAL)	<0.05 mg/kg	TM089	<0.05	<0.05			
GRO >C5-C10 (HS_1D_TOTAL)	<0.02 mg/kg	TM089	<0.02	<0.02			



CERTIFICATE OF ANALYSIS

Validated

SDG: 240701-33
Client Ref.: Low Farm

Report Number: 734084
Location: Low Farm

Superseded Report:

Table of Results - Appendix

Method No	Description
TM218	The determination of PAH in soil samples by GC-MS
TM222	Determination of Hot Water Soluble Boron in Soils (10:1 Water:Soil) by ICP OES.
TM089	Determination of Gasoline Range Hydrocarbons (GRO) by Headspace GC-FID (C4-C12)
TM151	Determination of Hexavalent Chromium using Kone analyser
TM181	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES
TM414	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GCxGC-FID
PM024	Soil preparation including homogenisation, moisture, screens of soils for Asbestos Containing Material
TM116	Determination of Volatile Organic Compounds by Headspace / GC-MS
TM132	ELTRA CS800 Operators Guide
TM133	Determination of pH in Soil and Water using the GLpH pH Meter

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).



CERTIFICATE OF ANALYSIS

Validated

SDG: 240701-33
Client Ref.: Low Farm

Report Number: 734084
Location: Low Farm

Superseded Report:

Test Completion Dates

Lab Sample No(s)	30006508	30006515	30006519	30006525	30006530	30006533
Customer Sample Ref.	DS11	DS11	DS12	TP29	TP29	TP30
AGS Ref.	ES	ES	ES	ES	ES	ES
Depth	0.10	1.00	0.40	0.10 - 0.20	0.90 - 1.00	0.20 - 0.30
Type	Soil/Solid (S)					
Boron Water Soluble	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024
EPH CWG GC (S)		05-Jul-2024				04-Jul-2024
GRO by GC-FID (S)		05-Jul-2024				05-Jul-2024
Hexavalent Chromium (s)	08-Jul-2024	08-Jul-2024	08-Jul-2024	08-Jul-2024	08-Jul-2024	08-Jul-2024
Metals in solid samples by OES	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024
PAH by GCMS	08-Jul-2024	08-Jul-2024	08-Jul-2024	08-Jul-2024	08-Jul-2024	09-Jul-2024
pH	04-Jul-2024	04-Jul-2024	04-Jul-2024	04-Jul-2024	04-Jul-2024	04-Jul-2024
Sample description	03-Jul-2024	03-Jul-2024	03-Jul-2024	03-Jul-2024	03-Jul-2024	03-Jul-2024
Total Organic Carbon	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024	05-Jul-2024
TPH CWG GC (S)		05-Jul-2024				05-Jul-2024
VOC MS (S)		05-Jul-2024				08-Jul-2024



CERTIFICATE OF ANALYSIS

Validated

SDG: 240701-33
Client Ref.: Low Farm

Report Number: 734084
Location: Low Farm

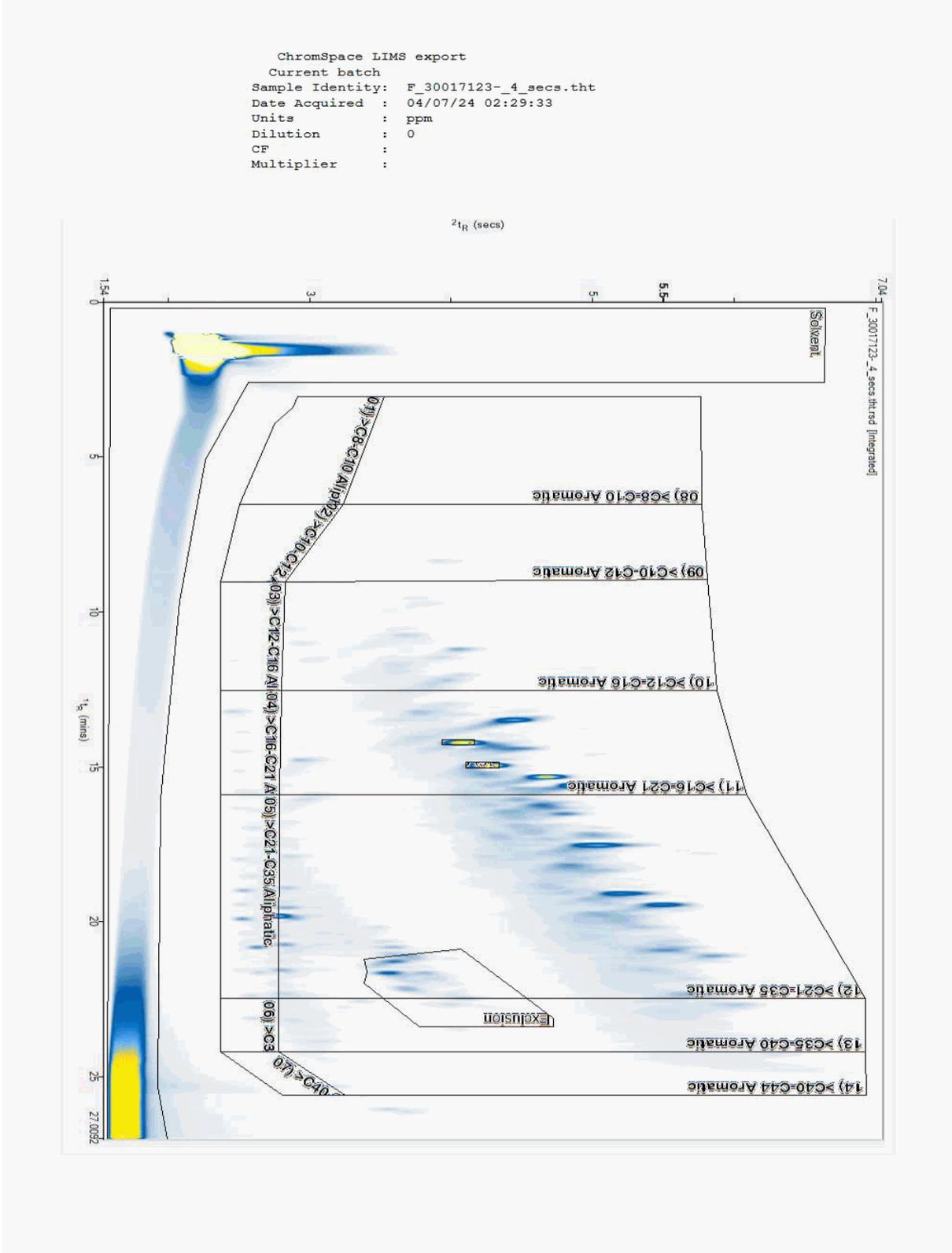
Superseded Report:

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 30017123
Sample ID : TP30

Depth : 0.20 - 0.30





CERTIFICATE OF ANALYSIS

Validated

SDG: 240701-33
Client Ref.: Low Farm

Report Number: 734084
Location: Low Farm

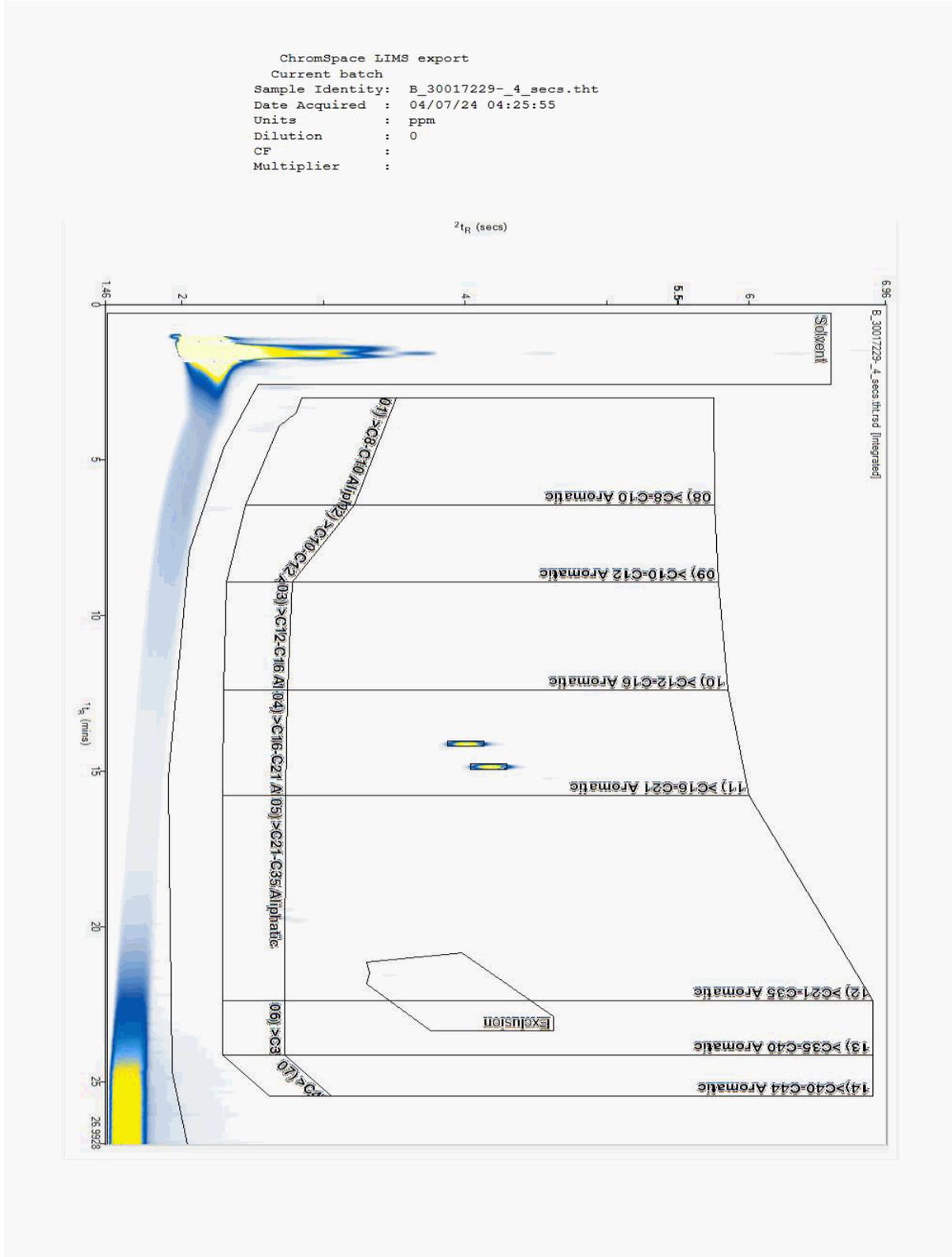
Superseded Report:

Chromatogram

Analysis: EPH CWG GC (S)

Sample No : 30017229
Sample ID : DS11

Depth : 1.00





CERTIFICATE OF ANALYSIS

Validated

SDG: 240701-33
Client Ref.: Low Farm

Report Number: 734084
Location: Low Farm

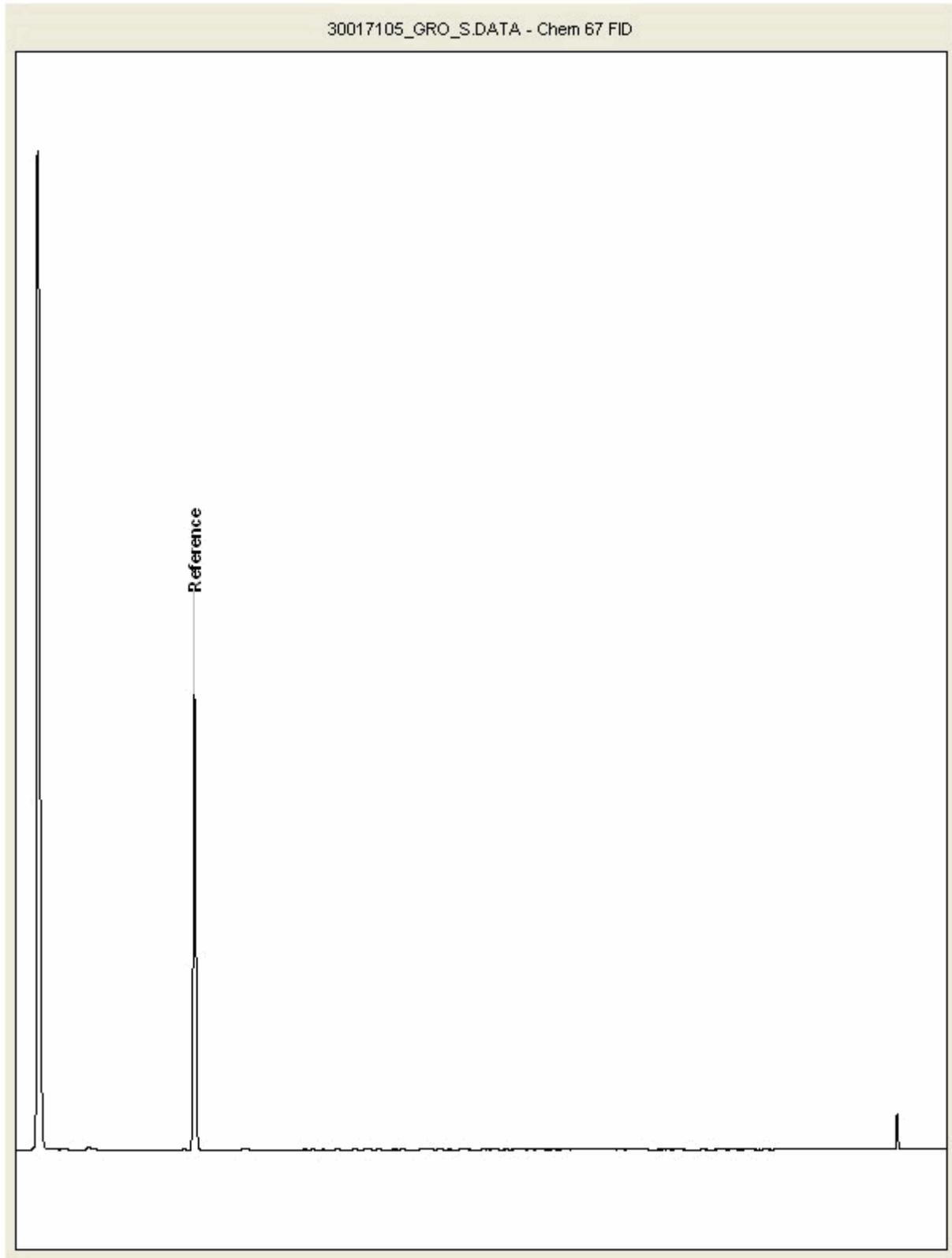
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 30017105
Sample ID : TP30

Depth : 0.20 - 0.30





CERTIFICATE OF ANALYSIS

Validated

SDG: 240701-33
Client Ref.: Low Farm

Report Number: 734084
Location: Low Farm

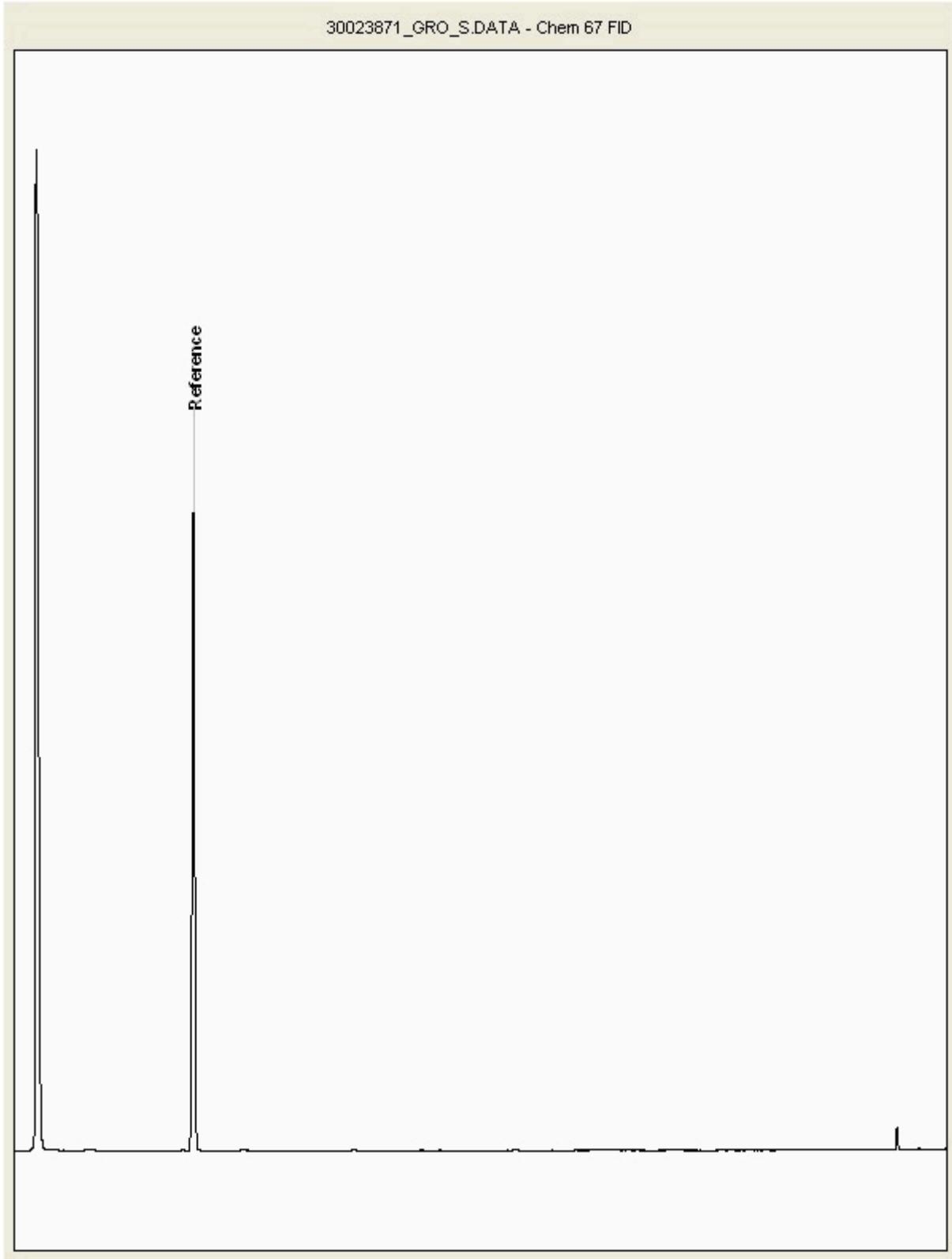
Superseded Report:

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 30023871
Sample ID : DS11

Depth : 1.00





CERTIFICATE OF ANALYSIS

SDG: 240701-33
Client Ref: Low Farm

Report Number: 734084
Location: Low Farm

Superseded Report:

Appendix

General

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur e.g volatile mercury

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as "mixed hydrocarbons". Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	Container with Headspace provided for volatiles analysis
2	Incorrect container received
3	Deviation from method
4	Matrix interference
♦	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to late arrival of instructions or samples
§	Sampled on date not provided

20. Asbestos

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as "Not detected". If no asbestos fibre types are found all will be reported as "Not detected" and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anorthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.



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CH5 3US

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email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

WSP UK Limited
8 First Street
Main
Lancashire
M15 4RP

Attention: Luke McFadden

CERTIFICATE OF ANALYSIS

Date of report Generation: 20 August 2024
Customer: WSP UK Limited
Sample Delivery Group (SDG): 240716-40
Your Reference: UK0037228.1558
Location: Low Farm, Overton
Report No: 738136
Order Number: UK0037228.1558-200

This report has been revised and directly supersedes 738077 in its entirety.

We received 113 samples on Tuesday July 16, 2024 and 50 of these samples were scheduled for analysis which was completed on Tuesday August 20, 2024. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.

Incorrect sampling dates and/or sample information will affect the validity of results.

The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Lauren Ellis

General Manager Western Europe Environmental



CERTIFICATE OF ANALYSIS

Validated

SDG: 240716-40
Client Ref.: UK0037228.1558

Report Number: 738136
Location: Low Farm, Overton

Superseded Report: 738077

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
30086601	DS01	D	2.00	27/06/2024
30086626	DS03	D	1.30	25/06/2024
30226055	DS03		1.30 - 1.30	
30086629	DS03	D	2.00	25/06/2024
30226056	DS03		2.00 - 2.00	
30086634	DS03	D	3.00	25/06/2024
30086636	DS03	D	4.00	25/06/2024
30086640	DS03	D	4.70	25/06/2024
30226060	DS04			
30086606	DS04	D	1.30	25/06/2024
30086642	DS04	D	2.00	25/06/2024
30086608	DS04	D	2.60	25/06/2024
30226059	DS04		2.60 - 2.60	
30086648	DS05	D	1.30	25/06/2024
30226057	DS05		2.00 - 2.00	
30086587	DS05	D	2.20	25/06/2024
30086610	DS05	D	3.00	25/06/2024
30086644	DS05	D	4.00	25/06/2024
30226058	DS05		4.00 - 4.00	
30086646	DS05	D	5.00	25/06/2024
30086589	DS06	D	2.00	25/06/2024
30086591	DS08	D	1.30	27/06/2024
30086594	DS09	D	0.60 - 0.70	26/06/2024
30086613	DS09	D	1.30	26/06/2024
30226061	DS09		1.30 - 1.30	26/06/2024
30086616	DS09	D	2.00	26/06/2024
30086622	DS10	D	1.30	26/06/2024
30086619	DS10	D	2.00	26/06/2024
30086596	DS10	D	2.80	25/06/2024
30086624	DS10	D	4.00	26/06/2024
30081966	TP01	B	1.00	26/06/2024
30081995	TP01	D	1.00	26/06/2024
30226046	TP01		1.00 - 1.00	26/06/2024
30082019	TP02	D	1.10	26/06/2024
30226047	TP02		1.10 - 1.20	26/06/2024
30086584	TP03	D	0.90 - 1.00	26/06/2024
30082049	TP03	B	1.30	26/06/2024
30082075	TP03	D	1.30	26/06/2024
30082106	TP04	B	1.10	26/06/2024
30086574	TP04	D	1.10	26/06/2024
30086603	TP04	D	2.70	26/06/2024
30081968	TP05	D	0.90	26/06/2024
30086632	TP05	B	0.90	26/06/2024
30081970	TP06	B	1.00	26/06/2024
30081972	TP06	D	1.00	26/06/2024
30081974	TP07	B	0.50	25/06/2024
30081976	TP07	B	2.00	25/06/2024
30081984	TP08	B	0.50	25/06/2024
30081986	TP08	B	1.50	25/06/2024
30081988	TP09	B	0.90	26/06/2024
30081991	TP09	D	0.90	26/06/2024
30226048	TP09		0.90 - 1.00	
30081993	TP10	D	0.20	25/06/2024
30081997	TP10	B	0.40	25/06/2024
30081999	TP10	D	1.30	25/06/2024
30082001	TP11	D	0.50	25/06/2024
30226049	TP11		0.50 - 0.50	



CERTIFICATE OF ANALYSIS

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SDG: 240716-40
Client Ref.: UK0037228.1558

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Location: Low Farm, Overton

Superseded Report: 738077

30082003	TP11	B	1.50	25/06/2024
30082006	TP11	B	1.70	25/06/2024
30082008	TP12	B	0.40	25/06/2024
30082010	TP12	B	0.80	25/06/2024
30082012	TP12	B	1.90	25/06/2024
30082014	TP13	B	0.50	24/06/2024
30082017	TP13	B	1.20	24/06/2024
30082021	TP13	B	1.50	24/06/2024
30082023	TP13	D	2.00	24/06/2024
30082031	TP14	D	0.20	25/06/2024
30082033	TP14	B	0.40	25/06/2024
30082036	TP14	B	0.80	25/06/2024
30082038	TP15	D	0.50	26/06/2024
30082040	TP15	B	0.50	26/06/2024
30226050	TP15		0.50 - 0.50	
30082042	TP16	B	0.50	27/06/2024
30082045	TP16	D	2.00	27/06/2024
30082047	TP17	B	0.50	27/06/2024
30086650	TP17	B	1.10	16/07/2024
30082051	TP17	D	2.20	27/06/2024
30082053	TP18	B	0.40	27/06/2024
30082055	TP18	B	1.80	27/06/2024
30082059	TP19	D	0.50	27/06/2024
30226051	TP19		0.50 - 0.50	
30082062	TP19	D	1.00	27/06/2024
30082065	TP20	B	0.40	27/06/2024
30082067	TP20	D	1.20	27/06/2024
30082069	TP20	B	2.00	27/06/2024
30082071	TP21	B	0.40	27/06/2024
30082073	TP21	B	1.50	27/06/2024
30082077	TP22	B	0.80	27/06/2024
30082084	TP22	B	2.00	27/06/2024
30082087	TP23	B	0.60	25/06/2024
30082089	TP23	D	1.20	25/06/2024
30226052	TP23		1.20 - 1.35	25/06/2024
30082091	TP24	B	0.70	25/06/2024
30082093	TP25	B	0.50	24/06/2024
30082096	TP25	D	1.20	24/06/2024
30082100	TP25	D	1.40	24/06/2024
30082102	TP26	B	0.40	24/06/2024
30082104	TP26	B	0.90	24/06/2024
30086546	TP26	B	1.60	24/06/2024
30086550	TP27	D	0.30	24/06/2024
30086553	TP27	B	0.60	24/06/2024
30086555	TP27	B	2.00	24/06/2024
30086557	TP28	B	0.40	24/06/2024
30086560	TP28	B	0.80	24/06/2024
30086563	TP28	D	1.80	24/06/2024
30086565	TP29	B	0.90	28/06/2024
30086567	TP29	D	0.90	28/06/2024
30226053	TP29		0.90 - 1.00	26/06/2024
30086570	TP29	D	2.30	28/06/2024
30086576	TP30	B	0.60	28/06/2024
30086579	TP30	D	0.60	28/06/2024
30086581	TP30	D	1.80	28/06/2024
30226054	TP30		1.80 - 1.90	26/06/2024

Only received samples which have had analysis scheduled will be shown on the following pages.



CERTIFICATE OF ANALYSIS

Validated

SDG: 240716-40
Client Ref.: UK0037228.1558

Report Number: 738136
Location: Low Farm, Overton

Superseded Report: 738077

Results Legend	Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type		
<p>X Test</p> <p>N No Determination Possible</p> <p>Sample Types -</p> <p>S - Soil/Solid UNS - Unspecified Solid GW - Ground Water SW - Surface Water LE - Land Leachate PL - Prepared Leachate PR - Process Water SA - Saline Water TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water DW - Drinking Water Non-regulatory UNL - Unspecified Liquid SL - Sludge G - Gas OTH - Other</p>	30082091	TP24	B	0.70	Geolabs container	S		
	30082093	TP25	B	0.50	Geolabs container	S		
	30082096	TP25	D	1.20	Geolabs container	S		
	30086546	TP26	B	1.60	Geolabs container	S		
	30086553	TP27	B	0.60	Geolabs container	S		
	30086555	TP27	B	2.00	Geolabs container	S		
	30086557	TP28	B	0.40	Geolabs container	S		
	30086560	TP28	B	0.80	Geolabs container	S		
	30226053	TP29		0.90 - 1.00	1 kg TUB with Handle (ALE260)	S		X
	30226054	TP30		1.80 - 1.90	1 kg TUB with Handle (ALE260)	S		X
Ammoniacal N as NH4 in 2:1 extract	All	NDPs: 0 Tests: 12						X
Anions by Kone (soil)	All	NDPs: 0 Tests: 12						X
Geotechnical Testing*	All	NDPs: 0 Tests: 37					X	X
Magnesium (BRE)	All	NDPs: 0 Tests: 12						X
NO3, NO2 and TON by KONE (s)	All	NDPs: 0 Tests: 12						X
pH	All	NDPs: 0 Tests: 12						X
Sample description	All	NDPs: 0 Tests: 11						X
Total Sulphate	All	NDPs: 0 Tests: 12						X
Total Sulphur	All	NDPs: 0 Tests: 12						X



CERTIFICATE OF ANALYSIS

Validated

SDG: 240716-40
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Report Number: 738136
Location: Low Farm, Overton

Superseded Report: 738077

Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm
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Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Inclusions	Inclusions 2
30226056	DS03	2.00 - 2.00	Dark Brown	Silty Clay	Stones	None
30226059	DS04	2.60 - 2.60	Dark Brown	Sandy Clay	Stones	None
30226058	DS05	4.00 - 4.00	Dark Brown	Silty Clay	None	None
30226061	DS09	1.30 - 1.30	Black	Sandy Clay Loam	Stones	N/A
30226046	TP01	1.00 - 1.00	Dark Brown	Clay Loam	Stones	Crushed Brick
30226047	TP02	1.10 - 1.20	Dark Brown	Clay Loam	Stones	None
30226048	TP09	0.90 - 1.00	Dark Brown	Sandy Clay Loam	Stones	Crushed Brick
30226049	TP11	0.50 - 0.50	Dark Brown	Sandy Clay Loam	Stones	None
30226050	TP15	0.50 - 0.50	Dark Brown	Clay Loam	None	None
30226051	TP19	0.50 - 0.50	Dark Brown	Clay Loam	Stones	None
30226053	TP29	0.90 - 1.00	Dark Brown	Clay Loam	Stones	None
30226054	TP30	1.80 - 1.90	Dark Brown	Sandy Clay Loam	Stones	Vegetation

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.



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Results Legend			Customer Sample Ref.		TP01	TP01	TP02	TP03	TP04	TP05
#	ISO17025 accredited.		Depth (m)		1.00	1.00 - 1.00	1.10 - 1.20	0.90 - 1.00	1.10	0.90
M	mCERTS accredited.		Sample Type		GeoTech Soils	Unspecified Solid (UNS)	Unspecified Solid (UNS)	GeoTech Soils	GeoTech Soils	GeoTech Soils
aq	Aqueous / settled sample.		Date Sampled		26/06/2024	26/06/2024	26/06/2024	26/06/2024	26/06/2024	26/06/2024
diss.filt	Dissolved / filtered sample.		Sample Time							
tot.unfilt	Total / unfiltered sample.		Date Received		16/07/2024	16/07/2024	16/07/2024	16/07/2024	16/07/2024	16/07/2024
*	Subcontracted - refer to subcontractor report for accreditation status.		SDG Ref		240716-40	240716-40	240716-40	240716-40	240716-40	240716-40
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery		Lab Sample No.(s)		30081995	30226046	30226047	30086584	30086574	30081968
(F)	Trigger breach confirmed		AGS Reference		D			D	D	D
1-4*\$	Sample deviation (see appendix)									
Component	LOD/Units	Method								
Moisture Content Ratio (% of as received sample)	%	PM024				13	13	22		
Moisture Content (GEOTECH)*		SUB	See Attached					See Attached	See Attached	
Plasticity Index 4 point*		SUB						See Attached	See Attached	
Loss on ignition	<0.7 %	TM018						67.5		
								@		
Sulphur, Total	<0.02 %	TM132			0.0498		0.0235			
					@		@			
pH	1 pH Units	TM133			6.29		6.95			
					@		@			
Sulphate, acid soluble (total)	<0.0048 %	TM221			0.0195		<0.0048			
Soluble Sulphate 2:1 extract as SO4 BRE	<0.004 g/l	TM243			0.0217		0.0201			
					@		@			
Chloride 2:1 water/soil extract BRE	<0.0025 g/l	TM243			0.0038		0.0091			
					@		@			
Nitrate as NO3, 2:1 water soluble (BRE)	<0.0003 g/l	TM243			0.00259		0.0051			
Ammoniacal N as NH4 in 2:1 extract BRE	<0.0003 g/l	TM248			0.0017		0.00171			
Magnesium (BRE)	<0.008 g/l	TM282			<0.008		<0.008			



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Results Legend			Customer Sample Ref.	TP11	TP12	TP13	TP13	TP15	TP16
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50 - 0.50	0.80	0.50	1.20	0.50 - 0.50	0.50
M	mCERTS accredited.			Unspecified Solid (UNS)	GeoTech Soils	GeoTech Soils	GeoTech Soils	Unspecified Solid (UNS)	GeoTech Soils
aq	Aqueous / settled sample.			-	25/06/2024	24/06/2024	24/06/2024	-	27/06/2024
diss.filt	Dissolved / filtered sample.			-	16/07/2024	16/07/2024	16/07/2024	-	16/07/2024
tot.unfilt	Total / unfiltered sample.			16/07/2024	240716-40	240716-40	240716-40	16/07/2024	240716-40
*	Subcontracted - refer to subcontractor report for accreditation status.			240716-40	30082010	30082014	30082017	240716-40	30082042
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery			30226049	B	B	B	30226050	B
(F)	Trigger breach confirmed								
1-4*\$	Sample deviation (see appendix)								
Component	LOD/Units	Method							
Moisture Content Ratio (% of as received sample)	%	PM024	8.4				8		
Moisture Content (GEOTECH)*		SUB		See Attached	See Attached			See Attached	
Plasticity Index 4 point*		SUB		See Attached	See Attached			See Attached	
PSD Wet/Dry sieve*		SUB				See Attached			
Sedimentation*		SUB				See Attached			
Sulphur, Total	<0.02 %	TM132	<0.02				<0.02		
pH	1 pH Units	TM133	7.34				7.08		
Sulphate, acid soluble (total)	<0.0048 %	TM221	<0.0048				<0.0048		
Soluble Sulphate 2:1 extract as SO4 BRE	<0.004 g/l	TM243	0.0069				0.0129		
Chloride 2:1 water/soil extract BRE	<0.0025 g/l	TM243	0.0056				0.005		
Nitrate as NO3, 2:1 water soluble (BRE)	<0.0003 g/l	TM243	0.00608				0.00239		
Ammoniacal N as NH4 in 2:1 extract BRE	<0.0003 g/l	TM248	0.00188				0.00161		
Magnesium (BRE)	<0.008 g/l	TM282	<0.008				<0.008		



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Table of Results - Appendix

Method No	Description
PM024	Soil preparation including homogenisation, moisture, screens of soils for Asbestos Containing Material
SUB	Subcontracted Test
TM018	Determination of Loss on Ignition
TM132	ELTRA CS800 Operators Guide
TM133	Determination of pH in Soil and Water using the GLpH pH Meter
TM221	Determination of Acid Extractable Sulphate in Soils by ICP OES
TM243	Mixed Anions In Soils By Kone
TM248	Determination of Ammonium BRE (2:1 Extract) on solids
TM282	Extraction of Magnesium by BRE Method

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).



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Test Completion Dates

Lab Sample No(s) Customer Sample Ref.	30086601	30086626	30086634	30226056	30086606	30226059	30086648	30226058	30226061	30086596
AGS Ref.	DS01	DS03	DS03	DS03	DS04	DS04	DS05	DS05	DS09	DS10
Depth	D	D	D		D		D			D
Type	GeoTech	GeoTech	GeoTech	Unspecified	GeoTech	Unspecified	GeoTech	Unspecified	Unspecified	GeoTech
Ammoniacal N as NH4 in 2:1 extract				17-Aug-2024		17-Aug-2024		17-Aug-2024	17-Aug-2024	
Anions by Kone (soil)				19-Aug-2024		19-Aug-2024		19-Aug-2024	19-Aug-2024	
Geotechnical Testing*	20-Aug-2024	20-Aug-2024	20-Aug-2024		20-Aug-2024		20-Aug-2024			20-Aug-2024
Magnesium (BRE)				19-Aug-2024		19-Aug-2024		19-Aug-2024	19-Aug-2024	
NO3, NO2 and TON by KONE (s)				19-Aug-2024		19-Aug-2024		19-Aug-2024	19-Aug-2024	
pH				19-Aug-2024		19-Aug-2024		19-Aug-2024	19-Aug-2024	
Sample description				15-Aug-2024		15-Aug-2024		15-Aug-2024	15-Aug-2024	
Total Sulphate				16-Aug-2024		16-Aug-2024		16-Aug-2024	16-Aug-2024	
Total Sulphur				19-Aug-2024		19-Aug-2024		19-Aug-2024	19-Aug-2024	
Lab Sample No(s) Customer Sample Ref.	30086622	30081966	30081995	30226046	30226047	30086574	30081968	30081974	30081976	30081984
AGS Ref.	DS10	TP01	TP01	TP01	TP02	TP04	TP05	TP07	TP07	TP08
Depth	D	B	D			D	D	B	B	B
Type	GeoTech	GeoTech	GeoTech	Unspecified	Unspecified	GeoTech	GeoTech	GeoTech	GeoTech	GeoTech
Ammoniacal N as NH4 in 2:1 extract				17-Aug-2024	17-Aug-2024					
Anions by Kone (soil)				19-Aug-2024	19-Aug-2024					
Geotechnical Testing*	20-Aug-2024	20-Aug-2024	20-Aug-2024			20-Aug-2024	20-Aug-2024	20-Aug-2024	20-Aug-2024	20-Aug-2024
Magnesium (BRE)				19-Aug-2024	19-Aug-2024					
NO3, NO2 and TON by KONE (s)				19-Aug-2024	19-Aug-2024					
pH				19-Aug-2024	19-Aug-2024					
Sample description				15-Aug-2024	15-Aug-2024					
Total Sulphate				16-Aug-2024	16-Aug-2024					
Total Sulphur				19-Aug-2024	19-Aug-2024					
Lab Sample No(s) Customer Sample Ref.	30081986	30226048	30081997	30226049	30082010	30082014	30082017	30226050	30082042	30082047
AGS Ref.	TP08	TP09	TP10	TP11	TP12	TP13	TP13	TP15	TP16	TP17
Depth	B		B		B	B	B		B	B
Type	GeoTech	Unspecified	GeoTech	Unspecified	GeoTech	GeoTech	GeoTech	Unspecified	GeoTech	GeoTech
Ammoniacal N as NH4 in 2:1 extract		17-Aug-2024		17-Aug-2024				17-Aug-2024		
Anions by Kone (soil)		19-Aug-2024		19-Aug-2024				19-Aug-2024		
Geotechnical Testing*	20-Aug-2024		20-Aug-2024		20-Aug-2024	20-Aug-2024	20-Aug-2024		20-Aug-2024	20-Aug-2024
Magnesium (BRE)		19-Aug-2024		19-Aug-2024				19-Aug-2024		
NO3, NO2 and TON by KONE (s)		19-Aug-2024		19-Aug-2024				19-Aug-2024		
pH		19-Aug-2024		19-Aug-2024				19-Aug-2024		
Sample description		15-Aug-2024		15-Aug-2024				15-Aug-2024		
Total Sulphate		16-Aug-2024		16-Aug-2024				16-Aug-2024		
Total Sulphur		19-Aug-2024		19-Aug-2024				19-Aug-2024		
Lab Sample No(s) Customer Sample Ref.	30086650	30082053	30082062	30226051	30082065	30082069	30082071	30082077	30082084	30082091
AGS Ref.	TP17	TP18	TP19	TP19	TP20	TP20	TP21	TP22	TP22	TP24
Depth	B	B	D		B	B	B	B	B	B
Type	GeoTech	GeoTech	GeoTech	Unspecified	GeoTech	GeoTech	GeoTech	GeoTech	GeoTech	GeoTech
Ammoniacal N as NH4 in 2:1 extract				17-Aug-2024						
Anions by Kone (soil)				19-Aug-2024						
Geotechnical Testing*	20-Aug-2024	20-Aug-2024	20-Aug-2024		20-Aug-2024	20-Aug-2024	20-Aug-2024	20-Aug-2024	20-Aug-2024	20-Aug-2024
Magnesium (BRE)				19-Aug-2024						
NO3, NO2 and TON by KONE (s)				19-Aug-2024						
pH				19-Aug-2024						
Sample description				15-Aug-2024						
Total Sulphate				16-Aug-2024						
Total Sulphur				19-Aug-2024						



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Lab Sample No(s)	30082093	30082096	30086546	30086553	30086555	30086557	30086560	30226053	30226054	30086584
Customer Sample Ref.	TP25	TP25	TP26	TP27	TP27	TP28	TP28	TP29	TP30	TP03a
AGS Ref.	B	D	B	B	B	B	B			D
Depth	0.50	1.20	1.60	0.60	2.00	0.40	0.80	0.90 - 1.00	1.80 - 1.90	0.90 - 1.00
Type	GeoTech	Unspecified	Unspecified	GeoTech						
Ammoniacal N as NH4 in 2:1 extract								17-Aug-2024	17-Aug-2024	
Anions by Kone (soil)								19-Aug-2024	19-Aug-2024	
Geotechnical Testing*	20-Aug-2024									
Loss on Ignition in soils										06-Aug-2024
Magnesium (BRE)								19-Aug-2024	19-Aug-2024	
NO3, NO2 and TON by KONE (s)								19-Aug-2024	19-Aug-2024	
pH								19-Aug-2024	19-Aug-2024	
Sample description								15-Aug-2024	15-Aug-2024	
Total Sulphate								16-Aug-2024	16-Aug-2024	
Total Sulphur								19-Aug-2024	19-Aug-2024	



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Appendix

General

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 15 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of 15 days after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur e.g volatile mercury

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as "mixed hydrocarbons". Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	Container with Headspace provided for volatiles analysis
2	Incorrect container received
3	Deviation from method
4	Matrix interference
◆	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to late arrival of instructions or samples
§	Sampled on date not provided

20. Asbestos

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as "Not detected". If no asbestos fibre types are found all will be reported as "Not detected" and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.



LABORATORY REPORT



Contract Number: PSL24/5126

Report Date: 30 July 2024
Client's Reference: 240716-40
Client Name: ALS Laboratories UK Ltd
Units 7-8 Hawarden Business Park
Manor road (Off Manor lane)
Hawarden
Deeside
CH5 3US

For the attention of:

Contract Title: 240716-40
Date Received: 17/7/2024
Date Commenced: 17/7/2024
Date Completed: 30/7/2024

Notes: Opinions and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced other than in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

A Watkins
(Managing Director)

R Berriman
(Associate Director)

S Royle
(Laboratory Manager)

L Knight
(Assistant Laboratory Manager)


D Nicholson
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SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
30081967	TP01	B	1.00		Brown mottled grey slightly sandy very silty CLAY.
30081975	TP07	B	0.50		Brown slightly gravelly slightly sandy very silty CLAY.
30081980	TP07	B	2.00		Grey very gravelly sandy CLAY.
30081985	TP08	B	0.50		Brown gravelly slightly sandy CLY.
30081987	TP08	B	1.50		Grey gravelly sandy CLAY.
30081998	TP10	B	0.40		Brown mottled grey slightly sandy CLAY.
30082011	TP12	B	0.80		Brown mottled grey slightly sandy very silty CLAY.
30082015	TP13	B	0.50		Brown mottled grey slightly sandy very silty CLAY.
30082018	TP13	B	1.20		Brown gravelly slightly sandy CLAY.
30082043	TP16	B	0.50		Brown mottled grey slightly sandy very silty CLAY.
30082048	TP17	B	0.50		Brown slightly sandy very silty CLAY.
30086651	TP17	B	1.10		Grey very gravelly slightly sandy CLAY.
30082054	TP18	B	0.40		Brown slightly sandy CLAY.
30082066	TP20	B	0.40		Brown gravelly slightly sandy CLAY.
30082070	TP20	B	2.00		Reddish brown mottled grey slightly sandy very silty CLAY.
30082072	TP21	B	0.40		Brown mottled grey slightly sandy CLAY.
30082078	TP22	B	0.80		Grey slightly gravelly slightly sandy very silty CLAY.
30082086	TP22	B	2.00		Brown slightly gravelly sandy CLAY.
30082092	TP24	B	0.70		Brown slightly sandy slightly silty GRAVEL with cobbles.



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Contract No:

PSL24/5126

Client Ref:

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
30082095	TP25	B	0.50		Brown slightly gravelly slightly sandy very silty CLAY.
30086547	TP26	B	1.60		Brown mottled grey slightly gravelly slightly sandy very silty CLAY.
30086554	TP27	B	0.60		Dark brown very gravelly sandy CLAY.
30086556	TP27	B	2.00		Brown mottled grey slightly sandy very silty CLAY.
30086558	TP28	B	0.40		Brown slightly sandy very silty CLAY.
30086562	TP28	B	0.80		Brown very gravelly sandy CLAY.
30086602	DS01	D	2.00		Grey very gravelly slightly sandy very silty CLAY.
30086627	DS03	D	1.30		Grey very gravelly slightly sandy very silty CLAY.
30086635	DS03	D	3.00		Grey gravelly slightly sandy very silty CLAY.
30086607	DS04	D	1.30		Brown mottled grey sandy very silty CLAY.
30086649	DS05	D	1.30		Grey slightly gravelly slightly sandy very silty CLAY.
30086623	DS10	D	1.30		Brown slightly gravelly sandy very silty CLAY.
30086599	DS10	D	2.80		Grey very gravelly slightly sandy CLAY.
30081996	TP01	D	1.00		Brown slightly gravelly sandy CLAY.
30086575	TP04	D	1.10		Grey slightly gravelly slightly sandy very silty CLAY.
30081969	TP05	D	0.90		Brown slightly gravelly sandy very silty CLAY.
30082063	TP19	D	1.00		Brown very gravelly sandy very silty CLAY.
30082097	TP25	D	1.20		Brown sandy slightly clayey GRAVEL.



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Client Ref:

SUMMARY OF SOIL CLASSIFICATION TESTS

(BS1377 : PART 2 : 1990)

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Moisture Content % Clause 3.2	Particle Density Mg/m ³ Clause 8.2	Liquid Limit % Clause 4.3/4	Plastic Limit % Clause 5.3	Plasticity Index % Clause 5.4	Passing .425mm %	Remarks
30081967	TP01	B	1.00		35		57	25	32	100	High Plasticity CH
30081975	TP07	B	0.50		21		57	27	30	97	High Plasticity CH
30081985	TP08	B	0.50		24		57	27	30	78	High Plasticity CH
30081987	TP08	B	1.50		12		48	18	30	81	Intermediate Plasticity CI
30081998	TP10	B	0.40		35		68	31	37	100	High Plasticity CH
30082011	TP12	B	0.80		30		81	29	52	100	Very High Plasticity CV
30082015	TP13	B	0.50		26		68	27	41	100	High Plasticity CH
30082043	TP16	B	0.50		17		54	23	31	100	High Plasticity CH
30082048	TP17	B	0.50		21		60	30	30	100	High Plasticity CH
30082054	TP18	B	0.40		24		51	25	26	100	High Plasticity CH
30082070	TP20	B	2.00		20		61	23	38	100	High Plasticity CH
30082072	TP21	B	0.40		35		77	29	48	100	Very High Plasticity CV
30082078	TP22	B	0.80		29		53	27	26	97	High Plasticity CH
30086556	TP27	B	2.00		19		62	25	37	100	High Plasticity CH
30086558	TP28	B	0.40		20		51	24	27	100	High Plasticity CH
30086602	DS01	D	2.00		10		48	26	22	77	Intermediate Plasticity CI
30086627	DS03	D	1.30		16		43	23	20	76	Intermediate Plasticity CI
30086635	DS03	D	3.00		13		46	26	20	80	Intermediate Plasticity CI
30086607	DS04	D	1.30		16		39	17	22	100	Intermediate Plasticity CI

SYMBOLS : NP : Non Plastic

* : Liquid Limit and Plastic Limit Wet Sieved.



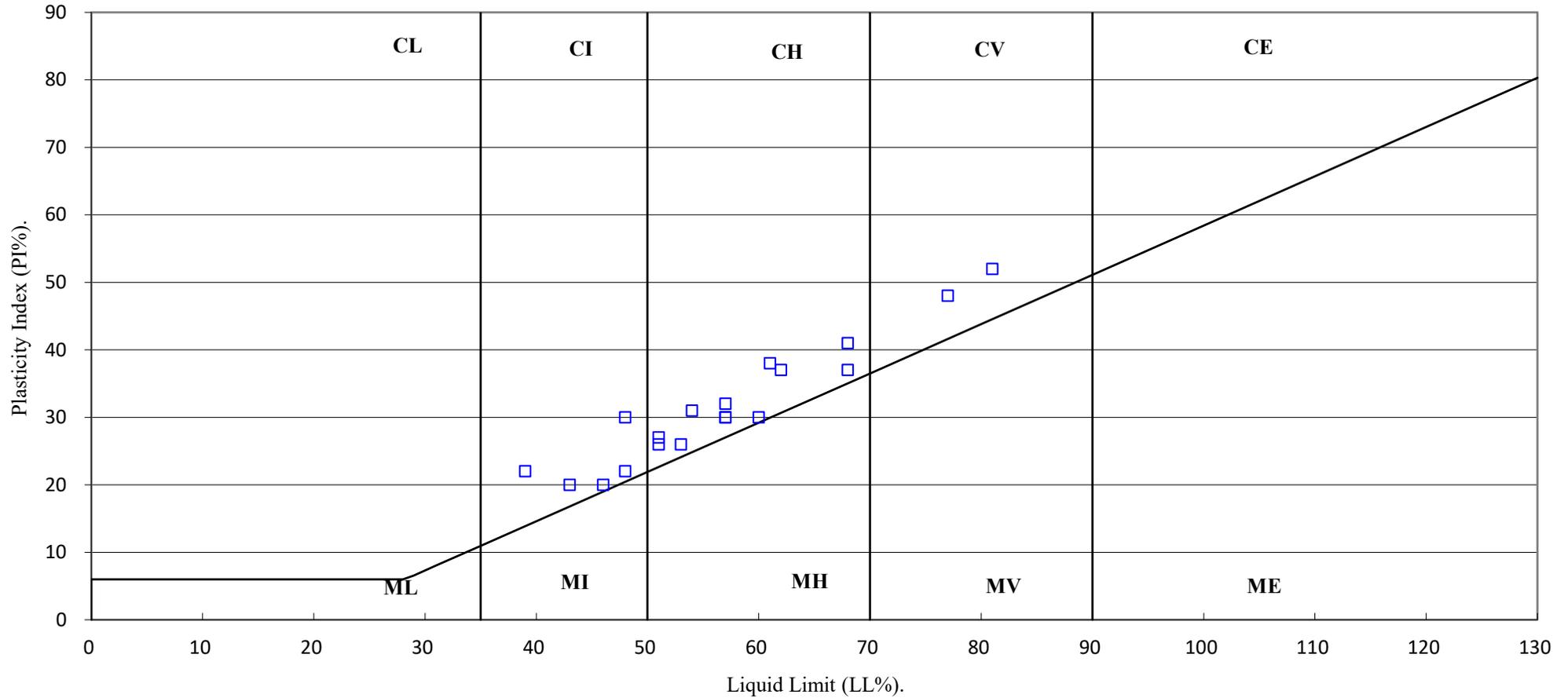
240716-40

Contract No:

PSL24/5126

Client Ref:

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.



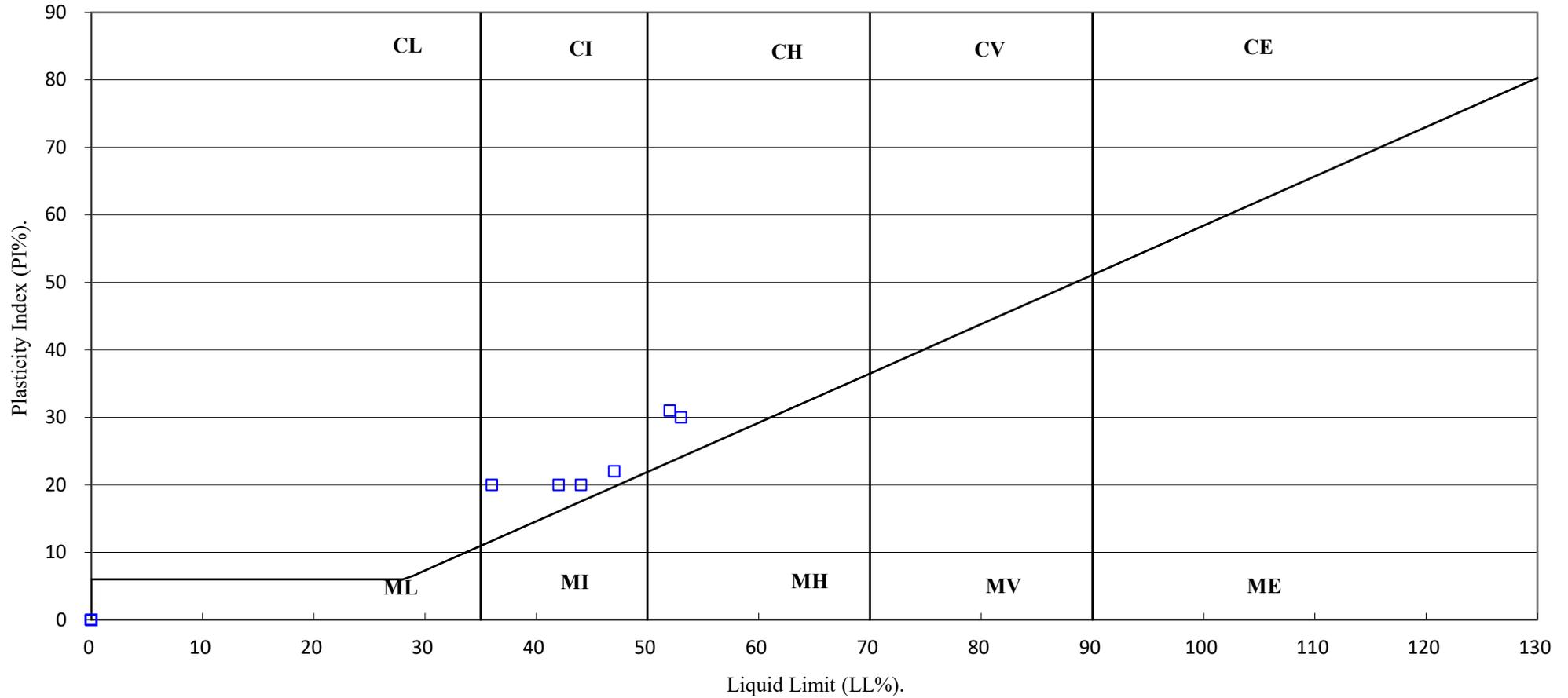
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Contract No:

PSL24/5126

Client Ref:

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.



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Contract No:

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Client Ref:

PARTICLE SIZE DISTRIBUTION TEST

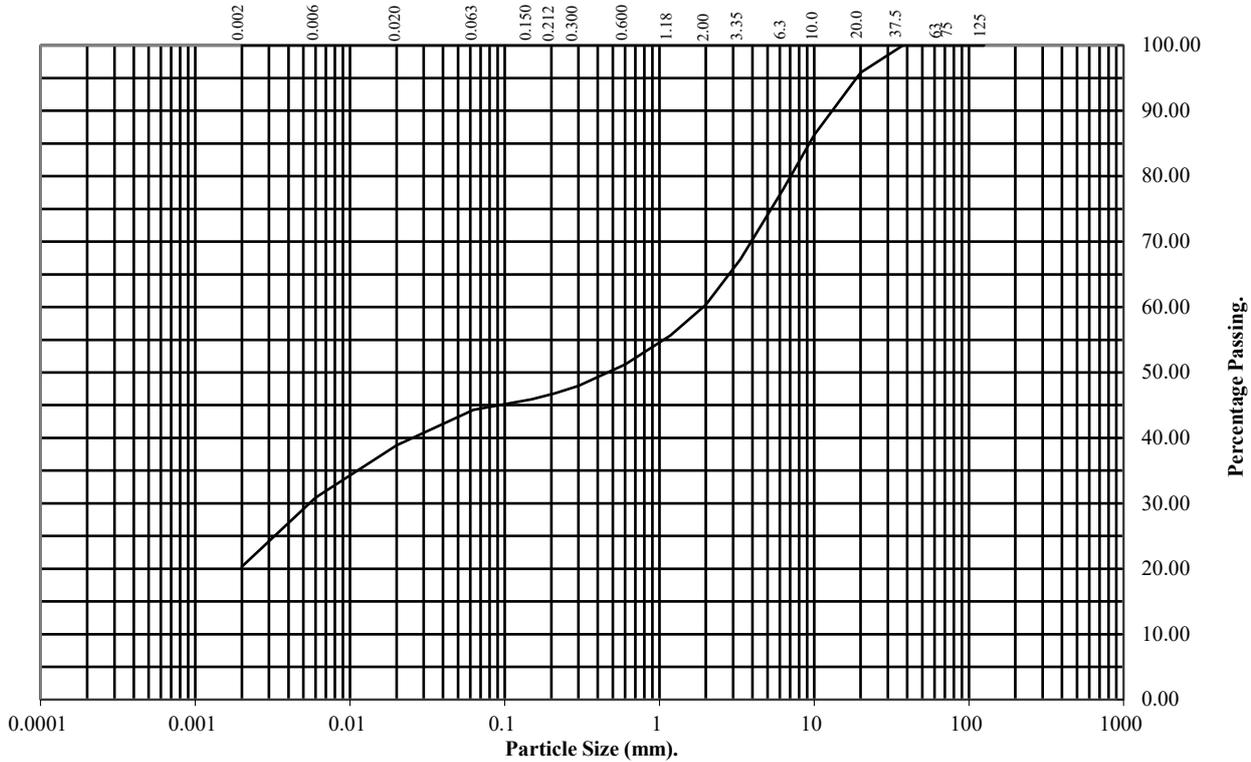
BS1377 : Part 2 : 1990

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Hole Number: 30081980 **Top Depth (m):** 2.00

Sample Number: TP07 **Base Depth(m):**

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	96
10	86
6.3	78
3.35	67
2	60
1.18	56
0.6	51
0.3	48
0.212	47
0.15	46
0.063	44

Particle Diameter	Percentage Passing
0.02	39
0.006	31
0.002	20

Soil Fraction	Total Percentage
Cobbles	0
Gravel	40
Sand	16
Silt	24
Clay	20

Remarks:
See Summary of Soil Descriptions



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PARTICLE SIZE DISTRIBUTION TEST

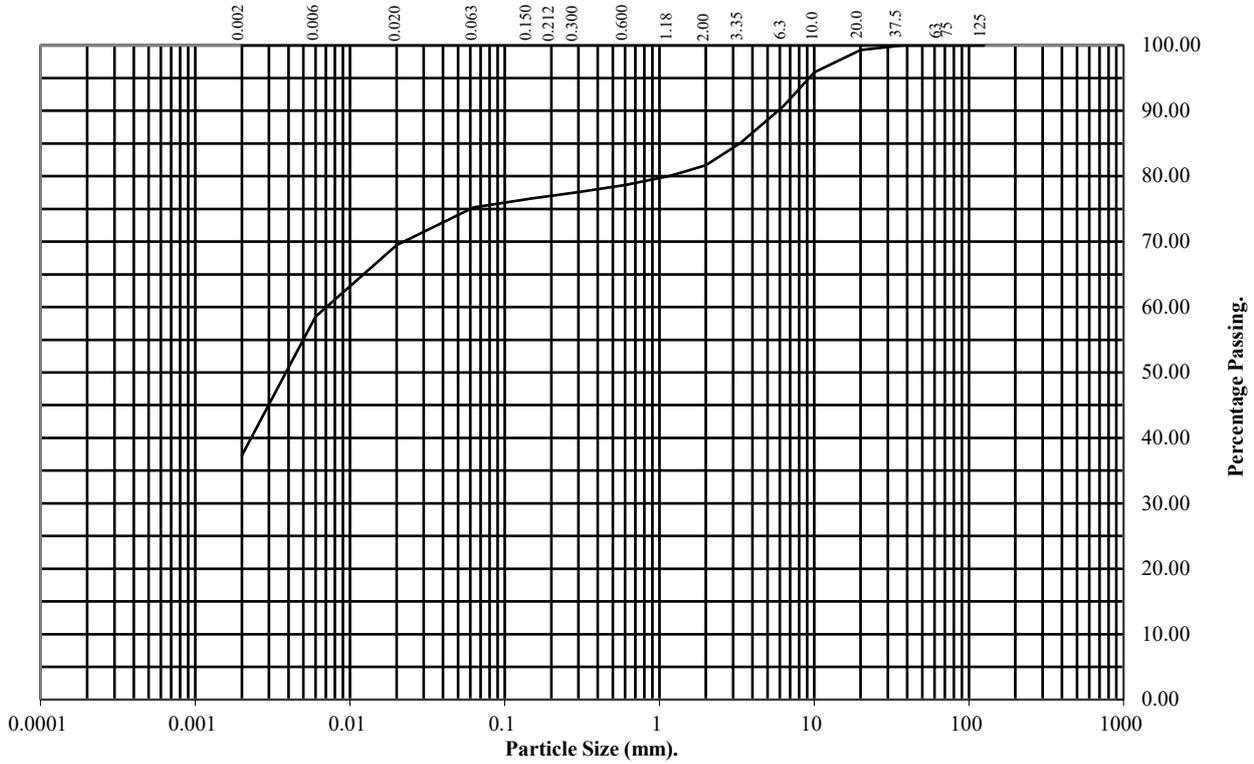
BS1377 : Part 2 : 1990

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Hole Number: 30081985 **Top Depth (m):** 0.50

Sample Number: TP08 **Base Depth(m):**

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	99
10	96
6.3	91
3.35	85
2	82
1.18	80
0.6	79
0.3	78
0.212	77
0.15	77
0.063	75

Particle Diameter	Percentage Passing
0.02	69
0.006	59
0.002	37

Soil Fraction	Total Percentage
Cobbles	0
Gravel	18
Sand	7
Silt	38
Clay	37

Remarks:
See Summary of Soil Descriptions



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PARTICLE SIZE DISTRIBUTION TEST

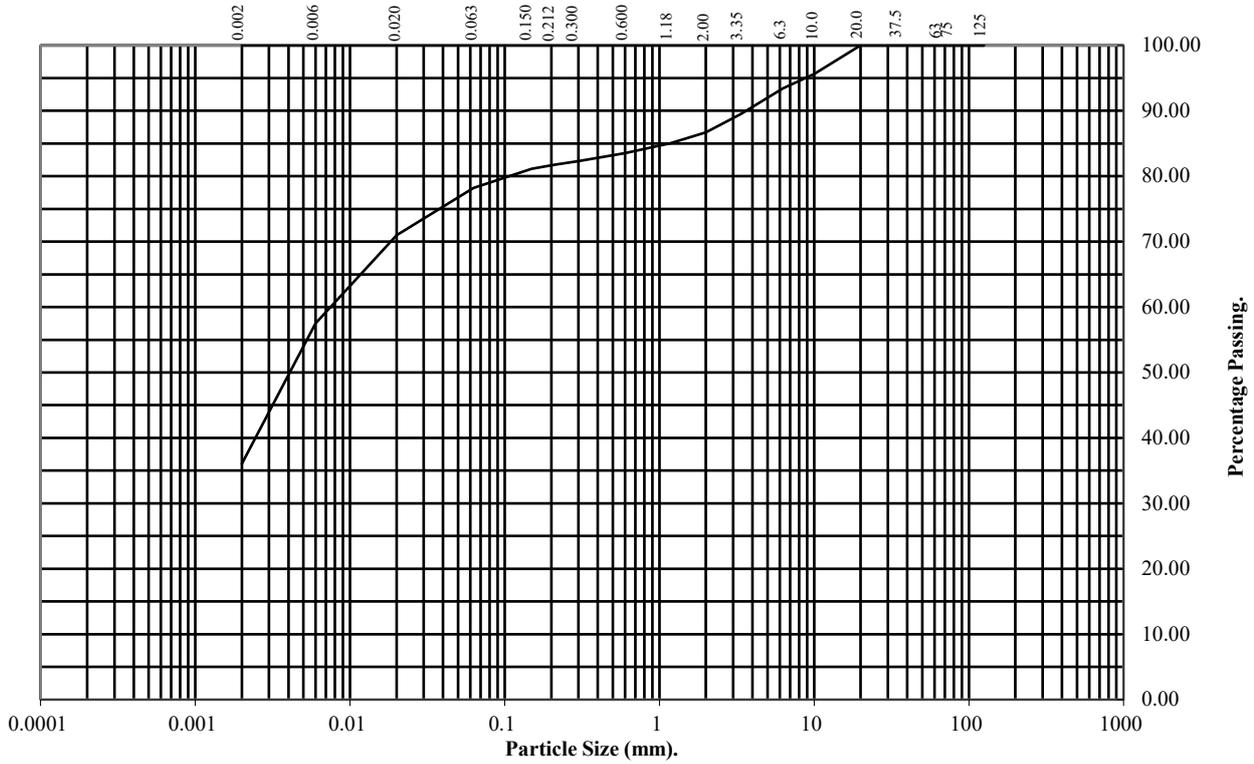
BS1377 : Part 2 : 1990

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Hole Number: 30082018 **Top Depth (m):** 1.20

Sample Number: TP13 **Base Depth(m):**

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	100
10	96
6.3	93
3.35	89
2	87
1.18	85
0.6	84
0.3	82
0.212	82
0.15	81
0.063	78

Particle Diameter	Percentage Passing
0.02	71
0.006	58
0.002	36

Soil Fraction	Total Percentage
Cobbles	0
Gravel	13
Sand	9
Silt	42
Clay	36

Remarks:
See Summary of Soil Descriptions



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PARTICLE SIZE DISTRIBUTION TEST

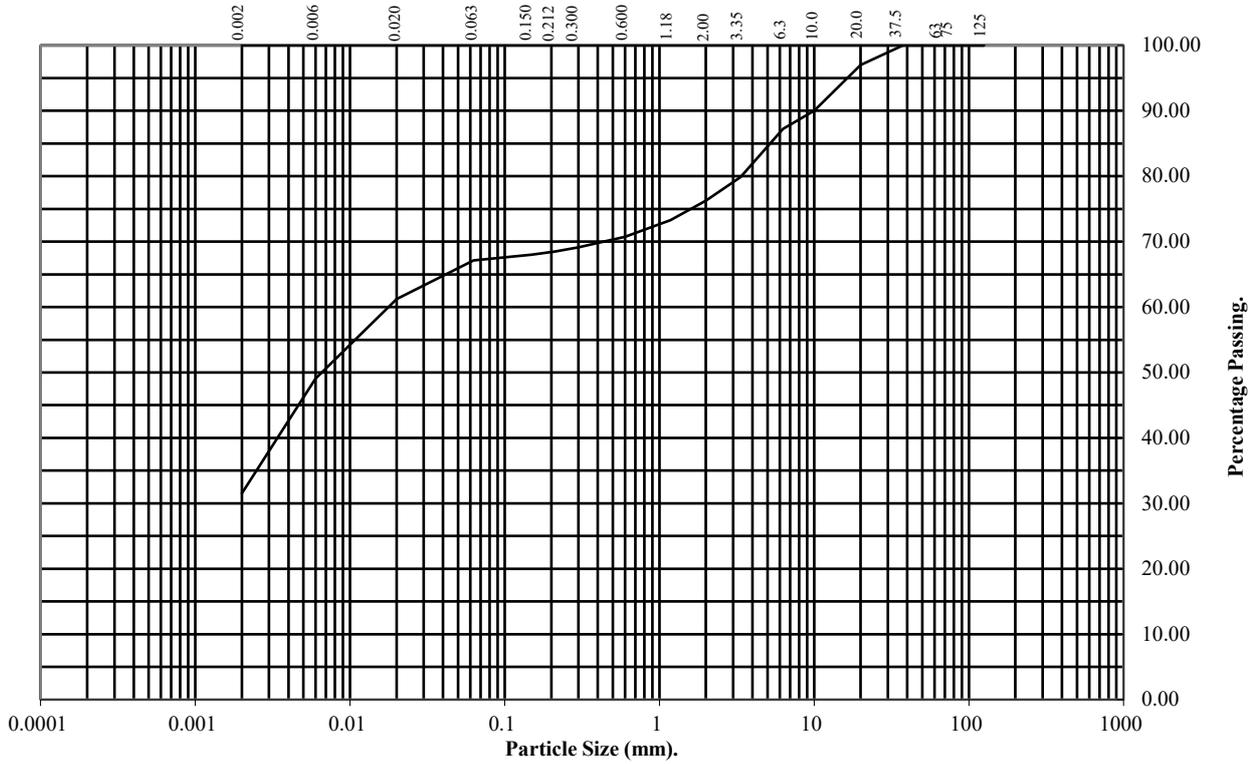
BS1377 : Part 2 : 1990

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Hole Number: 30086651 **Top Depth (m):** 1.10

Sample Number: TP17 **Base Depth(m):**

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	97
10	90
6.3	87
3.35	80
2	76
1.18	73
0.6	71
0.3	69
0.212	69
0.15	68
0.063	67

Particle Diameter	Percentage Passing
0.02	61
0.006	49
0.002	32

Soil Fraction	Total Percentage
Cobbles	0
Gravel	24
Sand	9
Silt	35
Clay	32

Remarks:
See Summary of Soil Descriptions



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Contract No:
PSL24/5126
Client Ref:

PARTICLE SIZE DISTRIBUTION TEST

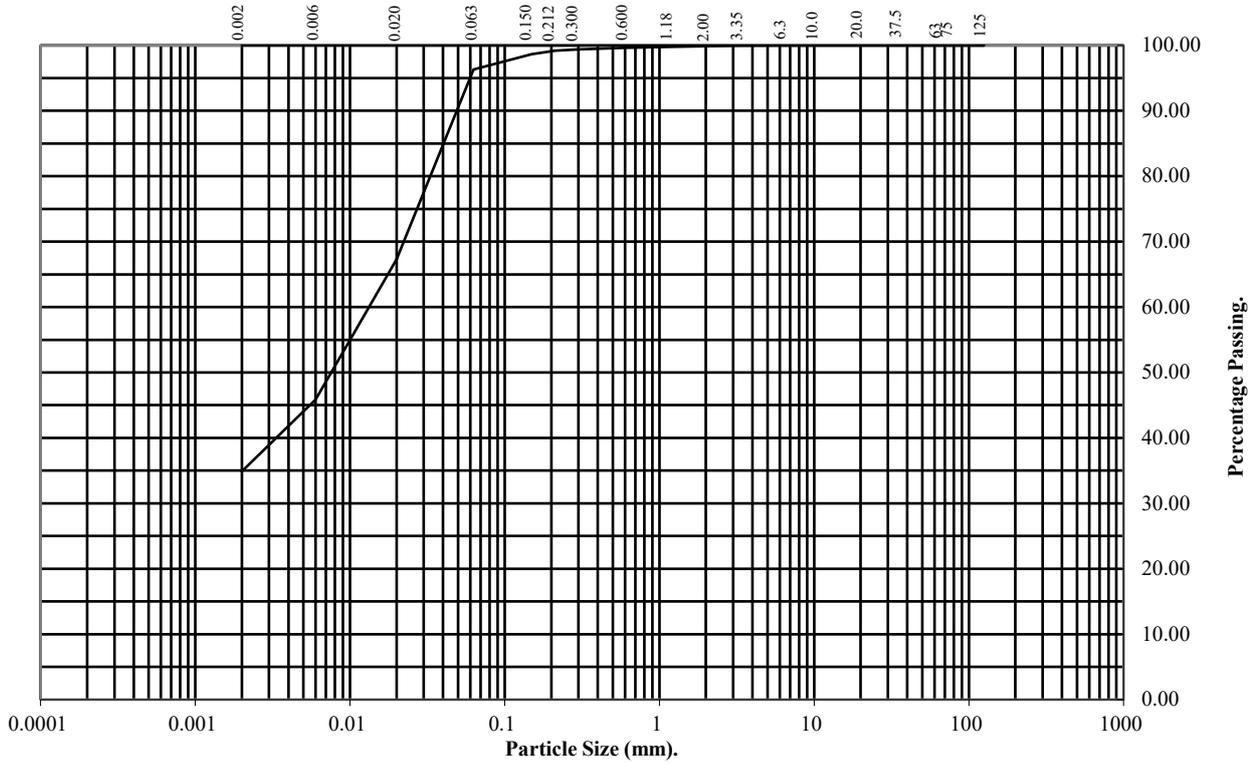
BS1377 : Part 2 : 1990

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Hole Number: 30082054 **Top Depth (m):** 0.40

Sample Number: TP18 **Base Depth(m):**

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	100
10	100
6.3	100
3.35	100
2	100
1.18	100
0.6	100
0.3	99
0.212	99
0.15	99
0.063	96

Particle Diameter	Percentage Passing
0.02	67
0.006	46
0.002	35

Soil Fraction	Total Percentage
Cobbles	0
Gravel	0
Sand	4
Silt	61
Clay	35

Remarks:
See Summary of Soil Descriptions



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Contract No:
PSL24/5126
Client Ref:

PARTICLE SIZE DISTRIBUTION TEST

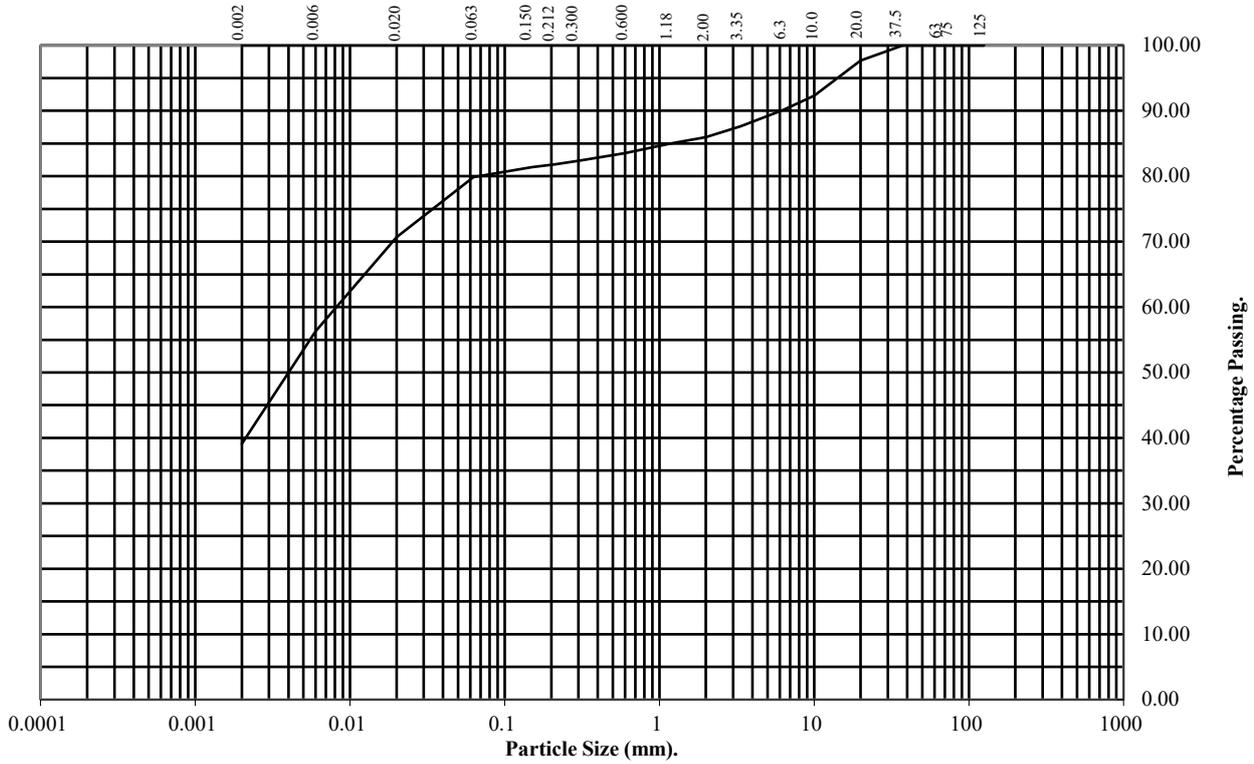
BS1377 : Part 2 : 1990

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Hole Number: 30082066 **Top Depth (m):** 0.40

Sample Number: TP20 **Base Depth(m):**

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	98
10	92
6.3	90
3.35	88
2	86
1.18	85
0.6	84
0.3	82
0.212	82
0.15	81
0.063	80

Particle Diameter	Percentage Passing
0.02	71
0.006	56
0.002	39

Soil Fraction	Total Percentage
Cobbles	0
Gravel	14
Sand	6
Silt	41
Clay	39

Remarks:
See Summary of Soil Descriptions



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PARTICLE SIZE DISTRIBUTION TEST

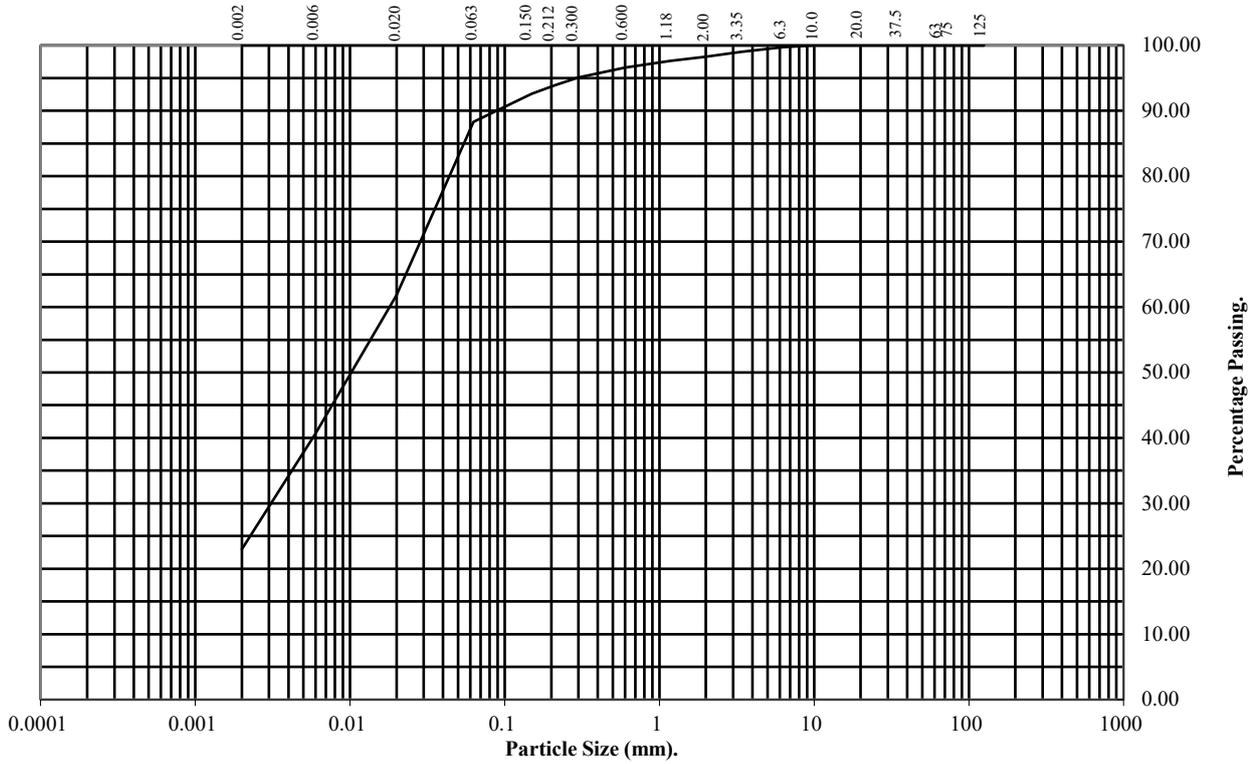
BS1377 : Part 2 : 1990

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Hole Number: 30082086 **Top Depth (m):** 2.00

Sample Number: TP22 **Base Depth(m):**

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	100
10	100
6.3	100
3.35	99
2	98
1.18	98
0.6	97
0.3	95
0.212	94
0.15	93
0.063	88

Particle Diameter	Percentage Passing
0.02	62
0.006	41
0.002	23

Soil Fraction	Total Percentage
Cobbles	0
Gravel	2
Sand	10
Silt	65
Clay	23

Remarks:
See Summary of Soil Descriptions



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PARTICLE SIZE DISTRIBUTION TEST

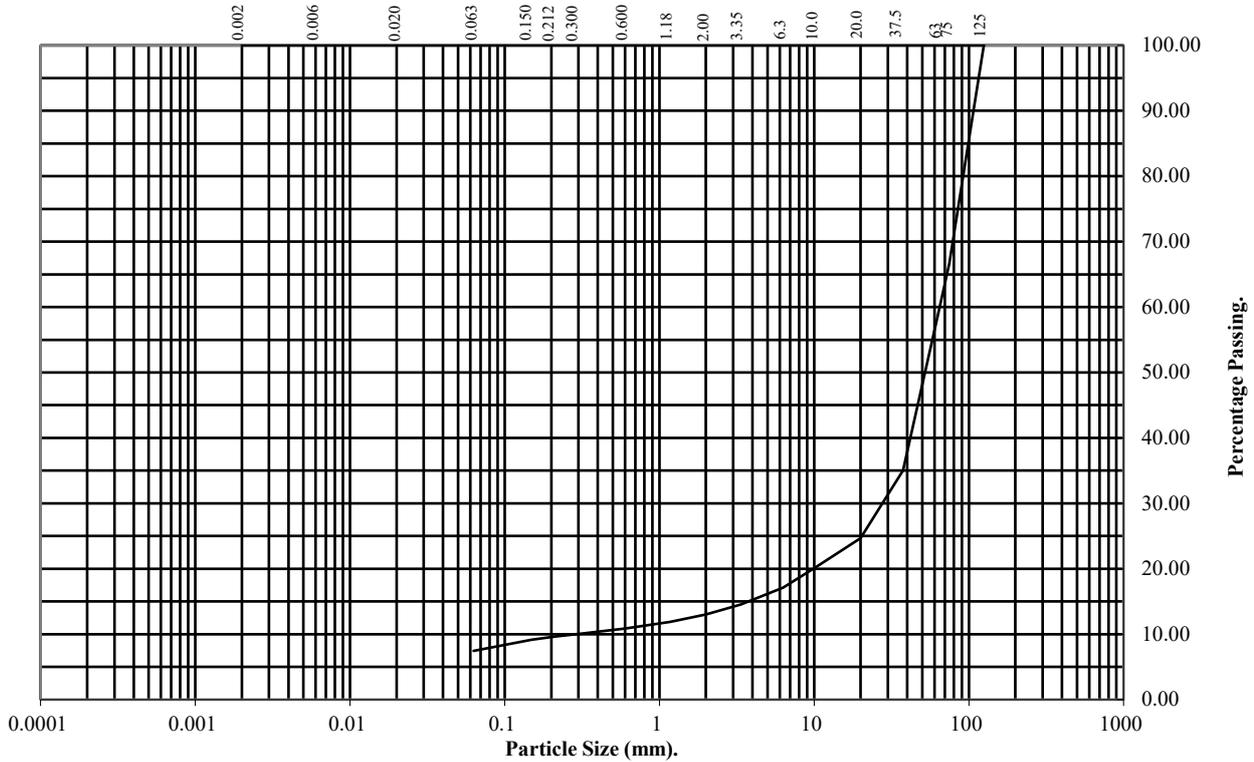
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: 30082092 **Top Depth (m):** 0.70

Sample Number: TP24 **Base Depth(m):**

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	67
63	59
37.5	35
20	25
10	20
6.3	17
3.35	15
2	13
1.18	12
0.6	11
0.3	10
0.212	10
0.15	9
0.063	7

Soil Fraction	Total Percentage
Cobbles	41
Gravel	46
Sand	6
Silt/Clay	7

Remarks:
See Summary of Soil Descriptions



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PSL24/5126
Client Ref:

PARTICLE SIZE DISTRIBUTION TEST

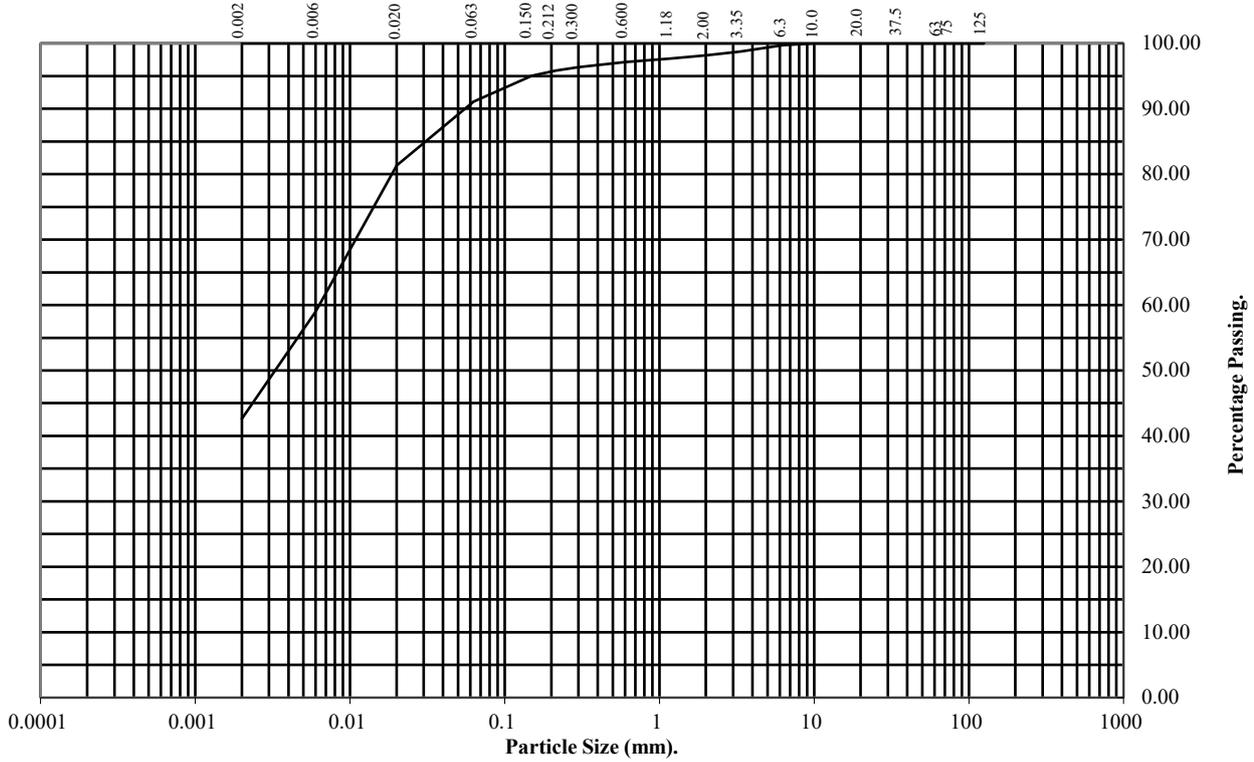
BS1377 : Part 2 : 1990

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Hole Number: 30082095 **Top Depth (m):** 0.50

Sample Number: TP25 **Base Depth(m):**

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	100
10	100
6.3	100
3.35	99
2	98
1.18	98
0.6	97
0.3	96
0.212	96
0.15	95
0.063	91

Particle Diameter	Percentage Passing
0.02	81
0.006	59
0.002	43

Soil Fraction	Total Percentage
Cobbles	0
Gravel	2
Sand	7
Silt	48
Clay	43

Remarks:
See Summary of Soil Descriptions



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PARTICLE SIZE DISTRIBUTION TEST

BS1377 : Part 2 : 1990

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

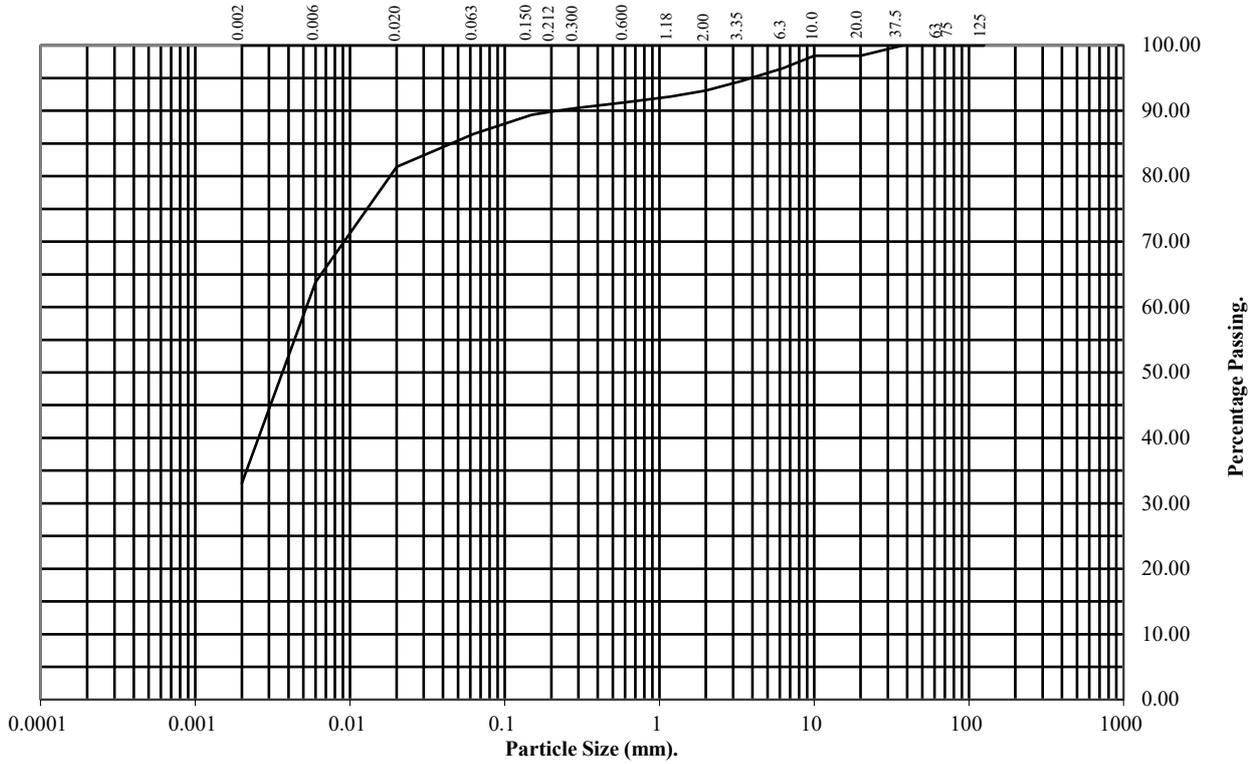
Hole Number: 30086547

Top Depth (m): 1.60

Sample Number: TP26

Base Depth(m):

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	98
10	98
6.3	97
3.35	95
2	93
1.18	92
0.6	91
0.3	90
0.212	90
0.15	89
0.063	86

Particle Diameter	Percentage Passing
0.02	81
0.006	64
0.002	33

Soil Fraction	Total Percentage
Cobbles	0
Gravel	7
Sand	7
Silt	53
Clay	33

Remarks:
See Summary of Soil Descriptions



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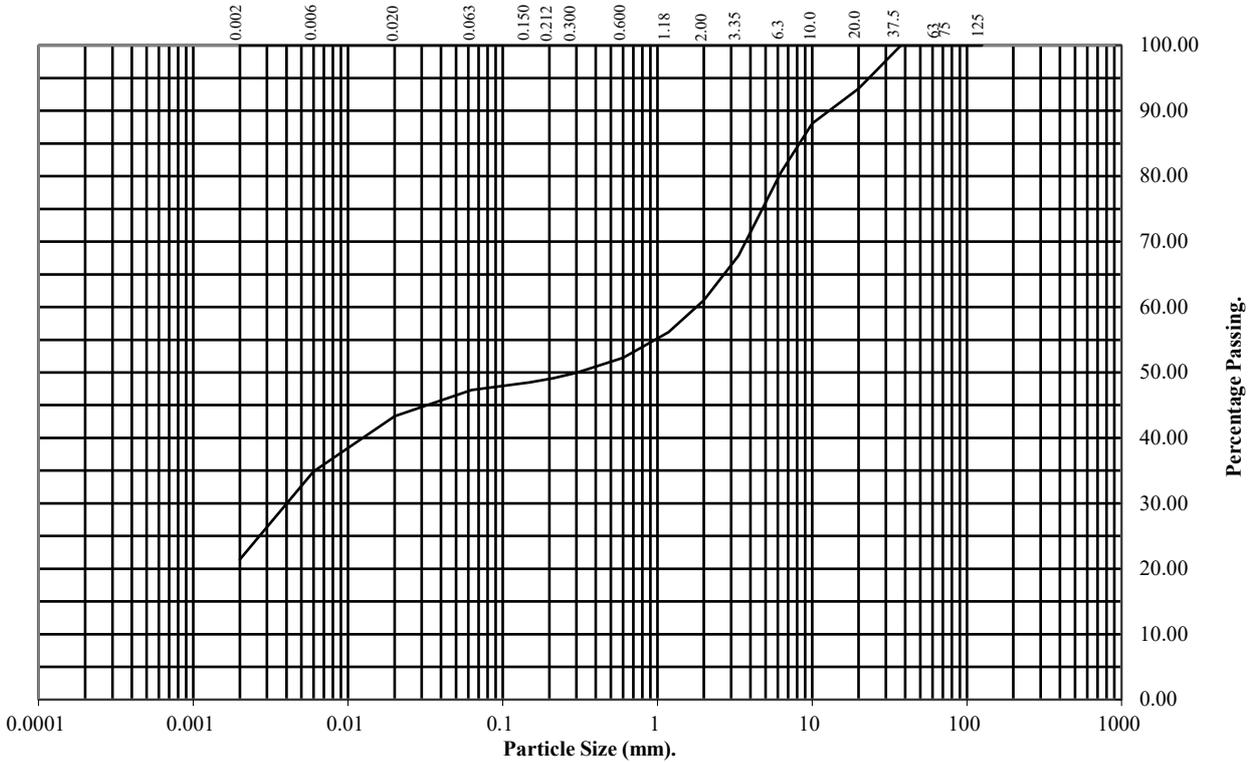
PARTICLE SIZE DISTRIBUTION TEST

BS1377 : Part 2 : 1990
Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Hole Number: 30086562 **Top Depth (m):** 0.60

Sample Number: TP27 **Base Depth(m):**

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	93
10	88
6.3	81
3.35	68
2	61
1.18	56
0.6	52
0.3	50
0.212	49
0.15	48
0.063	47

Particle Diameter	Percentage Passing
0.02	43
0.006	35
0.002	21

Soil Fraction	Total Percentage
Cobbles	0
Gravel	39
Sand	14
Silt	26
Clay	21

Remarks:
See Summary of Soil Descriptions



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Contract No:
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Client Ref:

PARTICLE SIZE DISTRIBUTION TEST

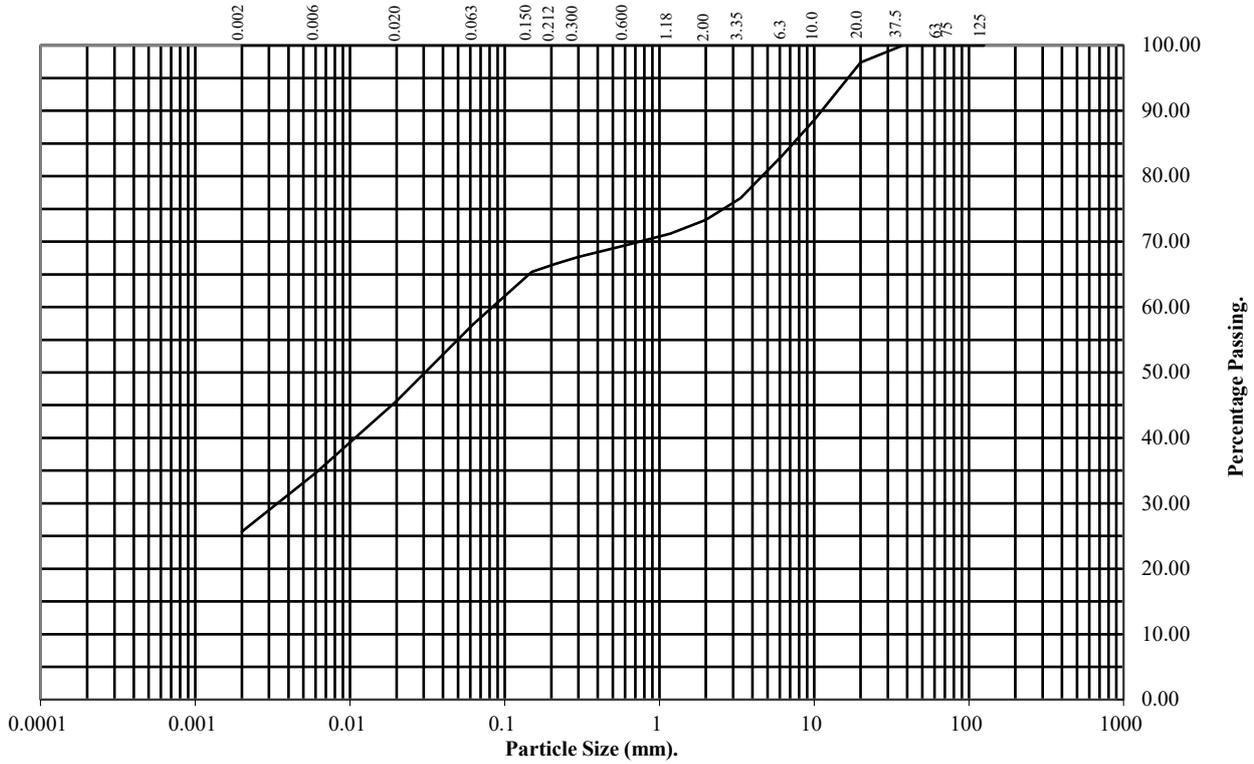
BS1377 : Part 2 : 1990

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Hole Number: 30086562 **Top Depth (m):** 0.80

Sample Number: TP28 **Base Depth(m):**

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	97
10	89
6.3	83
3.35	77
2	73
1.18	71
0.6	69
0.3	68
0.212	67
0.15	65
0.063	57

Particle Diameter	Percentage Passing
0.02	46
0.006	35
0.002	26

Soil Fraction	Total Percentage
Cobbles	0
Gravel	27
Sand	16
Silt	31
Clay	26

Remarks:
See Summary of Soil Descriptions



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PSL24/5126
Client Ref:

Appendix H

RISK ASSESSMENT METHODOLOGY



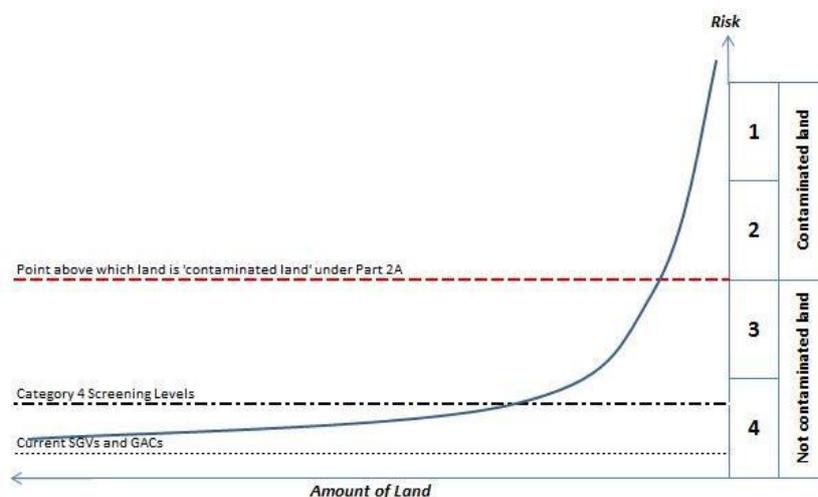
METHODOLOGY FOR THE DERIVATION OF GENERIC QUANTITATIVE ASSESSMENT CRITERIA TO EVALUATE RISKS TO HUMAN HEALTH FROM SOIL & GROUNDWATER CONTAMINATION

UK APPROACH

In the UK, the potential risks to human health from contamination in the ground are usually evaluated through a generic quantitative risk assessment (GQRA) approach. This allows generic and conservative exposure assumptions to be readily applied to risk assessments, and can be a useful tool for rapidly screening data and to identify those contaminants or scenarios that could benefit from further investigation and/or site-specific detailed quantitative risk assessment (DQRA). Current industry good practice is to use the approach presented in the Environment Agency (EA) publications SR2¹ and SR3². This approach allows the derivation of Generic Assessment Criteria (GACs), primarily for chronic exposure.

In April 2012, the Department of Environment, Food and Rural Affairs (Defra) published updated statutory guidance³ which introduced a four category approach to determining whether land in England and Wales is contaminated or not on the grounds of significant possibility of significant harm (SPOSH). **Figure 1** presents a graphical representation of the categories.

Figure 1: Four Categories for Determining if Land Represent a SPOSH



Cases classified as Category 1 are considered to be SPOSH based on actual evidence or an unacceptably high probability of harm existing. Category 4 cases are those where there is no risk, or a low risk of SPOSH.

¹ Environment Agency 'Human Health Toxicological Assessment of Contaminants in Soil', Report SC050021/SR2. January 2009.

² Environment Agency 'Updated Technical Background to the CLEA Model,' Report SC050021/SR3. January 2009.

³ Defra 'Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance'. April 2012.

GACs represent a minimal risk level, well within Category 4. A 2014 publication by Contaminated Land: Applications in Real Environments (CL:AIRE), SP1010⁴ and endorsed by Defra⁵ provided an approach to determine Category 4 Screening Levels (C4SLs) which are higher than the GACs whilst being “more pragmatic but still strongly precautionary”. It also provided C4SLs for six contaminants of concern. Although the C4SLs were designed to support Part 2A assessments to determine ‘contaminated land’ they are specifically mentioned, along with reference to the Part 2A statutory guidance, by the Department for Communities and Local Government (DCLG) for use in a planning context⁶.

An updated version the Contaminated Land Exposure Assessment (CLEA) Workbook (v1.071) was released by the EA in September 2015 to take into account the publication of SP1010. The updates comprised: additional toxicity data for the six chemicals for which C4SLs were derived; two new public open space land use scenarios; updated exposure parameters; options to run the model using C4SL exposure assumptions; and increased functionality. There were no changes to algorithms, so it is still possible to replicate the withdrawn SGVs using the input parameters held within v1.071.

It should be noted that the four category approach has not been adopted in Scotland under Part 2A or the planning regime. The Part 2A statutory guidance applicable in Scotland (Paper SE/2006/44 dated May 2006) does not reflect the changes introduced by Defra in April 2012 which allow for the use of C4SLs within Part 2A risk assessments. Additionally, it is considered that the principal of ‘minimal risk’ should still apply under planning in Scotland, based on current guidance.

WSP APPROACH

Following the withdrawal of the SGVs, and in the absence of an industry-wide, accepted set of GACs it is down to individual practitioners to derive their own soil assessment criteria. WSP has used the approach provided within SR2, SR3, SP1010, CLEA Workbook v1.071 and SR4⁷ to produce a set of minimal risk GACs. The chemical-specific data within two key publications were considered during their production: CL:AIRE 2010⁸ and LQM 2015⁹. Both documents provide comprehensive sets of GACs for different contaminants of concern.

The LQM Suitable For Use Levels (S4ULs) have selected exposure parameters consistent with the C4SL exposure scenarios. This approach was rejected by WSP as not representing minimal risk. However, the LQM S4UL document was critically reviewed and the approach and chemical input parameters were utilised where considered to be appropriate.

An industry-led C4SL Working Group is in the process of deriving a larger set of C4SLs in the near future, for approximately 20 contaminants. This will include a critical review of the chemical input data for all selected substances, and may therefore lead to further amendments to the chemical input data used in the WSP in-house screening values. It is considered likely that the contaminant list will

⁴ CL:AIRE ‘Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination’ SP1010, Final Project Report (Revision 2). September 2014.

⁵ Defra ‘SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination – Policy Companion Document’. December 2014.

⁶ DCLG Planning Practice Guidance ‘Land Affected by Contamination’, particularly Paragraphs 001 and 007. Ref IDs: 33-001-20140306 & 33-007-20140612.

⁷ Environment Agency ‘CLEA Software (Version 1.05) Handbook (and Software)’, Report SC050021/SR4. September 2009.

⁸ CL:AIRE ‘The EIC/AGS/CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment’. ISBN 978-1-05046-20-1. January 2010.

⁹ Nathanail et al ‘The LQM/CIEH S4ULs for Human Health Risk Assessment’, Land Quality Press, ISBN 978-0-9931084-0-2. 2015.

crossover with the 2009 EIC/AGS/CL:AIRE GACs. As such, this document was not critically reviewed by WSP.

WSP's current approach to the assessment of risks to human health is to continue to evaluate minimal risk through the use of in-house derived GACs, and to use the published C4SLs as a secondary tier of assessment until such time as additional C4SLs are published and/or in-house values are derived.

EXPOSURE MODELS

LAND USES

WSP has largely adopted the exposure assumptions of the generic land use scenarios included within SR3, with two additional public open space scenarios included from within SP1010 and two bespoke exposure scenarios (highways):

- à Residential with homegrown produce consumption;
- à Residential without homegrown produce consumption;
- à Allotments;
- à Commercial;
- à Public open space near residential housing (POS_{resi});
- à Public park (POS_{park});
- à Highways (surface soils); and
- à Highways (subsurface soils).

Exceptions are described in the following Sections.

SOIL PROPERTIES

SR3 assumes a sandy loam soil with a pH of 7 and a Soil Organic Matter (SOM) content of 6% for its generic land uses, based on the geographical spread of topsoils in the UK. WSP has adopted these default values. In addition, GACs based on an SOM of 1% and 2.5% have been derived, based on common experience of the nature of Made Ground and lack of topsoil on many brownfield sites.

RECEPTOR CHARACTERISTICS AND BEHAVIOURS

SP1010 provides some updated exposure parameters for long-term inhalation rates¹⁰ and the consumption rates for homegrown produce¹¹ compared to those provided in SR3. This data was used to derive WSP's GACs.

The changes in inhalation rates do not apply to the allotment generic land use scenario, as these are based on the breathing rates for short-term exposure of light to moderate intensity activity which were derived from a study that was not updated in USEPA 2011, so the SR3 rates were retained.

¹⁰ USEPA, National Centre for Environmental Assessment 'Exposure Factors Handbook: 2011 Edition' EPA/600/R-09/052F. September 2011.

¹¹ National Diet and Nutrition Survey 2008/2009 to 2010/2011.

HIGHWAYS EXPOSURE SCENARIOS

Human health GAC for a Highways exposure scenario have been derived. The site area is defined by publicly accessible land adjacent to highways, comprising both hard and soft landscaped areas. Exposure is considered to be largely transitory.

There are no publicly available GAC for this exposure scenario. Consequently, WSP have derived GAC for the following exposure scenarios:

- à Highways (surface soils); and
- à Highways (sub-surface soils).

Surface soils GAC are for soil at ground level and within 300mm of the surface. Conversely, subsurface GAC are for soils at a depth exceeding 0.3m bgl. These GAC are not to be used as import criteria.

The critical receptor is a young female child, CLEA age classes 4-9. This is consistent with the critical receptor for the POS(resi) exposure scenario, and considered to be appropriate for a child potentially playing outside without direct adult supervision.

For all GAC, a sandy loam soil and a soil organic matter content of 1% is assumed. There is no building on site.

Exposure scenarios for surface and subsurface soils are detailed below. These are considered to be conservative estimates, due to the mostly transitory use of publically accessible lands adjacent to highways.

HIGHWAYS GAC (SURFACE SOILS)

The relevant exposure pathways include direct soil and dust ingestion, dermal contact (outdoors) and the inhalation of outdoor dust and vapour.

The exposure frequency is 170 days per annum, and the occupancy period outdoors is 1 hour per day (as per the POS (resi) exposure scenario). The soil and dust ingestion rate has been set at 50 mg/day, consistent with a POS(park) exposure scenario.

HIGHWAYS GAC (SUBSURFACE SOILS)

The single relevant exposure pathway is the inhalation of outdoor vapour. Direct exposure pathways are not viable due to the depth of the soils below ground level.

The exposure frequency is 170 days per annum, and the occupancy period outdoors is 1 hour per day (as per the POS (resi) exposure scenario). The soil and dust ingestion rate has been set to zero, as direct exposure pathways to soils at this depth are not viable.

CHEMICAL DATA

PHYSICO-CHEMICAL PARAMETERS

Physico-chemical properties for the contaminants for which GACs have been derived have been obtained following critical review of the following hierarchy of data sources:

1. Environment Agency/Defra SGV reports where available;
2. Environment Agency 'Compilation of Data for Priority Organic Pollutants for Derivation of Soil Guideline Values', Report SC050021/SR7, November 2008; and
3. Published fate and transport reviews within Nathanail et. al 2015 and CL:AIRE 2010.

Where appropriate, and where sufficient data is available, values were adjusted to reflect a UK soil temperature of 10°C (e.g. K_{aw}).

TOXICOLOGICAL DATA

Toxicological data for the derivation of minimal risk Health Criteria Values (HCV) for each contaminant was selected with due regard to the approach presented in SR2. Where appropriate, the following hierarchy of data sources was used:

1. UK toxicity reviews published by authoritative bodies including:
 - < EA;
 - < Public Health England (PHE);
 - < Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment (COT); and
 - < Committee on Carcinogenicity of Chemicals in Food, Consumer Products and the Environment (COC).
2. Authoritative European sources such as European Food Standards Agency (EFSA)
3. International organisations including:
 - < World Health Organisation (WHO); and
 - < Joint FAO/WHO Expert Committee on Food Additives (JECFA).
4. Authoritative country-specific sources including:
 - < United States Environmental Protection Agency (USEPA);
 - < US Agency for Toxic Substances and Disease Registry (ATSDR);
 - < US Integrated Risk Information System (IRIS); and
 - < Netherlands National Institute for Public Health and the Environment (RIVM).

Factors such as the applicability of the data to human health (e.g. epidemiological vs. animal studies), the quality of the data, the level of uncertainty in the results and the age of the data were also taken into account in the final selection. Details for specific substances are available on request.

MEAN DAILY INTAKES

Estimations of background exposure for each threshold substance have been updated. In line with the SR2 approach, the exposure from non-threshold substances in the soil does not take into account exposure from other sources, and as such GACs were derived without consideration of the Mean Daily Intake (MDI) for those substances.

The data published by the EA in its series of TOX reports between 2002 and 2009 was evaluated to determine whether the values were considered to remain valid today. Values from these current UK published sources were not amended unless they were considered to be significantly different so that the GACs remained as comparable as possible with the revoked SGVs.

ORAL MEAN DAILY INTAKES

Oral MDI were generally estimated as the sum of exposure via the ingestion of food and drinking water using the default adult physiological parameters presented in Table 3.3 of SR2.

Data on the exposure of substances from food ingestion was generally obtained from UK Total Diet Studies (TDS) published by the Food Standards Agency (FSA) and its predecessor the Ministry of Agriculture, Fisheries and Food (MAFF) and from studies commissioned by COT. Where no UK-specific data was available, MDI were derived from the European Food Safety Authority (EFSA), Health Canada and US sources. This was a rare occurrence, and in these instances, the data was evaluated to determine its applicability to the UK.

Data on the concentrations of substances in tap water was obtained from a variety of sources. UK data was used where available, with preference given to Drinking Water Inspectorate (DWI) 2014 data from water company tap water testing (LOD, 1st and 99th percentile data is available). Where the substance was not included in tap water testing, other UK sources of information were considered including:

- à DWI data from water company tap water testing from previous years;
- à COT; and
- à FSA.

Where UK data was not available, a number of other data sources were considered, largely WHO International Programme on Chemical Safety (IPCS) Concise International Chemical Assessment Documents (CICADs) and background documents for the development of Guidelines for Drinking Water Quality, using professional judgement on the relevance of the data to the UK. The final decision on the MDI from drinking water was made using professional judgement on the balance of relevance and probability, taking into account the detection limit where not detected, Koc and solubility, reduction in use of the substance, banned substances, tight controls (e.g. on explosives) and with due consideration to the SR2 instruction that “if no data or information in background exposure are available, background exposure should be assumed to be negligible and the MDI set to zero....”.

Data from other countries was generally not used because it was considered that the hydrogeology of these countries along with industrial practices were unlikely to be reflective of the UK.

INHALATION MEAN DAILY INTAKES

Inhalation MDIs were based on estimates of average daily exposure by the inhalation pathway and calculated using the default adult physiological parameters presented in Table 3.3 of SR2.

The inhalation MDIs were generally estimated using background exposure data from the UK, derived from Defra's UK-AIR: Air Information Resource¹², which provides ambient air quality data from a number of sites forming a UK-wide monitoring network. The MDIs for heavy metals were based on rolling annual average metal mass concentration data from Defra's UK Heavy Metals Monitoring Network from the period October 2009 to September 2010¹³.

Information for some substances was obtained from UK sources including Environment Agency TOX reports and data from the UK Expert Panel on Air Quality Standards (EPAQS). Where recent UK data was not available, data was sourced from the International Programme on Chemical Safety (IPCS), the World Health Organisation (WHO), the Agency for Toxic Substances and Diseases Registry (ATSDR), Health Canada, and various other peer-reviewed sources summarised by LQM/CIEH¹⁴.

For other substances, where no data or information on background exposure was available, background exposure was assumed to be negligible and the MDI set at 0.5*TDI in accordance with guidance in SR2.

PLANT UPTAKE

Soil to plant concentration factors are available in CLEA v1.071 for arsenic, cadmium, hexavalent chromium, lead, mercury, nickel and selenium. For all remaining inorganic chemicals, concentration factors were obtained using the PRISM model. Substance-specific correction factors have been selected in accordance with the guidance established within SR3. This is consistent to the approach utilised in the derivation of the LQM S4UL and the EIC/AGS/CL:AIRE GAC.

Where there is a lack of appropriate data to enable the derivation of specific soil to plant concentrations factors for organic chemicals, plant uptake was modelled within CLEA v1.071 using the generic equations recommended within SR3, as follows:

- à Green Vegetables – Ryan et al. (1988);
- à Root Vegetables – Trapp (2002);
- à Tuber Vegetables – Trapp et al. (2007); and
- à Tree Fruit – Trapp et al. (2003).

There are no suitable models available for modelling uptake for herbaceous fruit or shrub fruit. Exposure is considered negligible.

¹² Crown 2016 copyright Defra via uk-air.defra.gov.uk, licenced under the Open Government Licence (OGL).

¹³ Defra, 2013 Spreadsheet of historic data for multiple years for the Metals network. Available online at: <http://uk-air.defra.gov.uk/data/metals-data>. [Accessed 13/03/2016].

¹⁴ LQM/CIEH, 2015. The LQM/CIEH S4ULs for Human Health Risk Assessment.

SOIL SATURATION LIMITS

GACs are not limited to their theoretical soil saturation within CLEA, although where either the aqueous or the vapour-based saturation is exceeded, this is highlighted within the Workbook (compared with the lower of the two values). This affects pathways which depend on partitioning calculations so in reality this only affects the vapour pathways and is relevant to organic substances and other substances, such as elemental mercury, that have a significant volatile component. However, the Workbook highlights saturation for direct contact pathways to indicate to the user where further qualitative consideration of free phase contamination at the surface may be required.

Where the lower of the two saturation limits is exceeded and the vapour pathway is the only exposure route being considered, the chronic risks to human health are likely to be negligible. Further evaluation could be undertaken using an alternative model suitable for evaluating non-aqueous phase liquids (NAPLs), such as the Johnson & Ettinger (J&E) approach described in USEPA 2003. However, WSP considers that if NAPLs are suspected, given the known limitations and over-simplifications of J&E, soil vapour monitoring is a more accurate way of assessing potential risks.

Where the lower saturation limit is exceeded for the vapour pathway and a number of exposure routes are being considered, then the contribution from the NAPL via vapour inhalation to the overall exposure can be evaluated using the procedure provided in SR4. WSP would evaluate this as part of a DQRA process or through soil vapour monitoring on-site to determine site-specific soil vapour concentrations.

CHEMICAL SPECIFIC ASSUMPTIONS

CYANIDES

Cyanide has high acute toxicity, and short term exposure is an important consideration when assessing the risks from soils contaminated with cyanide. The primary risk to human receptors from free cyanide in soils is an acute risk.

There is no current UK guidance available for calculating acute risks from free cyanide. Consequently, GAC for acute exposure were derived using the algorithms presented in MADEP 1992¹⁵ and assuming a one-off ingestion of 10g of soil (this conservative value has been taken as an upper bound estimate for a one-off soil ingestion rate amongst children). Receptor body weights have been selected according to the critical receptor for each exposure scenario. The lowest of the chronic and acute GAC for each land use scenario were adopted by WSP.

LEAD

The SGV for lead was withdrawn by the EA in 2009, and in 2011 the EA withdrew their published TOX report in light of new scientific evidence. The C4SL for lead was derived using the latest scientific evidence from a large human dataset. As such, no chemical-specific margin was applied in the derivation of the C4SL for lead. It may be possible for WSP to derive a GAC for lead using the same dataset and applying a chemical-specific margin, but the value is likely to be lower than UK natural background concentrations. Therefore, WSP has adopted the toxicological data used to derive the C4SLs in deriving the GAC for lead until such time as alternative GACs are published by an authoritative body. The relative bioavailability was set at 100% in line with the approach taken for other GACs, whereas the C4SL assumes 60% for soil and 64% for airborne dust. Thus, the WSP GAC are lower than the C4SLs.

¹⁵ MADEP 'Background Documentation for the Development of an "Available Cyanide" Benchmark Concentration' 1992. http://www.mass.gov/dep/toxics/cn_soil.htm

POLYCYCLIC AROMATIC HYDROCARBONS

WSP's approach to the assessment of polycyclic aromatic hydrocarbons (PAHs) uses the surrogate marker approach. BaP was used as a surrogate marker for all genotoxic PAHs in line with the Health Protection Agency 2010¹⁶ recommendations and SP1010. This assumes that the PAH profile of the data is similar to that of the coal tars used in the Culp *et al* oral carcinogenicity study from which the toxicity data for BaP was produced. In reality, this profile has been shown by HPA to be applicable on the majority of contaminated sites based on assessment of sites across the country.

The alternative is the Toxic Equivalency Factor (TEF) approach which uses a reference compound and assigns TEFs for other compounds based on estimates of potency. Key uncertainties with this approach include the assumption that all compounds have the same toxic mechanism of action within the body and that no compounds with a greater potency than the reference compound are present. It is considered by the HPA that the TEF approach is likely to under predict the true carcinogenicity of PAHs and therefore favours the surrogate marker approach.

For these reasons, WSP considers that the adoption of BaP as a surrogate marker for genotoxic PAHs, as opposed to the TEF approach, is reasonable. In rare cases where the PAH profile may differ from the wide definitions of the Culp *et al* study the user should discuss their project with an experienced risk assessor. In addition, WSP has derived a GAC for naphthalene, which is commonly a risk driver due to its high volatility, relative to other PAH compounds.

TRIMETHYLBENZENES

The GAC for trimethylbenzenes can be used for the assessment of any individual isomer (1,2,3-trimethylbenzene, 1,2,4-trimethylbenzene or 1,3,5-trimethylbenzene), or a mixture of the three isomers.

CHEMICAL GROUPS

For a number of chemical groups, the available toxicity data is for combinations of chemicals. Given that the physico-chemical parameters may differ between the chemicals, the GACs for the chemicals within the groups have been calculated and then the lowest GAC selected to represent the entire group. This was the approach taken by the EA for m-, o- and p-xylenes, and has also been adopted by WSP for:

- à 2-chlorophenol, 2,4-dichlorophenol, 2,4,6-trichlorophenol and 2,3,4,6-tetrachlorophenol;
- à 2-, 3- and 4-methylphenol (total cresols);
- à aldrin and dieldrin; and
- à α - and β -endosulphan.

¹⁶ HPA Contaminated Land Information Sheet 'Risk Assessment Approaches for Polycyclic Aromatic Hydrocarbons (PAHs) 2010

EXPOSURE TO VAPOURS

INHALATION OF MEASURED VAPOURS

WSP has derived a set of soil vapour GACs (GAC_{sv}) that allow for the assessment of measured site soil vapour concentrations, using J&E, in order to establish potential risks via indoor inhalation of vapours. This methodology enables a more robust assessment of exposure via the inhalation of soil vapours indoors than using CLEA-derived soil GAC, as it is based upon measured soil vapour concentrations beneath the site. It also allows for the assessment of vapours from all source terms (i.e. groundwater, soil or NAPL). Outdoor inhalation was not included. WSP considers that the indoor inhalation pathway is the significantly dominant risk-driver.

The generic land use scenarios within CLEA (residential and commercial) that were used to derive the soil GAC were used to define the receptor and building characteristics for the soil vapour GAC. Only residential and commercial generic land use scenarios include the indoor inhalation of vapours pathway.

The GAC_{sv} were derived for three different soil types; sand, sandy loam and clay, reflecting the importance of this parameter within the J&E model. A depth to contamination of 0.85 m below the base of the building foundation was assumed (i.e. 1 m below ground level). This differs from the depth assumed for the soil GAC (0.5 m bgl), but was selected by WSP as a reasonable worst case scenario.

It is acknowledged that the J&E commonly over-predicts indoor vapour concentrations. In particular, it will significantly over-predict vapour concentrations for suspended floor slabs, which many new builds are constructed with, it does not take into account lateral migration and assumes an infinite source of contamination at steady state conditions. In addition, it is common for soil gas/vapour wells to be installed with at least 1 m of plain riser at the surface and this equates to a total depth of 0.85 m below the building foundation plus a 0.15 m thick foundation, and so is more representative of the depth that samples will be taken from.

The TDSIs and IDs for each substance were converted from $\mu gkg^{-1}bwday^{-1}$ to μgm^{-3} using the standard conversions quoted in Table 3.3 of SR2, thereby replacing the need to model C_{air} in the equation:

$$C_{air} = \alpha \cdot C_{vap} \cdot 1,000,000 cm^3 m^{-3}$$

Where:

C_{air} is the concentration of vapours within the building, mg^{-3}

α is the steady state attenuation coefficient between soil and indoor air, dimensionless

C_{vap} is the soil vapour concentration, $mgcm^{-3}$

The target concentrations within indoor air for each substance (C_{air}) are a function of receptor inhalation rates and occupancy periods, as defined by the site conceptual exposure model (assuming standard CLEA occupancy periods and receptors).

The attenuation factor was calculated using J&E (Equation 10.4 in SR3) and the resulting C_{vap} is equivalent to the GAC_{sv} for the modelled exposure scenario.

Where reported soil vapour concentrations exceed the relevant saturated vapour concentration, free product may occur, and the user should discuss their project with an experienced risk assessor.

INHALATION OF GROUNDWATER-DERIVED VAPOURS

WSP has derived a set of groundwater GACs (GAC_{gw}) to evaluate the potential risks through the indoor inhalation of groundwater-derived vapours by first applying the approach described above for the derivation of the WSP GAC_{sv} to determine the acceptable concentration in soil vapour directly above the water table.

The depth to groundwater was assumed to be 1 m bgl (i.e. 0.85 m below the base of the building foundation). This depth was considered to be more representative of commonly encountered groundwater conditions than the 0.5 m below the base of the building foundation (i.e. 0.65 m bgl) that is used by CLEA for an unsaturated source present in the overlying soil.

The GAC_{gw} was then back-calculated from the GAC_{sv} using the air-water partition coefficient (K_{aw}) for each substance.

The WSP Groundwater Vapour GAC are protective against a dissolved phase contaminant source only. If the presence of NAPL is suspected, the risks from this source will need to be assessed. Where reported groundwater concentrations exceed the relevant solubility limit, free product may occur, and the user should discuss their project with an experienced risk assessor.

Appendix I

CONTAMINATION SCREENING ASSESSMENT SHEETS



PRE-REPORT DATA CHECK



All GEOL_GEO2 codes are complete.



All GEOL_GEO2 codes are recognised and suitable for this report.



All Test Types are valid and Sample Matrix can be calculated.



All result and screening units match



The following samples do not have the correct number of TPH fractions
The TPH Hazard Index calculation will be incomplete for these samples.

<u>PointID</u>	<u>Depth</u>	<u>Samp Ref</u>	<u>Samp Type</u>
TP14	0.40		ES

Low Farm - Overton



Parks Public Open Space, SOM=2.5%

Site Area(s) Selected: Whole site
Phase(s): All phases

Notes: * For results below LOD, a value of half LOD is used in the calculation of the mean

Aliphatics and Aromatics

ANALYTE	MADEGROUND			NATURAL GROUND			ASSESSMENT CRITERIA (AC)	UNITS	NO. OF LOCATIONS	NO. OF SAMPLES	NO. OF SAMPLES > LOD	NO. OF LOCATIONS > AC	LOCATIONS FAILING SCREENING
	MIN	MEAN*	MAX	MIN	MEAN*	MAX							
Aliphatic C05-C06	0.010	0.005	0.010	0.010	0.005	0.010	127,000	mg/kg	19	19	0	0	
Aliphatic C05-C10	0.050	0.025	0.050	0.050	0.025	0.050	-	mg/kg	19	19	0	0	
Aliphatic C06-C08	0.010	0.005	0.010	0.010	0.005	0.010	215,000	mg/kg	19	19	0	0	
Aliphatic C08-C10	0.010	0.006	0.011	0.010	0.005	0.010	18,300	mg/kg	19	19	1	0	
Aliphatic C10-C12	1.00	0.85	3.78	1.00	0.50	1.00	23,100	mg/kg	20	20	2	0	
Aliphatic C10-C44	5.0	16.4	49.6	5.00	5.46	17.9	-	mg/kg	20	20	10	0	
Aliphatic C12-C16	1.00	2.82	9.79	1.00	0.92	3.82	25,300	mg/kg	20	20	7	0	
Aliphatic C16-C21	1.00	3.94	11.80	1.00	1.59	8.64	-	mg/kg	20	20	10	0	
Aliphatic C16-C35	1.0	11.9	34.5	1.00	3.88	13.7	525,000	mg/kg	20	20	14	0	
Aliphatic C21-C35	1.00	8.04	23.70	1.00	2.61	9.39	-	mg/kg	20	20	14	0	
Aliphatic C35-C44	1.00	1.29	4.99	1.00	0.50	1.00	525,000	mg/kg	20	20	5	0	
Aromatic C05-C10	0.050	0.025	0.050	0.050	0.025	0.050	-	mg/kg	19	19	0	0	
Aromatic C06-C07	0.010	0.005	0.010	0.010	0.005	0.010	-	mg/kg	19	19	0	0	
Aromatic C07-C08	0.010	0.005	0.010	0.010	0.005	0.010	94,800	mg/kg	19	19	0	0	
Aromatic C08-C10	0.010	0.005	0.010	0.010	0.005	0.010	8,500	mg/kg	19	19	0	0	
Aromatic C10-C12	1.00	0.50	1.00	1.00	0.50	1.00	9,750	mg/kg	20	20	0	0	

Low Farm - Overton



Parks Public Open Space, SOM=2.5%

Site Area(s) Selected: Whole site
Phase(s): All phases

Notes: * For results below LOD, a value of half LOD is used in the calculation of the mean

Aliphatics and Aromatics

ANALYTE	MADEGROUND			NATURAL GROUND			ASSESSMENT CRITERIA (AC)	UNITS	NO. OF LOCATIONS	NO. OF SAMPLES	NO. OF SAMPLES > LOD	NO. OF LOCATIONS > AC	LOCATIONS FAILING SCREENING
	MIN	MEAN*	MAX	MIN	MEAN*	MAX							
Aromatic C12-C16	1.00	0.91	1.94	1.00	1.76	10.6	10,300	mg/kg	20	20	5	0	
Aromatic C16-C21	1.00	2.48	12.20	1.00	7.75	56.6	7,880	mg/kg	20	20	8	0	
Aromatic C16-C35	1.00	9.75	50.80	1.00	26.5	203	-	mg/kg	20	20	10	0	
Aromatic C21-C35	1.00	7.55	38.60	1.00	18.9	146	7,880	mg/kg	20	20	8	0	
Aromatic C35-C44	1.00	0.72	3.08	1.00	3.26	22.6	7,880	mg/kg	20	20	2	0	
Aromatic C40-C44	1.00	0.50	1.00	1.00	0.89	3.65	-	mg/kg	20	20	1	0	
Aromatics C10-C44	5.0	12.0	55.8	5.00	31.7	236	-	mg/kg	20	20	6	0	
Total Aliphatics and Aromatics (C05-C44)	10.0	27.4	85.2	10.0	36.9	247	-	mg/kg	20	20	8	0	
Total Aliphatics and Aromatics (C10-C44)	10.0	28.2	85.2	10.0	37.2	247	-	mg/kg	20	20	9	0	
TPH Hazard Index	-	0.002	0.007	0.0003	0.004	0.030	1.00	mg/kg	20	20	N/A	0	

Low Farm - Overton



Parks Public Open Space, SOM=2.5%

Site Area(s) Selected: Whole site
Phase(s): All phases

Notes: * For results below LOD, a value of half LOD is used in the calculation of the mean

Alkali and Alkaline Earth Metals

ANALYTE	MADEGROUND			NATURAL GROUND			ASSESSMENT CRITERIA (AC)	UNITS	NO. OF LOCATIONS	NO. OF SAMPLES	NO. OF SAMPLES > LOD	NO. OF LOCATIONS > AC	LOCATIONS FAILING SCREENING
	MIN	MEAN*	MAX	MIN	MEAN*	MAX							
Barium	42.1	85.1	156.0	25.3	72.1	140	5,770	mg/kg	39	45	45	0	
Beryllium	0.69	1.05	2.20	0.47	0.82	1.71	63.0	mg/kg	39	45	45	0	

Low Farm - Overton



Parks Public Open Space, SOM=2.5%

Site Area(s) Selected: Whole site
Phase(s): All phases

Notes: * For results below LOD, a value of half LOD is used in the calculation of the mean

BTEX and Fuel Additives

ANALYTE	MADEGROUND			NATURAL GROUND			ASSESSMENT CRITERIA (AC)	UNITS	NO. OF LOCATIONS	NO. OF SAMPLES	NO. OF SAMPLES > LOD	NO. OF LOCATIONS > AC	LOCATIONS FAILING SCREENING
	MIN	MEAN*	MAX	MIN	MEAN*	MAX							
Benzene	0.010	0.005	0.010	0.010	0.005	0.010	101	mg/kg	19	19	0	0	
BTEX	0.070	0.035	0.070	0.070	0.035	0.070	-	mg/kg	19	19	0	0	
Ethylbenzene	0.010	0.005	0.010	0.010	0.005	0.010	21,700	mg/kg	19	19	0	0	
Methyl t-butylether (MTBE)	0.005	0.003	0.005	0.005	0.003	0.005	107,000	mg/kg	19	19	0	0	
TAME	0.010	0.005	0.010	0.010	0.005	0.010	-	mg/kg	19	19	0	0	
Toluene	0.011	0.006	0.015	0.010	0.006	0.015	95,100	mg/kg	19	19	0	0	
Xylene - Total (Summed)	0.020	0.020	0.020	0.020	0.020	0.020	23,300	mg/kg	19	19	19	0	
Xylene-m & p	0.020	0.010	0.020	0.020	0.010	0.020	23,300	mg/kg	19	19	0	0	
Xylene-o	0.020	0.010	0.020	0.020	0.010	0.020	23,300	mg/kg	19	19	0	0	

Low Farm - Overton



Parks Public Open Space, SOM=2.5%

Site Area(s) Selected: Whole site
Phase(s): All phases

Notes: * For results below LOD, a value of half LOD is used in the calculation of the mean

General Chemistry

ANALYTE	MADEGROUND			NATURAL GROUND			ASSESSMENT CRITERIA (AC)	UNITS	NO. OF LOCATIONS	NO. OF SAMPLES	NO. OF SAMPLES > LOD	NO. OF LOCATIONS > AC	LOCATIONS FAILING SCREENING
	MIN	MEAN*	MAX	MIN	MEAN*	MAX							
pH	4.42	6.69	8.22	6.13	7.10	7.98	-	pH units	39	45	45	0	

Low Farm - Overton



Parks Public Open Space, SOM=2.5%

Site Area(s) Selected: Whole site
Phase(s): All phases

Notes: * For results below LOD, a value of half LOD is used in the calculation of the mean

Metals													
ANALYTE	MADEGROUND			NATURAL GROUND			ASSESSMENT CRITERIA (AC)	UNITS	NO. OF LOCATIONS	NO. OF SAMPLES	NO. OF SAMPLES > LOD	NO. OF LOCATIONS >AC	LOCATIONS FAILING SCREENING
	MIN	MEAN*	MAX	MIN	MEAN*	MAX							
Arsenic	6.9	16.6	31.3	3.32	13.9	47.8	168	mg/kg	39	45	45	0	
Boron	1.00	0.52	1.01	1.00	0.50	1.00	46,000	mg/kg	39	45	1	0	
Cadmium	0.02	0.11	0.41	0.020	0.15	0.42	555	mg/kg	39	45	34	0	
Chromium	0.90	8.82	26.20	0.90	9.04	23.8	-	mg/kg	39	45	38	0	
Copper	21.0	35.1	70.0	15.0	26.1	42.5	44,400	mg/kg	39	45	45	0	
Hexavalent Chromium	0.60	0.32	0.81	0.60	0.30	0.60	69.0	mg/kg	39	45	1	0	
Lead	18.4	67.3	799.0	7.39	35.7	63.9	808	mg/kg	39	45	45	0	
Mercury	0.100	0.058	0.242	0.10	0.075	1.00	242	mg/kg	39	45	2	0	
Nickel	15.4	29.0	45.6	12.7	21.8	52.8	804	mg/kg	39	45	45	0	
Selenium	1.00	0.99	2.06	1.00	0.97	10.0	1,850	mg/kg	39	45	17	0	
Vanadium	10.1	24.1	82.1	12.2	22.2	34.1	5,030	mg/kg	39	45	45	0	
Zinc	51.3	97.2	143.0	30.0	86.4	117	173,000	mg/kg	39	45	45	0	

Low Farm - Overton



Parks Public Open Space, SOM=2.5%

Site Area(s) Selected: Whole site
Phase(s): All phases

Notes: * For results below LOD, a value of half LOD is used in the calculation of the mean

Other

ANALYTE	MADEGROUND			NATURAL GROUND			ASSESSMENT CRITERIA (AC)	UNITS	NO. OF LOCATIONS	NO. OF SAMPLES	NO. OF SAMPLES > LOD	NO. OF LOCATIONS > AC	LOCATIONS FAILING SCREENING
	MIN	MEAN*	MAX	MIN	MEAN*	MAX							
Soil Organic Matter (SOM)	0.61	8.08	42.80	0.35	6.78	55.2	-	%	40	46	45	0	

Low Farm - Overton



Parks Public Open Space, SOM=2.5%

Site Area(s) Selected: Whole site
Phase(s): All phases

Notes: * For results below LOD, a value of half LOD is used in the calculation of the mean

PAHs

ANALYTE	MADEGROUND			NATURAL GROUND			ASSESSMENT CRITERIA (AC)	UNITS	NO. OF LOCATIONS	NO. OF SAMPLES	NO. OF SAMPLES > LOD	NO. OF LOCATIONS > AC	LOCATIONS FAILING SCREENING
	MIN	MEAN*	MAX	MIN	MEAN*	MAX							
Acenaphthene	0.01	0.15	1.64	0.008	0.28	1.72	-	mg/kg	39	45	27	0	
Acenaphthylene	0.012	0.015	0.125	0.012	0.013	0.12	-	mg/kg	39	45	8	0	
Anthracene	0.02	0.14	1.12	0.016	0.28	1.50	-	mg/kg	39	45	24	0	
Benzo (a) anthracene	0.01	0.32	2.35	0.014	0.67	3.49	-	mg/kg	39	45	35	0	
Benzo (a) pyrene	0.02	0.24	1.65	0.015	0.53	2.59	11.0	mg/kg	39	45	30	0	
Benzo (b) fluoranthene	0.02	0.35	2.50	0.015	0.74	3.50	-	mg/kg	39	45	38	0	
Benzo (ghi) perylene	0.02	0.15	0.83	0.024	0.31	1.56	-	mg/kg	39	45	27	0	
Benzo (k) fluoranthene	0.01	0.12	0.82	0.014	0.25	1.24	-	mg/kg	39	45	28	0	
Chrysene	0.01	0.37	2.66	0.010	0.76	3.95	-	mg/kg	39	45	40	0	
Dibenzo (ah) anthracene	0.023	0.038	0.235	0.023	0.075	0.36	-	mg/kg	39	45	17	0	
Fluoranthene	0.02	0.78	6.06	0.017	1.72	8.19	-	mg/kg	39	45	35	0	
Fluorene	0.01	0.12	1.09	0.010	0.19	1.16	-	mg/kg	39	45	24	0	
Indeno (1,2,3-cd) pyrene	0.02	0.13	0.78	0.018	0.30	1.37	-	mg/kg	39	45	27	0	
Naphthalene	0.009	0.091	1.140	0.009	0.23	1.95	1,920	mg/kg	39	45	24	0	
PAH Total (EPA 16)	0.12	5.48	34.40	0.12	9.35	46.3	-	mg/kg	39	45	35	0	
Phenanthrene	0.02	0.80	6.57	0.015	1.60	7.92	-	mg/kg	39	45	39	0	

Low Farm - Overton



Parks Public Open Space, SOM=2.5%

Site Area(s) Selected: Whole site
Phase(s): All phases

Notes: * For results below LOD, a value of half LOD is used in the calculation of the mean

PAHs

ANALYTE	MADEGROUND			NATURAL GROUND			ASSESSMENT CRITERIA (AC)	UNITS	NO. OF LOCATIONS	NO. OF SAMPLES	NO. OF SAMPLES > LOD	NO. OF LOCATIONS > AC	LOCATIONS FAILING SCREENING
	MIN	MEAN*	MAX	MIN	MEAN*	MAX							
Pyrene	0.02	0.68	4.94	0.015	1.43	6.91	-	mg/kg	39	45	39	0	

Physical

ANALYTE	MADEGROUND			NATURAL GROUND			ASSESSMENT CRITERIA (AC)	UNITS	NO. OF LOCATIONS	NO. OF SAMPLES	NO. OF SAMPLES > LOD	NO. OF LOCATIONS > AC	LOCATIONS FAILING SCREENING
	MIN	MEAN*	MAX	MIN	MEAN*	MAX							
Loss on ignition	4.6	12.8	29.2	13.2	38.2	59.5	-	%	10	10	10	0	
Water Analytical M (ad)	1.08	1.64	2.64	3.81	3.81	3.81	-	%	6	6	6	0	
Water Gross M (ex)	7.8	11.8	15.4	15.8	15.8	15.8	-	%	6	6	6	0	
Water Total M (ar)	10.2	13.2	16.7	19.0	19.0	19.0	-	%	6	6	6	0	
Gross Calorific Value Dry Matter	0.52	3.40	12.60	4.80	4.80	4.80	-	MJ/kg	6	6	6	0	
Gross Calorific Value Original	0.50	2.96	11.20	3.89	3.89	3.89	-	MJ/kg	6	6	5	0	
Net Calorific Value Dry Matter	0.50	3.10	12.10	4.46	4.46	4.46	-	MJ/kg	6	6	4	0	
Net Calorific Value Original	0.50	2.57	10.50	3.18	3.18	3.18	-	MJ/kg	6	6	4	0	

Low Farm - Overton



Parks Public Open Space, SOM=2.5%

Site Area(s) Selected: Whole site
Phase(s): All phases

Notes: * For results below LOD, a value of half LOD is used in the calculation of the mean

QA Standard

ANALYTE	MADEGROUND			NATURAL GROUND			ASSESSMENT CRITERIA (AC)	UNITS	NO. OF LOCATIONS	NO. OF SAMPLES	NO. OF SAMPLES > LOD	NO. OF LOCATIONS > AC	LOCATIONS FAILING SCREENING
	MIN	MEAN*	MAX	MIN	MEAN*	MAX							
Acenaphthene-d10	73.3	82.6	90.9	76.7	82.5	90.1	-	%	39	45	45	0	
Chrysene-d12	60.2	75.9	93.7	63.1	76.5	89.3	-	%	39	45	45	0	
Naphthalene-d8	70.2	81.8	93.6	74.5	81.8	95.5	-	%	39	45	45	0	
Perylene-d12**	49.3	71.4	89.9	53.5	72.1	83.8	-	%	39	45	45	0	
Phenanthrene-d10 IS	70.4	82.6	94.9	73.2	82.9	94.8	-	%	39	45	45	0	

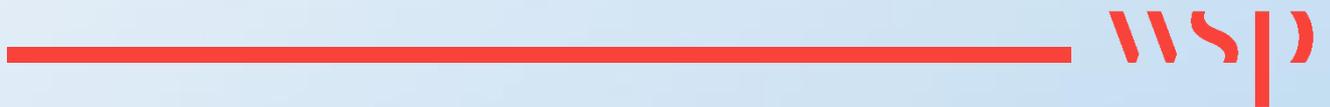
TPH/EPH

ANALYTE	MADEGROUND			NATURAL GROUND			ASSESSMENT CRITERIA (AC)	UNITS	NO. OF LOCATIONS	NO. OF SAMPLES	NO. OF SAMPLES > LOD	NO. OF LOCATIONS > AC	LOCATIONS FAILING SCREENING
	MIN	MEAN*	MAX	MIN	MEAN*	MAX							
GRO Surrogate	50.3	77.4	91.1	77.0	94.5	114	-	%	19	19	19	0	
PRO (>C5-C10)	0.020	0.010	0.020	0.020	0.010	0.020	-	mg/kg	19	19	0	0	

THERE WERE NO EXCEEDANCES OF Parks Public Open Space, SOM=2.5%

Appendix J

HAZARDOUS WASTE ASSESSMENT





Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- a) understand the origin of the waste
- b) select the correct List of Waste code(s)
- c) confirm that the list of determinands, results and sampling plan are fit for purpose
- d) select and justify the chosen metal species (Appendix B)
- e) correctly apply moisture correction and other available corrections
- f) add the meta data for their user-defined substances (Appendix A)
- g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



581H2-7U0XP-HLP AE

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

Job name

Low Farm, Overton

Description/Comments

This is a preliminary conservative assessment based on the laboratory data provided from ALS laboratory reports: 240627-52, 240629-35 and 240701-33

Any waste accepted into a landfill is at the landfill operators discretion. Additional sampling and analysis may be required for off-site disposal.

Asbestos not identified during current assessment.

Project

UK0037228.1558

Site

Low Farm, Overton

Classified by

Name:
Alice Waylett
Date:
02 Aug 2024 10:34 GMT
Telephone:
01992 526 000

Company:
WSP
Unit 9 The Chase, John Tate Road, Foxholes
Business Park,
Hertford
SG13 7NN

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification:
Course
Hazardous Waste Classification

CERTIFIED
Date
06 Oct 2022

Next 3 year Refresher due by Oct 2025

Purpose of classification

2 - Material Characterisation

Address of the waste

Low Farm, Wakefield Road, Grange Moor, Wakefield WF4 4BB

Post Code WF4 4BB

SIC for the process giving rise to the waste

41100 Development of building projects

Description of industry/producer giving rise to the waste

The proposed development is the construction of a solar photovoltaic farm and associated infrastructure.

Description of the specific process, sub-process and/or activity that created the waste

Ground investigation soils – to indicate preliminary waste disposal options should the off-site disposal of soils be required.

Description of the waste

General Made Ground (previous opencast workings comprising gravelly clay of mudstone, sandstone, shale, minor coal).
Natural weathered bedrock of the Pennine Lower Coal Measures Formation (gravelly clay of mudstone, with occasional weathered coal).



Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	DS01-270624--0.50		Non Hazardous		3
2	DS02-270624--0.15		Non Hazardous		5
3	DS03-250624--0.40		Non Hazardous		7
4	DS04-250624--0.90		Non Hazardous		9
5	DS05-250624--0.20		Non Hazardous		11
6	DS06-270624--0.80		Non Hazardous		13
7	DS07-270624--0.90		Non Hazardous		15
8	DS08-270624--0.45		Non Hazardous		17
9	DS09-270624--0.10		Non Hazardous		20
10	DS10-270624--0.60		Non Hazardous		22
11	DS11-280624--0.10		Non Hazardous		24
12	DS11-280624--1.00		Non Hazardous		26
13	DS12-280624--0.40		Non Hazardous		28
14	TP01-270624--0.10		Non Hazardous		30
15	TP02-270624--0.10		Non Hazardous		32
16	TP02-270624--1.10		Non Hazardous		34
17	TP03-270624--0.10		Non Hazardous		36
18	TP04-270624--0.20		Non Hazardous		38
19	TP05-270624--0.20		Non Hazardous		40
20	TP05-270624--0.90		Non Hazardous		42
21	TP06-270624--0.10		Non Hazardous		44
22	TP07-250624--0.40		Non Hazardous		46
23	TP08-250624--0.20		Non Hazardous		49
24	TP08-250624--0.40		Non Hazardous		51
25	TP09-270624--0.30		Non Hazardous		53
26	TP10-250624--0.40		Non Hazardous		56
27	TP11-250624--0.20		Non Hazardous		58
28	TP12-250624--0.40		Non Hazardous		60
29	TP13-240624--0.60		Non Hazardous		62
30	TP14-250624--0.40		Non Hazardous		64
31	TP15-270624--0.10		Non Hazardous		67
32	TP15-270624--0.50		Non Hazardous		69
33	TP16-270624--0.20		Non Hazardous		72
34	TP17-270624--0.30		Non Hazardous		74
35	TP18-270624--0.20		Non Hazardous		76
36	TP19-270624--0.20		Non Hazardous		79
37	TP20-270624--1.20		Non Hazardous		81
38	TP21-270624--0.40		Non Hazardous		83
39	TP22-270624--0.50		Non Hazardous		85
40	TP23-250624--0.20		Non Hazardous		87
41	TP24-250624--0.50		Non Hazardous		89
42	TP25-240624--0.20		Non Hazardous		91
43	TP26-240624--0.40		Non Hazardous		94
44	TP27-240624--0.50		Non Hazardous		96
45	TP28-240624--0.20		Non Hazardous		99
46	TP29-280624-0.20-0.10		Non Hazardous		101
47	TP29-280624-1.00-0.90		Non Hazardous		103
48	TP30-280624-0.30-0.20		Non Hazardous		105

Related documents

#	Name	Description
1	240627-52_240629-35_240701-33.hwol	ALS Hawarden .hwol file used to populate the Job
2	Waste Stream Template WM3 V1.2GB 2024	waste stream template used to create this Job

Report

Created by: Alice Waylett

Created date: 02 Aug 2024 10:34 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	108
Appendix B: Rationale for selection of metal species	109
Appendix C: Version	110

Classification of sample: DS01-270624--0.50

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
DS01-270624--0.50	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
12%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				6.92	mg/kg	1.32	8.04	mg/kg	0.000804 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				42.1	mg/kg	1.233	45.698	mg/kg	0.00457 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				1.35	mg/kg	2.775	3.297	mg/kg	0.00033 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				0.0516	mg/kg	1.142	0.0519	mg/kg	0.00000519 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				8.88	mg/kg	1.462	11.421	mg/kg	0.00114 %	✓	
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
		024-017-00-8										
8	copper { dicopper oxide; copper (I) oxide }				34.7	mg/kg	1.126	34.38	mg/kg	0.00344 %	✓	
		029-002-00-X	215-270-7	1317-39-1								
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	26.1	mg/kg		22.968	mg/kg	0.0023 %	✓	
		082-001-00-6										
10	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
		080-010-00-X	231-299-8	7487-94-7								
11	nickel { nickel sulfate }				41.3	mg/kg	2.637	95.828	mg/kg	0.00958 %	✓	
		028-009-00-5	232-104-9	7786-81-4								
12	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
		028-031-00-5	239-125-2	15060-62-5								
13	zinc { zinc sulphate }				99.3	mg/kg	2.469	215.777	mg/kg	0.0216 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
14	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		603-181-00-X	216-653-1	1634-04-4								



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.011 mg/kg		<0.011 mg/kg	<0.0000011 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				7.39 pH		7.39 pH	7.39 pH		
			PH							
21	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
		201-469-6	83-32-9							
24	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7							
25	phenanthrene				0.0608 mg/kg		0.0535 mg/kg	0.00000535 %	✓	
		201-581-5	85-01-8							
26	anthracene				<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
		204-371-1	120-12-7							
27	fluoranthene				<0.017 mg/kg		<0.017 mg/kg	<0.0000017 %		<LOD
		205-912-4	206-44-0							
28	pyrene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
		204-927-3	129-00-0							
29	benzo[a]anthracene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				0.0173 mg/kg		0.0152 mg/kg	0.00000152 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
		205-883-8	191-24-2							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				17 mg/kg	1.785	26.706 mg/kg	0.00267 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0482 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: DS02-270624--0.15

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
DS02-270624--0.15	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
23%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 23% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				18.9	mg/kg	1.32	19.215	mg/kg	0.00192 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				70.7	mg/kg	1.233	67.15	mg/kg	0.00672 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				0.795	mg/kg	2.775	1.699	mg/kg	0.00017 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				0.272	mg/kg	1.142	0.239	mg/kg	0.0000239 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				10.7	mg/kg	1.462	12.042	mg/kg	0.0012 %	✓	
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				29	mg/kg	1.126	25.141	mg/kg	0.00251 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	799	mg/kg		615.23	mg/kg	0.0615 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				15.4	mg/kg	2.637	31.266	mg/kg	0.00313 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				1.38	mg/kg	2.554	2.714	mg/kg	0.000271 %	✓	
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				88.1	mg/kg	2.469	167.51	mg/kg	0.0168 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	pH				6.72	pH		6.72	pH	6.72 pH		
			PH									
15	naphthalene				0.0287	mg/kg		0.0221	mg/kg	0.00000221 %	✓	
	601-052-00-2	202-049-5	91-20-3									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		0.0702 mg/kg		0.0541 mg/kg	0.00000541 %	✓	
18	fluorene	201-695-5	86-73-7		0.0445 mg/kg		0.0343 mg/kg	0.00000343 %	✓	
19	phenanthrene	201-581-5	85-01-8		0.326 mg/kg		0.251 mg/kg	0.0000251 %	✓	
20	anthracene	204-371-1	120-12-7		0.0515 mg/kg		0.0397 mg/kg	0.00000397 %	✓	
21	fluoranthene	205-912-4	206-44-0		0.366 mg/kg		0.282 mg/kg	0.0000282 %	✓	
22	pyrene	204-927-3	129-00-0		0.306 mg/kg		0.236 mg/kg	0.0000236 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.137 mg/kg		0.105 mg/kg	0.0000105 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.169 mg/kg		0.13 mg/kg	0.000013 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.161 mg/kg		0.124 mg/kg	0.0000124 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.0534 mg/kg		0.0411 mg/kg	0.00000411 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.1 mg/kg		0.077 mg/kg	0.0000077 %	✓	
28	indeno[123-cd]pyrene		205-893-2	193-39-5	0.0557 mg/kg		0.0429 mg/kg	0.00000429 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
30	benzo[ghi]perylene		205-883-8	191-24-2	0.0638 mg/kg		0.0491 mg/kg	0.00000491 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	27.7 mg/kg	1.785	38.076 mg/kg	0.00381 %	✓	
Total:								0.0987 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: DS03-250624--0.40

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
DS03-250624--0.40	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
14%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				7.31 mg/kg	1.32	8.3 mg/kg	0.00083 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				63.7 mg/kg	1.233	67.573 mg/kg	0.00676 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.954 mg/kg	2.775	2.277 mg/kg	0.000228 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.042 mg/kg	1.142	0.0413 mg/kg	0.00000413 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				5.21 mg/kg	1.462	6.549 mg/kg	0.000655 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				27.8 mg/kg	1.126	26.918 mg/kg	0.00269 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	19.1 mg/kg		16.426 mg/kg	0.00164 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				32.5 mg/kg	2.637	73.695 mg/kg	0.00737 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				91.4 mg/kg	2.469	194.097 mg/kg	0.0194 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.0115 mg/kg		<0.0115 mg/kg	<0.00000115 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				6.63 pH		6.63 pH	6.63 pH		
			PH							
21	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
		201-469-6	83-32-9							
24	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7							
25	phenanthrene				0.0499 mg/kg		0.0429 mg/kg	0.00000429 %	✓	
		201-581-5	85-01-8							
26	anthracene				<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
		204-371-1	120-12-7							
27	fluoranthene				0.041 mg/kg		0.0353 mg/kg	0.00000353 %	✓	
		205-912-4	206-44-0							
28	pyrene				0.0392 mg/kg		0.0337 mg/kg	0.00000337 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				0.0185 mg/kg		0.0159 mg/kg	0.00000159 %	✓	
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				0.0367 mg/kg		0.0316 mg/kg	0.00000316 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				0.0367 mg/kg		0.0316 mg/kg	0.00000316 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
		205-883-8	191-24-2							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				17.7 mg/kg	1.785	27.174 mg/kg	0.00272 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0441 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: DS04-250624--0.90

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
DS04-250624--0.90	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
14%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				14	mg/kg	1.32	15.897	mg/kg	0.00159 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				38.4	mg/kg	1.233	40.735	mg/kg	0.00407 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				0.509	mg/kg	2.775	1.215	mg/kg	0.000121 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				0.171	mg/kg	1.142	0.168	mg/kg	0.0000168 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				4.32	mg/kg	1.462	5.43	mg/kg	0.000543 %	✓	
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				19	mg/kg	1.126	18.397	mg/kg	0.00184 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	20.6	mg/kg		17.716	mg/kg	0.00177 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				16.3	mg/kg	2.637	36.961	mg/kg	0.0037 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				94.7	mg/kg	2.469	201.104	mg/kg	0.0201 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.0105 mg/kg		<0.0105 mg/kg	<0.00000105 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				7.26 pH		7.26 pH	7.26 pH		
			PH							
21	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
		201-469-6	83-32-9							
24	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7							
25	phenanthrene				0.0333 mg/kg		0.0286 mg/kg	0.00000286 %	✓	
		201-581-5	85-01-8							
26	anthracene				<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
		204-371-1	120-12-7							
27	fluoranthene				0.0461 mg/kg		0.0396 mg/kg	0.00000396 %	✓	
		205-912-4	206-44-0							
28	pyrene				0.0404 mg/kg		0.0347 mg/kg	0.00000347 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				0.0214 mg/kg		0.0184 mg/kg	0.00000184 %	✓	
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				0.0238 mg/kg		0.0205 mg/kg	0.00000205 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				0.0256 mg/kg		0.022 mg/kg	0.0000022 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				0.0178 mg/kg		0.0153 mg/kg	0.00000153 %	✓	
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
		205-883-8	191-24-2							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				18.6 mg/kg	1.785	28.556 mg/kg	0.00286 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0384 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: DS05-250624--0.20

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
DS05-250624--0.20	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
19%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 19% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				20.5	mg/kg	1.32	21.924	mg/kg	0.00219 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				116	mg/kg	1.233	115.899	mg/kg	0.0116 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				0.949	mg/kg	2.775	2.133	mg/kg	0.000213 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				0.413	mg/kg	1.142	0.382	mg/kg	0.0000382 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				12.9	mg/kg	1.462	15.272	mg/kg	0.00153 %	✓	
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				44	mg/kg	1.126	40.127	mg/kg	0.00401 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	60.4	mg/kg		48.924	mg/kg	0.00489 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				22.4	mg/kg	2.637	47.84	mg/kg	0.00478 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				2.06	mg/kg	2.554	4.261	mg/kg	0.000426 %	✓	
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				111	mg/kg	2.469	222.014	mg/kg	0.0222 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	pH				7.08	pH		7.08	pH	7.08 pH		
15	naphthalene				1.14	mg/kg		0.923	mg/kg	0.0000923 %	✓	
	601-052-00-2	202-049-5	91-20-3									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		0.0226 mg/kg		0.0183 mg/kg	0.0000183 %	✓	
17	acenaphthene	201-469-6	83-32-9		1.64 mg/kg		1.328 mg/kg	0.000133 %	✓	
18	fluorene	201-695-5	86-73-7		1.09 mg/kg		0.883 mg/kg	0.0000883 %	✓	
19	phenanthrene	201-581-5	85-01-8		6.57 mg/kg		5.322 mg/kg	0.000532 %	✓	
20	anthracene	204-371-1	120-12-7		1.12 mg/kg		0.907 mg/kg	0.0000907 %	✓	
21	fluoranthene	205-912-4	206-44-0		6.06 mg/kg		4.909 mg/kg	0.000491 %	✓	
22	pyrene	204-927-3	129-00-0		4.94 mg/kg		4.001 mg/kg	0.0004 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	2.35 mg/kg		1.904 mg/kg	0.00019 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	2.66 mg/kg		2.155 mg/kg	0.000215 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	2.5 mg/kg		2.025 mg/kg	0.000202 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.822 mg/kg		0.666 mg/kg	0.0000666 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	1.65 mg/kg		1.337 mg/kg	0.000134 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.775 mg/kg		0.628 mg/kg	0.0000628 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.235 mg/kg		0.19 mg/kg	0.000019 %	✓	
30	benzo[ghi]perylene	205-883-8	191-24-2		0.828 mg/kg		0.671 mg/kg	0.0000671 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	27.2 mg/kg	1.785	39.331 mg/kg	0.00393 %	✓	
Total:								0.0591 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: DS06-270624--0.80

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
DS06-270624--0.80	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
9.6% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 9.6% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				18.5	mg/kg	1.32	22.081	mg/kg	0.00221 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				105	mg/kg	1.233	117.083	mg/kg	0.0117 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				1.18	mg/kg	2.775	2.961	mg/kg	0.000296 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				<0.02	mg/kg	1.142	<0.0228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				<1.5	mg/kg	1.462	<2.192	mg/kg	<0.000219 %		<LOD
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				37.4	mg/kg	1.126	38.066	mg/kg	0.00381 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	22.4	mg/kg		20.25	mg/kg	0.00202 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				36.2	mg/kg	2.637	86.285	mg/kg	0.00863 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				1.07	mg/kg	2.554	2.47	mg/kg	0.000247 %	✓	
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				122	mg/kg	2.469	272.334	mg/kg	0.0272 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	pH				7.43	pH		7.43	pH	7.43 pH		
			PH									
15	naphthalene				<0.009	mg/kg		<0.009	mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
18	fluorene	201-695-5	86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	phenanthrene	201-581-5	85-01-8		0.0415 mg/kg		0.0375 mg/kg	0.00000375 %	✓	
20	anthracene	204-371-1	120-12-7		<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
21	fluoranthene	205-912-4	206-44-0		<0.017 mg/kg		<0.017 mg/kg	<0.0000017 %		<LOD
22	pyrene	204-927-3	129-00-0		0.0223 mg/kg		0.0202 mg/kg	0.00000202 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.0328 mg/kg		0.0297 mg/kg	0.00000297 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.03 mg/kg		0.0271 mg/kg	0.00000271 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.0374 mg/kg		0.0338 mg/kg	0.00000338 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
28	indeno[123-cd]pyrene		205-893-2	193-39-5	<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
30	benzo[ghi]perylene		205-883-8	191-24-2	0.0408 mg/kg		0.0369 mg/kg	0.00000369 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	10.1 mg/kg	1.785	16.299 mg/kg	0.00163 %	✓	
Total:								0.0585 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: DS07-270624--0.90

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
DS07-270624--0.90	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
15%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				17.3	mg/kg	1.32	19.415	mg/kg	0.00194 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				62.9	mg/kg	1.233	65.949	mg/kg	0.00659 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				0.686	mg/kg	2.775	1.618	mg/kg	0.000162 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				<0.02	mg/kg	1.142	<0.0228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				10.2	mg/kg	1.462	12.672	mg/kg	0.00127 %	✓	
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				70	mg/kg	1.126	66.99	mg/kg	0.0067 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	27.5	mg/kg		23.375	mg/kg	0.00234 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				25.4	mg/kg	2.637	56.926	mg/kg	0.00569 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				1.12	mg/kg	2.554	2.431	mg/kg	0.000243 %	✓	
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				52.4	mg/kg	2.469	109.982	mg/kg	0.011 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	pH				4.42	pH		4.42	pH	4.42 pH		
			PH									
15	naphthalene				0.0134	mg/kg		0.0114	mg/kg	0.00000114 %	✓	
	601-052-00-2	202-049-5	91-20-3									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
18	fluorene	201-695-5	86-73-7		0.0242 mg/kg		0.0206 mg/kg	0.0000206 %	✓	
19	phenanthrene	201-581-5	85-01-8		0.501 mg/kg		0.426 mg/kg	0.0000426 %	✓	
20	anthracene	204-371-1	120-12-7		<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
21	fluoranthene	205-912-4	206-44-0		0.103 mg/kg		0.0875 mg/kg	0.00000875 %	✓	
22	pyrene	204-927-3	129-00-0		0.139 mg/kg		0.118 mg/kg	0.0000118 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.04 mg/kg		0.034 mg/kg	0.0000034 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.104 mg/kg		0.0884 mg/kg	0.00000884 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.0422 mg/kg		0.0359 mg/kg	0.00000359 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
28	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	15 mg/kg	1.785	22.761 mg/kg	0.00228 %	✓	
Total:								0.0388 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: DS08-270624--0.45

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
DS08-270624--0.45	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
12%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				18	mg/kg	1.32	20.914	mg/kg	0.00209 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				73.1	mg/kg	1.233	79.348	mg/kg	0.00793 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				0.892	mg/kg	2.775	2.179	mg/kg	0.000218 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				<0.02	mg/kg	1.142	<0.0228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				9.55	mg/kg	1.462	12.283	mg/kg	0.00123 %	✓	
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				51.8	mg/kg	1.126	51.322	mg/kg	0.00513 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	27.8	mg/kg		24.464	mg/kg	0.00245 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				26	mg/kg	2.637	60.327	mg/kg	0.00603 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				59.1	mg/kg	2.469	128.423	mg/kg	0.0128 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	TPH (C6 to C40) petroleum group				54.7	mg/kg		48.136	mg/kg	0.00481 %	✓	
			TPH									
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.011 mg/kg		<0.011 mg/kg	<0.0000011 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				4.93 pH		4.93 pH	4.93 pH		
			PH							
21	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
		201-469-6	83-32-9							
24	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7							
25	phenanthrene				0.185 mg/kg		0.163 mg/kg	0.0000163 %	✓	
		201-581-5	85-01-8							
26	anthracene				0.181 mg/kg		0.159 mg/kg	0.0000159 %	✓	
		204-371-1	120-12-7							
27	fluoranthene				0.0554 mg/kg		0.0488 mg/kg	0.00000488 %	✓	
		205-912-4	206-44-0							
28	pyrene				0.0575 mg/kg		0.0506 mg/kg	0.00000506 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				0.0198 mg/kg		0.0174 mg/kg	0.00000174 %	✓	
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				0.0718 mg/kg		0.0632 mg/kg	0.00000632 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				0.0349 mg/kg		0.0307 mg/kg	0.00000307 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
		205-883-8	191-24-2							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				17.2 mg/kg	1.785	27.021 mg/kg	0.0027 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0462 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- ⚗ Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification



Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 5000 mg/kg (0.5%)
because: Given the nature of the samples (soils) the flammability hazardous property is considered unlikely to apply.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00481%)

Classification of sample: DS09-270624--0.10

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
DS09-270624--0.10	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
17%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				20.3 mg/kg	1.32	22.246 mg/kg	0.00222 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				86.7 mg/kg	1.233	88.763 mg/kg	0.00888 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.954 mg/kg	2.775	2.198 mg/kg	0.00022 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.187 mg/kg	1.142	0.177 mg/kg	0.0000177 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				18.1 mg/kg	1.462	21.957 mg/kg	0.0022 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				29.6 mg/kg	1.126	27.661 mg/kg	0.00277 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	46 mg/kg		38.18 mg/kg	0.00382 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				22.4 mg/kg	2.637	49.021 mg/kg	0.0049 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				99.9 mg/kg	2.469	204.747 mg/kg	0.0205 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		6.31 pH		6.31 pH	6.31 pH		
15	naphthalene				0.0694 mg/kg		0.0576 mg/kg	0.00000576 %	✓	
	601-052-00-2	202-049-5	91-20-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		0.134 mg/kg		0.111 mg/kg	0.0000111 %	✓	
18	fluorene	201-695-5	86-73-7		0.0935 mg/kg		0.0776 mg/kg	0.00000776 %	✓	
19	phenanthrene	201-581-5	85-01-8		1.03 mg/kg		0.855 mg/kg	0.0000855 %	✓	
20	anthracene	204-371-1	120-12-7		0.204 mg/kg		0.169 mg/kg	0.0000169 %	✓	
21	fluoranthene	205-912-4	206-44-0		1.53 mg/kg		1.27 mg/kg	0.000127 %	✓	
22	pyrene	204-927-3	129-00-0		1.31 mg/kg		1.087 mg/kg	0.000109 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.624 mg/kg		0.518 mg/kg	0.0000518 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.686 mg/kg		0.569 mg/kg	0.0000569 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.645 mg/kg		0.535 mg/kg	0.0000535 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.242 mg/kg		0.201 mg/kg	0.0000201 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.485 mg/kg		0.403 mg/kg	0.0000403 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.261 mg/kg		0.217 mg/kg	0.0000217 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.0581 mg/kg		0.0482 mg/kg	0.00000482 %	✓	
30	benzo[ghi]perylene	205-883-8	191-24-2		0.276 mg/kg		0.229 mg/kg	0.0000229 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	29.6 mg/kg	1.785	43.858 mg/kg	0.00439 %	✓	
Total:								0.0512 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: DS10-270624--0.60

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
DS10-270624--0.60	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
10%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				9.19 mg/kg	1.32	10.92 mg/kg	0.00109 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				54.8 mg/kg	1.233	60.836 mg/kg	0.00608 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				1.1 mg/kg	2.775	2.748 mg/kg	0.000275 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.0286 mg/kg	1.142	0.0294 mg/kg	0.00000294 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				13.5 mg/kg	1.462	17.758 mg/kg	0.00178 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				33.9 mg/kg	1.126	34.351 mg/kg	0.00344 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	31.7 mg/kg		28.53 mg/kg	0.00285 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				41.2 mg/kg	2.637	97.768 mg/kg	0.00978 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				116 mg/kg	2.469	257.795 mg/kg	0.0258 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				7.11 pH		7.11 pH	7.11 pH		
			PH							
21	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
		201-469-6	83-32-9							
24	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
		201-695-5	86-73-7							
25	phenanthrene				0.0525 mg/kg		0.0472 mg/kg	0.00000472 %	✓	
		201-581-5	85-01-8							
26	anthracene				<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
		204-371-1	120-12-7							
27	fluoranthene				<0.017 mg/kg		<0.017 mg/kg	<0.0000017 %		<LOD
		205-912-4	206-44-0							
28	pyrene				0.0187 mg/kg		0.0168 mg/kg	0.00000168 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				0.0256 mg/kg		0.023 mg/kg	0.0000023 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				0.0187 mg/kg		0.0168 mg/kg	0.00000168 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
		205-883-8	191-24-2							
37	vanadium { divanadium pentoxide; vanadium pentoxide }				18.1 mg/kg	1.785	29.081 mg/kg	0.00291 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0557 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- 🧪 Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: DS11-280624--0.10

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
DS11-280624--0.10	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
20% (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				20 mg/kg	1.32	21.125 mg/kg	0.00211 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				120 mg/kg	1.233	118.415 mg/kg	0.0118 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.986 mg/kg	2.775	2.189 mg/kg	0.000219 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.0405 mg/kg	1.142	0.037 mg/kg	0.0000037 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				<1.5 mg/kg	1.462	<2.192 mg/kg	<0.000219 %		<LOD
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				23.5 mg/kg	1.126	21.167 mg/kg	0.00212 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	47.8 mg/kg		38.24 mg/kg	0.00382 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				15.6 mg/kg	2.637	32.906 mg/kg	0.00329 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				1.61 mg/kg	2.554	3.289 mg/kg	0.000329 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				88.7 mg/kg	2.469	175.221 mg/kg	0.0175 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		7.86 pH		7.86 pH	7.86 pH		
15	naphthalene				0.68 mg/kg		0.544 mg/kg	0.0000544 %	✓	
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		0.842 mg/kg		0.674 mg/kg	0.0000674 %	✓	
18	fluorene	201-695-5	86-73-7		0.669 mg/kg		0.535 mg/kg	0.0000535 %	✓	
19	phenanthrene	201-581-5	85-01-8		5.87 mg/kg		4.696 mg/kg	0.00047 %	✓	
20	anthracene	204-371-1	120-12-7		0.879 mg/kg		0.703 mg/kg	0.0000703 %	✓	
21	fluoranthene	205-912-4	206-44-0		5.39 mg/kg		4.312 mg/kg	0.000431 %	✓	
22	pyrene	204-927-3	129-00-0		4.38 mg/kg		3.504 mg/kg	0.00035 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	1.91 mg/kg		1.528 mg/kg	0.000153 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	1.96 mg/kg		1.568 mg/kg	0.000157 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	1.89 mg/kg		1.512 mg/kg	0.000151 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.606 mg/kg		0.485 mg/kg	0.0000485 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	1.31 mg/kg		1.048 mg/kg	0.000105 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.67 mg/kg		0.536 mg/kg	0.0000536 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.169 mg/kg		0.135 mg/kg	0.0000135 %	✓	
30	benzo[ghi]perylene	205-883-8	191-24-2		0.635 mg/kg		0.508 mg/kg	0.0000508 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	31.1 mg/kg	1.785	44.415 mg/kg	0.00444 %	✓	
Total:								0.0486 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- 🧪 Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: DS11-280624--1.00

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
DS11-280624--1.00	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
10%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				5.25 mg/kg	1.32	6.239 mg/kg	0.000624 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				52.8 mg/kg	1.233	58.616 mg/kg	0.00586 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				1.13 mg/kg	2.775	2.823 mg/kg	0.000282 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				<0.02 mg/kg	1.142	<0.0228 mg/kg	<0.00000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				7.93 mg/kg	1.462	10.431 mg/kg	0.00104 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				26.9 mg/kg	1.126	27.258 mg/kg	0.00273 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	17.5 mg/kg		15.75 mg/kg	0.00158 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				25.8 mg/kg	2.637	61.224 mg/kg	0.00612 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				1.15 mg/kg	2.554	2.643 mg/kg	0.000264 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				96.3 mg/kg	2.469	214.014 mg/kg	0.0214 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.011 mg/kg		<0.011 mg/kg	<0.0000011 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				7.89 pH		7.89 pH	7.89 pH		
			PH							
21	naphthalene				0.0137 mg/kg		0.0123 mg/kg	0.00000123 %	✓	
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				0.0497 mg/kg		0.0447 mg/kg	0.00000447 %	✓	
		201-469-6	83-32-9							
24	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
		201-695-5	86-73-7							
25	phenanthrene				0.276 mg/kg		0.248 mg/kg	0.0000248 %	✓	
		201-581-5	85-01-8							
26	anthracene				0.0411 mg/kg		0.037 mg/kg	0.0000037 %	✓	
		204-371-1	120-12-7							
27	fluoranthene				0.331 mg/kg		0.298 mg/kg	0.0000298 %	✓	
		205-912-4	206-44-0							
28	pyrene				0.278 mg/kg		0.25 mg/kg	0.000025 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				0.151 mg/kg		0.136 mg/kg	0.0000136 %	✓	
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				0.162 mg/kg		0.146 mg/kg	0.0000146 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				0.153 mg/kg		0.138 mg/kg	0.0000138 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				0.0478 mg/kg		0.043 mg/kg	0.0000043 %	✓	
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				0.107 mg/kg		0.0963 mg/kg	0.00000963 %	✓	
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				0.0638 mg/kg		0.0574 mg/kg	0.00000574 %	✓	
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				0.0617 mg/kg		0.0555 mg/kg	0.00000555 %	✓	
		205-883-8	191-24-2							
37	vanadium { divanadium pentoxide; vanadium pentoxide }				22.1 mg/kg	1.785	35.507 mg/kg	0.00355 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0451 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: DS12-280624--0.40

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
DS12-280624--0.40	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
20%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				4.08 mg/kg	1.32	4.31 mg/kg	0.000431 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				57.4 mg/kg	1.233	56.642 mg/kg	0.00566 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.681 mg/kg	2.775	1.512 mg/kg	0.000151 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				<0.02 mg/kg	1.142	<0.0228 mg/kg	<0.00000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				5.92 mg/kg	1.462	6.922 mg/kg	0.000692 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				21.4 mg/kg	1.126	19.275 mg/kg	0.00193 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	14.3 mg/kg		11.44 mg/kg	0.00114 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				16.8 mg/kg	2.637	35.437 mg/kg	0.00354 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				65.3 mg/kg	2.469	128.996 mg/kg	0.0129 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		7.98 pH		7.98 pH	7.98 pH		
15	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
18	fluorene	201-695-5	86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
19	phenanthrene	201-581-5	85-01-8		<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
20	anthracene	204-371-1	120-12-7		<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
21	fluoranthene	205-912-4	206-44-0		0.0275 mg/kg		0.022 mg/kg	0.0000022 %	✓	
22	pyrene	204-927-3	129-00-0		0.0261 mg/kg		0.0209 mg/kg	0.00000209 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.0165 mg/kg		0.0132 mg/kg	0.00000132 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
28	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	27 mg/kg	1.785	38.56 mg/kg	0.00386 %	✓	
Total:								0.0311 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP01-270624--0.10

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP01-270624--0.10	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
18% (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 18% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				14.2 mg/kg	1.32	15.374 mg/kg	0.00154 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				59.5 mg/kg	1.233	60.182 mg/kg	0.00602 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.686 mg/kg	2.775	1.561 mg/kg	0.000156 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.157 mg/kg	1.142	0.147 mg/kg	0.0000147 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				7.35 mg/kg	1.462	8.809 mg/kg	0.000881 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				24.2 mg/kg	1.126	22.342 mg/kg	0.00223 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	53.4 mg/kg		43.788 mg/kg	0.00438 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				18.7 mg/kg	2.637	40.431 mg/kg	0.00404 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				84.4 mg/kg	2.469	170.895 mg/kg	0.0171 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		6.9 pH		6.9 pH	6.9 pH		
15	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
18	fluorene	201-695-5	86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
19	phenanthrene	201-581-5	85-01-8		0.072 mg/kg		0.059 mg/kg	0.0000059 %	✓	
20	anthracene	204-371-1	120-12-7		<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
21	fluoranthene	205-912-4	206-44-0		0.0951 mg/kg		0.078 mg/kg	0.0000078 %	✓	
22	pyrene	204-927-3	129-00-0		0.0834 mg/kg		0.0684 mg/kg	0.00000684 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.041 mg/kg		0.0336 mg/kg	0.00000336 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.0597 mg/kg		0.049 mg/kg	0.0000049 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.0721 mg/kg		0.0591 mg/kg	0.00000591 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.0197 mg/kg		0.0162 mg/kg	0.00000162 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.037 mg/kg		0.0303 mg/kg	0.00000303 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.027 mg/kg		0.0221 mg/kg	0.00000221 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		0.0303 mg/kg		0.0248 mg/kg	0.00000248 %	✓	
31	vanadium { divanadium pentoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	20 mg/kg	1.785	29.277 mg/kg	0.00293 %	✓	
Total:								0.0401 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP02-270624--0.10

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP02-270624--0.10	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
20% (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				18.9 mg/kg	1.32	19.963 mg/kg	0.002 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				84.1 mg/kg	1.233	82.989 mg/kg	0.0083 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.838 mg/kg	2.775	1.861 mg/kg	0.000186 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.25 mg/kg	1.142	0.228 mg/kg	0.0000228 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				6.92 mg/kg	1.462	8.091 mg/kg	0.000809 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				27.6 mg/kg	1.126	24.86 mg/kg	0.00249 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	61.2 mg/kg		48.96 mg/kg	0.0049 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				18.8 mg/kg	2.637	39.656 mg/kg	0.00397 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				1.25 mg/kg	2.554	2.554 mg/kg	0.000255 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				103 mg/kg	2.469	203.47 mg/kg	0.0203 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		6.91 pH		6.91 pH	6.91 pH		
15	naphthalene				0.0292 mg/kg		0.0234 mg/kg	0.00000234 %	✓	
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		0.081 mg/kg		0.0648 mg/kg	0.00000648 %	✓	
18	fluorene	201-695-5	86-73-7		0.054 mg/kg		0.0432 mg/kg	0.00000432 %	✓	
19	phenanthrene	201-581-5	85-01-8		0.465 mg/kg		0.372 mg/kg	0.0000372 %	✓	
20	anthracene	204-371-1	120-12-7		0.0724 mg/kg		0.0579 mg/kg	0.00000579 %	✓	
21	fluoranthene	205-912-4	206-44-0		0.584 mg/kg		0.467 mg/kg	0.0000467 %	✓	
22	pyrene	204-927-3	129-00-0		0.518 mg/kg		0.414 mg/kg	0.0000414 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.249 mg/kg		0.199 mg/kg	0.0000199 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.264 mg/kg		0.211 mg/kg	0.0000211 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.279 mg/kg		0.223 mg/kg	0.0000223 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.0982 mg/kg		0.0786 mg/kg	0.00000786 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.19 mg/kg		0.152 mg/kg	0.0000152 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.113 mg/kg		0.0904 mg/kg	0.00000904 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.0287 mg/kg		0.023 mg/kg	0.0000023 %	✓	
30	benzo[ghi]perylene	205-883-8	191-24-2		0.108 mg/kg		0.0864 mg/kg	0.00000864 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	26.4 mg/kg	1.785	37.703 mg/kg	0.00377 %	✓	
Total:								0.0478 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP02-270624--1.10

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP02-270624--1.10	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
14% (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				7.55 mg/kg	1.32	8.573 mg/kg	0.000857 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				49.1 mg/kg	1.233	52.086 mg/kg	0.00521 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				1.02 mg/kg	2.775	2.435 mg/kg	0.000243 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				<0.02 mg/kg	1.142	<0.0228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				9.4 mg/kg	1.462	11.815 mg/kg	0.00118 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				31.3 mg/kg	1.126	30.307 mg/kg	0.00303 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	18.4 mg/kg		15.824 mg/kg	0.00158 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				39.8 mg/kg	2.637	90.248 mg/kg	0.00902 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				104 mg/kg	2.469	220.854 mg/kg	0.0221 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		6.99 pH		6.99 pH	6.99 pH		
15	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
18	fluorene	201-695-5	86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
19	phenanthrene	201-581-5	85-01-8		0.0353 mg/kg		0.0304 mg/kg	0.00000304 %	✓	
20	anthracene	204-371-1	120-12-7		<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
21	fluoranthene	205-912-4	206-44-0		<0.017 mg/kg		<0.017 mg/kg	<0.0000017 %		<LOD
22	pyrene	204-927-3	129-00-0		0.0236 mg/kg		0.0203 mg/kg	0.00000203 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.0283 mg/kg		0.0243 mg/kg	0.00000243 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.0184 mg/kg		0.0158 mg/kg	0.00000158 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
28	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	17.2 mg/kg	1.785	26.406 mg/kg	0.00264 %	✓	
Total:								0.0466 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP03-270624--0.10

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP03-270624--0.10	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
18%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 18% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				13.5 mg/kg	1.32	14.616 mg/kg	0.00146 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				51.7 mg/kg	1.233	52.293 mg/kg	0.00523 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.652 mg/kg	2.775	1.484 mg/kg	0.000148 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.139 mg/kg	1.142	0.13 mg/kg	0.000013 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				6.84 mg/kg	1.462	8.198 mg/kg	0.00082 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				21.9 mg/kg	1.126	20.219 mg/kg	0.00202 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	50.8 mg/kg		41.656 mg/kg	0.00417 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				16.9 mg/kg	2.637	36.539 mg/kg	0.00365 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				1.03 mg/kg	2.554	2.157 mg/kg	0.000216 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				75 mg/kg	2.469	151.862 mg/kg	0.0152 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		7.35 pH		7.35 pH	7.35 pH		
15	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		0.0116 mg/kg		0.0095 mg/kg	0.000000951 %	✓	
18	fluorene	201-695-5	86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
19	phenanthrene	201-581-5	85-01-8		0.0757 mg/kg		0.0621 mg/kg	0.00000621 %	✓	
20	anthracene	204-371-1	120-12-7		<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
21	fluoranthene	205-912-4	206-44-0		0.0962 mg/kg		0.0789 mg/kg	0.00000789 %	✓	
22	pyrene	204-927-3	129-00-0		0.0842 mg/kg		0.069 mg/kg	0.0000069 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.0446 mg/kg		0.0366 mg/kg	0.00000366 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.0644 mg/kg		0.0528 mg/kg	0.00000528 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.0644 mg/kg		0.0528 mg/kg	0.00000528 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.0208 mg/kg		0.0171 mg/kg	0.00000171 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.0357 mg/kg		0.0293 mg/kg	0.00000293 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.0229 mg/kg		0.0188 mg/kg	0.00000188 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
31	vanadium { divanadium pentoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	20.2 mg/kg	1.785	29.57 mg/kg	0.00296 %	✓	
Total:								0.0364 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP04-270624--0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP04-270624--0.20	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
12% (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				10.5 mg/kg	1.32	12.2 mg/kg	0.00122 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				61.9 mg/kg	1.233	67.191 mg/kg	0.00672 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				1.34 mg/kg	2.775	3.273 mg/kg	0.000327 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.0923 mg/kg	1.142	0.0928 mg/kg	0.00000928 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				<1.5 mg/kg	1.462	<2.192 mg/kg	<0.000219 %		<LOD
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				43.8 mg/kg	1.126	43.396 mg/kg	0.00434 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	31.1 mg/kg		27.368 mg/kg	0.00274 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				45.6 mg/kg	2.637	105.805 mg/kg	0.0106 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				1.8 mg/kg	2.554	4.045 mg/kg	0.000405 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				109 mg/kg	2.469	236.855 mg/kg	0.0237 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		7.68 pH		7.68 pH	7.68 pH		
15	naphthalene				0.0423 mg/kg		0.0372 mg/kg	0.00000372 %	✓	
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		0.018 mg/kg		0.0158 mg/kg	0.00000158 %	✓	
17	acenaphthene	201-469-6	83-32-9		0.0593 mg/kg		0.0522 mg/kg	0.00000522 %	✓	
18	fluorene	201-695-5	86-73-7		0.0501 mg/kg		0.0441 mg/kg	0.00000441 %	✓	
19	phenanthrene	201-581-5	85-01-8		0.381 mg/kg		0.335 mg/kg	0.0000335 %	✓	
20	anthracene	204-371-1	120-12-7		0.0736 mg/kg		0.0648 mg/kg	0.00000648 %	✓	
21	fluoranthene	205-912-4	206-44-0		0.325 mg/kg		0.286 mg/kg	0.0000286 %	✓	
22	pyrene	204-927-3	129-00-0		0.268 mg/kg		0.236 mg/kg	0.0000236 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.12 mg/kg		0.106 mg/kg	0.0000106 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.178 mg/kg		0.157 mg/kg	0.0000157 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.159 mg/kg		0.14 mg/kg	0.000014 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.0456 mg/kg		0.0401 mg/kg	0.00000401 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.0961 mg/kg		0.0846 mg/kg	0.00000846 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.0545 mg/kg		0.048 mg/kg	0.0000048 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		0.0876 mg/kg		0.0771 mg/kg	0.00000771 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	12.7 mg/kg	1.785	19.951 mg/kg	0.002 %	✓	
Total:								0.0529 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP05-270624--0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP05-270624--0.20	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
19%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 19% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				12.3 mg/kg	1.32	13.154 mg/kg	0.00132 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				60.5 mg/kg	1.233	60.447 mg/kg	0.00604 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.641 mg/kg	2.775	1.441 mg/kg	0.000144 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.26 mg/kg	1.142	0.241 mg/kg	0.0000241 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				18.6 mg/kg	1.462	22.02 mg/kg	0.0022 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				22.4 mg/kg	1.126	20.428 mg/kg	0.00204 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	48.6 mg/kg		39.366 mg/kg	0.00394 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				15.2 mg/kg	2.637	32.463 mg/kg	0.00325 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				85.3 mg/kg	2.469	170.611 mg/kg	0.0171 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		7.28 pH		7.28 pH	7.28 pH		
15	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
18	fluorene	201-695-5	86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
19	phenanthrene	201-581-5	85-01-8		0.0689 mg/kg		0.0558 mg/kg	0.00000558 %	✓	
20	anthracene	204-371-1	120-12-7		<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
21	fluoranthene	205-912-4	206-44-0		0.122 mg/kg		0.0988 mg/kg	0.00000988 %	✓	
22	pyrene	204-927-3	129-00-0		0.109 mg/kg		0.0883 mg/kg	0.00000883 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.0542 mg/kg		0.0439 mg/kg	0.00000439 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.0678 mg/kg		0.0549 mg/kg	0.00000549 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.0852 mg/kg		0.069 mg/kg	0.0000069 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.0281 mg/kg		0.0228 mg/kg	0.00000228 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.0553 mg/kg		0.0448 mg/kg	0.00000448 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.0406 mg/kg		0.0329 mg/kg	0.00000329 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		0.0481 mg/kg		0.039 mg/kg	0.0000039 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	27.1 mg/kg	1.785	39.187 mg/kg	0.00392 %	✓	
Total:								0.0407 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP05-270624--0.90

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP05-270624--0.90	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
9.9% (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.9% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				7.63 mg/kg	1.32	9.077 mg/kg	0.000908 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				32.9 mg/kg	1.233	36.564 mg/kg	0.00366 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.514 mg/kg	2.775	1.285 mg/kg	0.000129 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				<0.02 mg/kg	1.142	<0.0228 mg/kg	<0.00000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				8.63 mg/kg	1.462	11.365 mg/kg	0.00114 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				17.3 mg/kg	1.126	17.55 mg/kg	0.00175 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	13.7 mg/kg		12.344 mg/kg	0.00123 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				25 mg/kg	2.637	59.391 mg/kg	0.00594 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				53.6 mg/kg	2.469	119.251 mg/kg	0.0119 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				6.2 pH		6.2 pH	6.2 pH		
			PH							
21	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
		201-469-6	83-32-9							
24	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
		201-695-5	86-73-7							
25	phenanthrene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
		201-581-5	85-01-8							
26	anthracene				<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
		204-371-1	120-12-7							
27	fluoranthene				<0.017 mg/kg		<0.017 mg/kg	<0.0000017 %		<LOD
		205-912-4	206-44-0							
28	pyrene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
		204-927-3	129-00-0							
29	benzo[a]anthracene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
		205-883-8	191-24-2							
37	vanadium { divanadium pentoxide; vanadium pentoxide }				16.8 mg/kg	1.785	27.022 mg/kg	0.0027 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0311 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- 🧬 Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP06-270624--0.10

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP06-270624--0.10	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
14% (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				11.7 mg/kg	1.32	13.285 mg/kg	0.00133 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				48.8 mg/kg	1.233	51.767 mg/kg	0.00518 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.506 mg/kg	2.775	1.208 mg/kg	0.000121 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.17 mg/kg	1.142	0.167 mg/kg	0.0000167 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				9.54 mg/kg	1.462	11.991 mg/kg	0.0012 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				21.6 mg/kg	1.126	20.915 mg/kg	0.00209 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	54.6 mg/kg		46.956 mg/kg	0.0047 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				13.7 mg/kg	2.637	31.065 mg/kg	0.00311 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				1.32 mg/kg	2.554	2.899 mg/kg	0.00029 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				76.8 mg/kg	2.469	163.092 mg/kg	0.0163 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		7.01 pH		7.01 pH	7.01 pH		
15	naphthalene				0.0711 mg/kg		0.0611 mg/kg	0.00000611 %	✓	
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		0.127 mg/kg		0.109 mg/kg	0.0000109 %	✓	
18	fluorene	201-695-5	86-73-7		0.0794 mg/kg		0.0683 mg/kg	0.00000683 %	✓	
19	phenanthrene	201-581-5	85-01-8		0.916 mg/kg		0.788 mg/kg	0.0000788 %	✓	
20	anthracene	204-371-1	120-12-7		0.174 mg/kg		0.15 mg/kg	0.000015 %	✓	
21	fluoranthene	205-912-4	206-44-0		1.26 mg/kg		1.084 mg/kg	0.000108 %	✓	
22	pyrene	204-927-3	129-00-0		1.06 mg/kg		0.912 mg/kg	0.0000912 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.466 mg/kg		0.401 mg/kg	0.0000401 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.533 mg/kg		0.458 mg/kg	0.0000458 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.607 mg/kg		0.522 mg/kg	0.0000522 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.192 mg/kg		0.165 mg/kg	0.0000165 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.435 mg/kg		0.374 mg/kg	0.0000374 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.281 mg/kg		0.242 mg/kg	0.0000242 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.0574 mg/kg		0.0494 mg/kg	0.00000494 %	✓	
30	benzo[ghi]perylene	205-883-8	191-24-2		0.317 mg/kg		0.273 mg/kg	0.0000273 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	20.8 mg/kg	1.785	31.933 mg/kg	0.00319 %	✓	
Total:								0.0386 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- 🧪 Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP07-250624--0.40

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP07-250624--0.40	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
13%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				7.74 mg/kg	1.32	8.891 mg/kg	0.000889 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				110 mg/kg	1.233	118.045 mg/kg	0.0118 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.961 mg/kg	2.775	2.32 mg/kg	0.000232 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.0348 mg/kg	1.142	0.0346 mg/kg	0.00000346 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				<1.5 mg/kg	1.462	<2.192 mg/kg	<0.000219 %		<LOD
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				0.805 mg/kg	2.27	1.59 mg/kg	0.000159 %	✓	
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				38.3 mg/kg	1.126	37.516 mg/kg	0.00375 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	29.2 mg/kg		25.404 mg/kg	0.00254 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				43.2 mg/kg	2.637	99.097 mg/kg	0.00991 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				1.9 mg/kg	2.554	4.221 mg/kg	0.000422 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				143 mg/kg	2.469	307.205 mg/kg	0.0307 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	TPH (C6 to C40) petroleum group				40.3 mg/kg		35.061 mg/kg	0.00351 %	✓	
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				8.01 pH		8.01 pH	8.01 pH		
			PH							
21	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
		201-469-6	83-32-9							
24	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
		201-695-5	86-73-7							
25	phenanthrene				0.0458 mg/kg		0.0398 mg/kg	0.00000398 %	✓	
		201-581-5	85-01-8							
26	anthracene				<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
		204-371-1	120-12-7							
27	fluoranthene				<0.017 mg/kg		<0.017 mg/kg	<0.0000017 %		<LOD
		205-912-4	206-44-0							
28	pyrene				0.0204 mg/kg		0.0177 mg/kg	0.00000177 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				0.0249 mg/kg		0.0217 mg/kg	0.00000217 %	✓	
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				0.0185 mg/kg		0.0161 mg/kg	0.00000161 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				0.0283 mg/kg		0.0246 mg/kg	0.00000246 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				0.031 mg/kg		0.027 mg/kg	0.0000027 %	✓	
		205-883-8	191-24-2							
37	vanadium { divanadium pentoxide; vanadium pentoxide }				14 mg/kg	1.785	21.744 mg/kg	0.00217 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0667 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- 🧪 Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification



Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 5000 mg/kg (0.5%)
because: Given the nature of the samples (soils) the flammability hazardous property is considered unlikely to apply.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00351%)

Classification of sample: TP08-250624--0.20

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP08-250624--0.20	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
18% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 18% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				13.9	mg/kg	1.32	15.049	mg/kg	0.0015 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				84.4	mg/kg	1.233	85.368	mg/kg	0.00854 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				0.728	mg/kg	2.775	1.657	mg/kg	0.000166 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				0.317	mg/kg	1.142	0.297	mg/kg	0.0000297 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				7.29	mg/kg	1.462	8.737	mg/kg	0.000874 %	✓	
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				31.9	mg/kg	1.126	29.451	mg/kg	0.00295 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	45.1	mg/kg		36.982	mg/kg	0.0037 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				17.6	mg/kg	2.637	38.053	mg/kg	0.00381 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				1.97	mg/kg	2.554	4.125	mg/kg	0.000413 %	✓	
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				102	mg/kg	2.469	206.532	mg/kg	0.0207 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	pH				5.87	pH		5.87	pH	5.87 pH		
			PH									
15	naphthalene				0.0576	mg/kg		0.0472	mg/kg	0.00000472 %	✓	
	601-052-00-2	202-049-5	91-20-3									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		0.0402 mg/kg		0.033 mg/kg	0.0000033 %	✓	
17	acenaphthene	201-469-6	83-32-9		0.119 mg/kg		0.0976 mg/kg	0.00000976 %	✓	
18	fluorene	201-695-5	86-73-7		0.0996 mg/kg		0.0817 mg/kg	0.00000817 %	✓	
19	phenanthrene	201-581-5	85-01-8		1.26 mg/kg		1.033 mg/kg	0.000103 %	✓	
20	anthracene	204-371-1	120-12-7		0.295 mg/kg		0.242 mg/kg	0.0000242 %	✓	
21	fluoranthene	205-912-4	206-44-0		1.75 mg/kg		1.435 mg/kg	0.000144 %	✓	
22	pyrene	204-927-3	129-00-0		1.44 mg/kg		1.181 mg/kg	0.000118 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.671 mg/kg		0.55 mg/kg	0.000055 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.707 mg/kg		0.58 mg/kg	0.000058 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.679 mg/kg		0.557 mg/kg	0.0000557 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.252 mg/kg		0.207 mg/kg	0.0000207 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.521 mg/kg		0.427 mg/kg	0.0000427 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.292 mg/kg		0.239 mg/kg	0.0000239 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.0668 mg/kg		0.0548 mg/kg	0.00000548 %	✓	
30	benzo[ghi]perylene	205-883-8	191-24-2		0.293 mg/kg		0.24 mg/kg	0.000024 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	24 mg/kg	1.785	35.132 mg/kg	0.00351 %	✓	
Total:								0.0473 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP08-250624--0.40

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP08-250624--0.40	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
11% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 11% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				9.08 mg/kg	1.32	10.67 mg/kg	0.00107 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				68.3 mg/kg	1.233	74.98 mg/kg	0.0075 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				1.14 mg/kg	2.775	2.816 mg/kg	0.000282 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.0934 mg/kg	1.142	0.095 mg/kg	0.0000095 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				7.91 mg/kg	1.462	10.289 mg/kg	0.00103 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				33 mg/kg	1.126	33.067 mg/kg	0.00331 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	19.9 mg/kg		17.711 mg/kg	0.00177 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				41.7 mg/kg	2.637	97.855 mg/kg	0.00979 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				112 mg/kg	2.469	246.139 mg/kg	0.0246 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.0125 mg/kg		<0.0125 mg/kg	<0.00000125 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				7.23 pH		7.23 pH	7.23 pH		
			PH							
21	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
		201-469-6	83-32-9							
24	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7							
25	phenanthrene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
		201-581-5	85-01-8							
26	anthracene				<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
		204-371-1	120-12-7							
27	fluoranthene				<0.017 mg/kg		<0.017 mg/kg	<0.0000017 %		<LOD
		205-912-4	206-44-0							
28	pyrene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
		204-927-3	129-00-0							
29	benzo[a]anthracene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
		205-883-8	191-24-2							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				16.8 mg/kg	1.785	26.692 mg/kg	0.00267 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0538 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- ♻️ Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP09-270624--0.30

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP09-270624--0.30	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
16% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 16% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				13.3 mg/kg	1.32	14.751 mg/kg	0.00148 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				80 mg/kg	1.233	82.891 mg/kg	0.00829 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.719 mg/kg	2.775	1.676 mg/kg	0.000168 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.166 mg/kg	1.142	0.159 mg/kg	0.0000159 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				7.77 mg/kg	1.462	9.539 mg/kg	0.000954 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				26 mg/kg	1.126	24.589 mg/kg	0.00246 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	40.6 mg/kg		34.104 mg/kg	0.00341 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				19.1 mg/kg	2.637	42.303 mg/kg	0.00423 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				1.29 mg/kg	2.554	2.767 mg/kg	0.000277 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				96.9 mg/kg	2.469	200.991 mg/kg	0.0201 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	TPH (C6 to C40) petroleum group				29.2 mg/kg		24.528 mg/kg	0.00245 %	✓	
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				5.48 pH		5.48 pH	5.48 pH		
			PH							
21	naphthalene				0.0515 mg/kg		0.0433 mg/kg	0.0000433 %	✓	
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				0.129 mg/kg		0.108 mg/kg	0.0000108 %	✓	
		201-469-6	83-32-9							
24	fluorene				0.0921 mg/kg		0.0774 mg/kg	0.00000774 %	✓	
		201-695-5	86-73-7							
25	phenanthrene				0.793 mg/kg		0.666 mg/kg	0.0000666 %	✓	
		201-581-5	85-01-8							
26	anthracene				0.134 mg/kg		0.113 mg/kg	0.0000113 %	✓	
		204-371-1	120-12-7							
27	fluoranthene				1.02 mg/kg		0.857 mg/kg	0.0000857 %	✓	
		205-912-4	206-44-0							
28	pyrene				0.893 mg/kg		0.75 mg/kg	0.000075 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				0.412 mg/kg		0.346 mg/kg	0.0000346 %	✓	
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				0.426 mg/kg		0.358 mg/kg	0.0000358 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				0.438 mg/kg		0.368 mg/kg	0.0000368 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				0.144 mg/kg		0.121 mg/kg	0.0000121 %	✓	
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				0.307 mg/kg		0.258 mg/kg	0.0000258 %	✓	
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				0.186 mg/kg		0.156 mg/kg	0.0000156 %	✓	
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				0.0457 mg/kg		0.0384 mg/kg	0.00000384 %	✓	
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				0.178 mg/kg		0.15 mg/kg	0.000015 %	✓	
		205-883-8	191-24-2							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				26.6 mg/kg	1.785	39.888 mg/kg	0.00399 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0487 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification



Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 5000 mg/kg (0.5%)
because: Given the nature of the samples (soils) the flammability hazardous property is considered unlikely to apply.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00245%)

Classification of sample: TP10-250624--0.40

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name: TP10-250624--0.40	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 12% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				5.46 mg/kg	1.32	6.344 mg/kg	0.000634 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				35 mg/kg	1.233	37.992 mg/kg	0.0038 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.854 mg/kg	2.775	2.086 mg/kg	0.000209 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.0339 mg/kg	1.142	0.0341 mg/kg	0.00000341 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				8.45 mg/kg	1.462	10.868 mg/kg	0.00109 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				24.2 mg/kg	1.126	23.977 mg/kg	0.0024 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	13.8 mg/kg		12.144 mg/kg	0.00121 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				20.5 mg/kg	2.637	47.566 mg/kg	0.00476 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				73.1 mg/kg	2.469	158.845 mg/kg	0.0159 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.0105 mg/kg		<0.0105 mg/kg	<0.00000105 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				6.13 pH		6.13 pH	6.13 pH		
			PH							
21	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
		201-469-6	83-32-9							
24	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7							
25	phenanthrene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
		201-581-5	85-01-8							
26	anthracene				<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
		204-371-1	120-12-7							
27	fluoranthene				0.021 mg/kg		0.0185 mg/kg	0.00000185 %	✓	
		205-912-4	206-44-0							
28	pyrene				0.0184 mg/kg		0.0162 mg/kg	0.00000162 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				0.0116 mg/kg		0.0102 mg/kg	0.00000102 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
		205-883-8	191-24-2							
37	vanadium { divanadium pentoxide; vanadium pentoxide }				16.7 mg/kg	1.785	26.235 mg/kg	0.00262 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0344 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP11-250624--0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP11-250624--0.20	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
13% (wet weight correction)	Entry:
	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				13.8 mg/kg	1.32	15.852 mg/kg	0.00159 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				60.9 mg/kg	1.233	65.354 mg/kg	0.00654 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.546 mg/kg	2.775	1.318 mg/kg	0.000132 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.422 mg/kg	1.142	0.419 mg/kg	0.0000419 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				9.82 mg/kg	1.462	12.487 mg/kg	0.00125 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				31.2 mg/kg	1.126	30.561 mg/kg	0.00306 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	47.9 mg/kg		41.673 mg/kg	0.00417 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				17.1 mg/kg	2.637	39.226 mg/kg	0.00392 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				105 mg/kg	2.469	225.57 mg/kg	0.0226 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		7.22 pH		7.22 pH	7.22 pH		
15	naphthalene				0.205 mg/kg		0.178 mg/kg	0.0000178 %	✓	
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		0.228 mg/kg		0.198 mg/kg	0.0000198 %	✓	
18	fluorene	201-695-5	86-73-7		0.159 mg/kg		0.138 mg/kg	0.0000138 %	✓	
19	phenanthrene	201-581-5	85-01-8		1.28 mg/kg		1.114 mg/kg	0.000111 %	✓	
20	anthracene	204-371-1	120-12-7		0.241 mg/kg		0.21 mg/kg	0.000021 %	✓	
21	fluoranthene	205-912-4	206-44-0		1.48 mg/kg		1.288 mg/kg	0.000129 %	✓	
22	pyrene	204-927-3	129-00-0		1.28 mg/kg		1.114 mg/kg	0.000111 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.625 mg/kg		0.544 mg/kg	0.0000544 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.731 mg/kg		0.636 mg/kg	0.0000636 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.742 mg/kg		0.646 mg/kg	0.0000646 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.237 mg/kg		0.206 mg/kg	0.0000206 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.512 mg/kg		0.445 mg/kg	0.0000445 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.286 mg/kg		0.249 mg/kg	0.0000249 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.0739 mg/kg		0.0643 mg/kg	0.00000643 %	✓	
30	benzo[ghi]perylene	205-883-8	191-24-2		0.321 mg/kg		0.279 mg/kg	0.0000279 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	21 mg/kg	1.785	32.615 mg/kg	0.00326 %	✓	
Total:								0.048 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP12-250624--0.40

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP12-250624--0.40	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
21%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 21% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				9.56 mg/kg	1.32	9.972 mg/kg	0.000997 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				63.1 mg/kg	1.233	61.488 mg/kg	0.00615 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.666 mg/kg	2.775	1.46 mg/kg	0.000146 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.102 mg/kg	1.142	0.092 mg/kg	0.0000092 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				13.3 mg/kg	1.462	15.357 mg/kg	0.00154 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				12.4 mg/kg	1.126	11.029 mg/kg	0.0011 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	28.9 mg/kg		22.831 mg/kg	0.00228 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				11.3 mg/kg	2.637	23.538 mg/kg	0.00235 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				3.7 mg/kg	2.554	7.465 mg/kg	0.000746 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				63.6 mg/kg	2.469	124.067 mg/kg	0.0124 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		5.24 pH		5.24 pH	5.24 pH		
15	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
18	fluorene	201-695-5	86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
19	phenanthrene	201-581-5	85-01-8		<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
20	anthracene	204-371-1	120-12-7		<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
21	fluoranthene	205-912-4	206-44-0		<0.017 mg/kg		<0.017 mg/kg	<0.0000017 %		<LOD
22	pyrene	204-927-3	129-00-0		<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
24	chrysene	601-048-00-0	205-923-4	218-01-9	<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
28	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	31.6 mg/kg	1.785	44.565 mg/kg	0.00446 %	✓	
Total:								0.0327 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP13-240624--0.60

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name: TP13-240624--0.60	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content: 14% (wet weight correction)	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				11.2 mg/kg	1.32	12.717 mg/kg	0.00127 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				63.6 mg/kg	1.233	67.467 mg/kg	0.00675 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.913 mg/kg	2.775	2.179 mg/kg	0.000218 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				<0.02 mg/kg	1.142	<0.0228 mg/kg	<0.00000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				<1.5 mg/kg	1.462	<2.192 mg/kg	<0.000219 %		<LOD
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				21 mg/kg	1.126	20.334 mg/kg	0.00203 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	18.7 mg/kg		16.082 mg/kg	0.00161 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				22.9 mg/kg	2.637	51.927 mg/kg	0.00519 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				77.5 mg/kg	2.469	164.579 mg/kg	0.0165 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.011 mg/kg		<0.011 mg/kg	<0.0000011 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				7.05 pH		7.05 pH	7.05 pH		
			PH							
21	naphthalene				0.0847 mg/kg		0.0728 mg/kg	0.00000728 %	✓	
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				0.118 mg/kg		0.101 mg/kg	0.0000101 %	✓	
		201-469-6	83-32-9							
24	fluorene				0.0778 mg/kg		0.0669 mg/kg	0.00000669 %	✓	
		201-695-5	86-73-7							
25	phenanthrene				0.652 mg/kg		0.561 mg/kg	0.0000561 %	✓	
		201-581-5	85-01-8							
26	anthracene				0.0984 mg/kg		0.0846 mg/kg	0.00000846 %	✓	
		204-371-1	120-12-7							
27	fluoranthene				0.702 mg/kg		0.604 mg/kg	0.0000604 %	✓	
		205-912-4	206-44-0							
28	pyrene				0.613 mg/kg		0.527 mg/kg	0.0000527 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				0.281 mg/kg		0.242 mg/kg	0.0000242 %	✓	
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				0.356 mg/kg		0.306 mg/kg	0.0000306 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				0.328 mg/kg		0.282 mg/kg	0.0000282 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				0.111 mg/kg		0.0955 mg/kg	0.00000955 %	✓	
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				0.234 mg/kg		0.201 mg/kg	0.0000201 %	✓	
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				0.124 mg/kg		0.107 mg/kg	0.0000107 %	✓	
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				0.0327 mg/kg		0.0281 mg/kg	0.00000281 %	✓	
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				0.149 mg/kg		0.128 mg/kg	0.0000128 %	✓	
		205-883-8	191-24-2							
37	vanadium { divanadium pentoxide; vanadium pentoxide }				20.1 mg/kg	1.785	30.859 mg/kg	0.00309 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0389 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- 🧪 Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP14-250624--0.40

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP14-250624--0.40	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
15% (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				16.4 mg/kg	1.32	18.405 mg/kg	0.00184 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				51.3 mg/kg	1.233	53.786 mg/kg	0.00538 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				1.08 mg/kg	2.775	2.548 mg/kg	0.000255 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.199 mg/kg	1.142	0.193 mg/kg	0.0000193 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				8.62 mg/kg	1.462	10.709 mg/kg	0.00107 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				30.2 mg/kg	1.126	28.902 mg/kg	0.00289 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	24.9 mg/kg		21.165 mg/kg	0.00212 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				24.1 mg/kg	2.637	54.012 mg/kg	0.0054 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				69 mg/kg	2.469	144.824 mg/kg	0.0145 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	TPH (C6 to C40) petroleum group				62.5 mg/kg		53.125 mg/kg	0.00531 %	✓	
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				7 pH		7 pH	7pH		
			PH							
21	naphthalene				0.198 mg/kg		0.168 mg/kg	0.0000168 %	✓	
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				0.671 mg/kg		0.57 mg/kg	0.000057 %	✓	
		201-469-6	83-32-9							
24	fluorene				0.456 mg/kg		0.388 mg/kg	0.0000388 %	✓	
		201-695-5	86-73-7							
25	phenanthrene				3.11 mg/kg		2.643 mg/kg	0.000264 %	✓	
		201-581-5	85-01-8							
26	anthracene				0.507 mg/kg		0.431 mg/kg	0.0000431 %	✓	
		204-371-1	120-12-7							
27	fluoranthene				3.1 mg/kg		2.635 mg/kg	0.000263 %	✓	
		205-912-4	206-44-0							
28	pyrene				2.63 mg/kg		2.236 mg/kg	0.000224 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				1.23 mg/kg		1.045 mg/kg	0.000105 %	✓	
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				1.42 mg/kg		1.207 mg/kg	0.000121 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				1.35 mg/kg		1.148 mg/kg	0.000115 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				0.44 mg/kg		0.374 mg/kg	0.0000374 %	✓	
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				0.942 mg/kg		0.801 mg/kg	0.0000801 %	✓	
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				0.531 mg/kg		0.451 mg/kg	0.0000451 %	✓	
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				0.144 mg/kg		0.122 mg/kg	0.0000122 %	✓	
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				0.536 mg/kg		0.456 mg/kg	0.0000456 %	✓	
		205-883-8	191-24-2							
37	vanadium { divanadium pentoxide; vanadium pentoxide }				14 mg/kg	1.785	21.244 mg/kg	0.00212 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0431 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- 🧩 Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification



Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 5000 mg/kg (0.5%)
because: Given the nature of the samples (soils) the flammability hazardous property is considered unlikely to apply.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00531%)

Classification of sample: TP15-270624--0.10

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP15-270624--0.10	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
21% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 21% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				27 mg/kg	1.32	28.163 mg/kg	0.00282 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				113 mg/kg	1.233	110.114 mg/kg	0.011 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				1.22 mg/kg	2.775	2.675 mg/kg	0.000267 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.16 mg/kg	1.142	0.144 mg/kg	0.0000144 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				19.6 mg/kg	1.462	22.631 mg/kg	0.00226 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				38.1 mg/kg	1.126	33.888 mg/kg	0.00339 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	57.8 mg/kg		45.662 mg/kg	0.00457 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				25.8 mg/kg	2.637	53.741 mg/kg	0.00537 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				112 mg/kg	2.469	218.483 mg/kg	0.0218 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH				6.17 pH		6.17 pH	6.17 pH		
15	naphthalene				0.197 mg/kg		0.156 mg/kg	0.0000156 %	✓	
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		0.466 mg/kg		0.368 mg/kg	0.0000368 %	✓	
18	fluorene	201-695-5	86-73-7		0.319 mg/kg		0.252 mg/kg	0.0000252 %	✓	
19	phenanthrene	201-581-5	85-01-8		2.28 mg/kg		1.801 mg/kg	0.00018 %	✓	
20	anthracene	204-371-1	120-12-7		0.409 mg/kg		0.323 mg/kg	0.0000323 %	✓	
21	fluoranthene	205-912-4	206-44-0		2.45 mg/kg		1.936 mg/kg	0.000194 %	✓	
22	pyrene	204-927-3	129-00-0		2.05 mg/kg		1.62 mg/kg	0.000162 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.976 mg/kg		0.771 mg/kg	0.0000771 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	1.11 mg/kg		0.877 mg/kg	0.0000877 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	1.03 mg/kg		0.814 mg/kg	0.0000814 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.361 mg/kg		0.285 mg/kg	0.0000285 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.761 mg/kg		0.601 mg/kg	0.0000601 %	✓	
28	indeno[123-cd]pyrene		205-893-2	193-39-5	0.369 mg/kg		0.292 mg/kg	0.0000292 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.107 mg/kg		0.0845 mg/kg	0.00000845 %	✓	
30	benzo[ghi]perylene		205-883-8	191-24-2	0.428 mg/kg		0.338 mg/kg	0.0000338 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	32.6 mg/kg	1.785	45.976 mg/kg	0.0046 %	✓	
Total:								0.0579 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP15-270624--0.50

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP15-270624--0.50	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
13% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 13% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				8.76 mg/kg	1.32	10.062 mg/kg	0.00101 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				94.6 mg/kg	1.233	101.519 mg/kg	0.0102 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				1.38 mg/kg	2.775	3.332 mg/kg	0.000333 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.0228 mg/kg	1.142	0.0227 mg/kg	0.00000227 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				5.85 mg/kg	1.462	7.439 mg/kg	0.000744 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				35.8 mg/kg	1.126	35.067 mg/kg	0.00351 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	25.9 mg/kg		22.533 mg/kg	0.00225 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				43.1 mg/kg	2.637	98.868 mg/kg	0.00989 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				117 mg/kg	2.469	251.35 mg/kg	0.0251 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	TPH (C6 to C40) petroleum group				17.9 mg/kg		15.573 mg/kg	0.00156 %	✓	
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				7.42 pH		7.42 pH	7.42 pH		
			PH							
21	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				0.0296 mg/kg		0.0258 mg/kg	0.00000258 %	✓	
		201-469-6	83-32-9							
24	fluorene				0.0263 mg/kg		0.0229 mg/kg	0.00000229 %	✓	
		201-695-5	86-73-7							
25	phenanthrene				0.197 mg/kg		0.171 mg/kg	0.0000171 %	✓	
		201-581-5	85-01-8							
26	anthracene				0.024 mg/kg		0.0209 mg/kg	0.00000209 %	✓	
		204-371-1	120-12-7							
27	fluoranthene				0.167 mg/kg		0.145 mg/kg	0.0000145 %	✓	
		205-912-4	206-44-0							
28	pyrene				0.146 mg/kg		0.127 mg/kg	0.0000127 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				0.0638 mg/kg		0.0555 mg/kg	0.00000555 %	✓	
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				0.0943 mg/kg		0.082 mg/kg	0.0000082 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				0.0818 mg/kg		0.0712 mg/kg	0.00000712 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				0.0216 mg/kg		0.0188 mg/kg	0.00000188 %	✓	
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				0.0493 mg/kg		0.0429 mg/kg	0.00000429 %	✓	
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				0.0236 mg/kg		0.0205 mg/kg	0.00000205 %	✓	
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				0.0423 mg/kg		0.0368 mg/kg	0.00000368 %	✓	
		205-883-8	191-24-2							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				18.3 mg/kg	1.785	28.422 mg/kg	0.00284 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0582 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- ♻️ Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification



Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 5000 mg/kg (0.5%)
because: Given the nature of the samples (soils) the flammability hazardous property is considered unlikely to apply.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00156%)

Classification of sample: TP16-270624--0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP16-270624--0.20	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
15% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 15% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				18.3 mg/kg	1.32	20.538 mg/kg	0.00205 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				86.5 mg/kg	1.233	90.693 mg/kg	0.00907 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.716 mg/kg	2.775	1.689 mg/kg	0.000169 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.331 mg/kg	1.142	0.321 mg/kg	0.0000321 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				23.8 mg/kg	1.462	29.567 mg/kg	0.00296 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				34.4 mg/kg	1.126	32.921 mg/kg	0.00329 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	59.9 mg/kg		50.915 mg/kg	0.00509 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				18.4 mg/kg	2.637	41.238 mg/kg	0.00412 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				98.2 mg/kg	2.469	206.112 mg/kg	0.0206 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		6.41 pH		6.41 pH	6.41 pH		
15	naphthalene				0.229 mg/kg		0.195 mg/kg	0.0000195 %	✓	
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		0.116 mg/kg		0.0986 mg/kg	0.0000986 %	✓	
17	acenaphthene	201-469-6	83-32-9		0.349 mg/kg		0.297 mg/kg	0.0000297 %	✓	
18	fluorene	201-695-5	86-73-7		0.245 mg/kg		0.208 mg/kg	0.0000208 %	✓	
19	phenanthrene	201-581-5	85-01-8		2.98 mg/kg		2.533 mg/kg	0.000253 %	✓	
20	anthracene	204-371-1	120-12-7		0.47 mg/kg		0.399 mg/kg	0.0000399 %	✓	
21	fluoranthene	205-912-4	206-44-0		4.11 mg/kg		3.494 mg/kg	0.000349 %	✓	
22	pyrene	204-927-3	129-00-0		3.44 mg/kg		2.924 mg/kg	0.000292 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	1.69 mg/kg		1.437 mg/kg	0.000144 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	1.9 mg/kg		1.615 mg/kg	0.000162 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	2.14 mg/kg		1.819 mg/kg	0.000182 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.704 mg/kg		0.598 mg/kg	0.0000598 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	1.38 mg/kg		1.173 mg/kg	0.000117 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.949 mg/kg		0.807 mg/kg	0.0000807 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.2 mg/kg		0.17 mg/kg	0.000017 %	✓	
30	benzo[ghi]perylene	205-883-8	191-24-2		0.907 mg/kg		0.771 mg/kg	0.0000771 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	28.6 mg/kg	1.785	43.398 mg/kg	0.00434 %	✓	
Total:								0.0543 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP17-270624--0.30

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP17-270624--0.30	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:
18% (wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 18% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				20.3 mg/kg	1.32	21.978 mg/kg	0.0022 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				88.7 mg/kg	1.233	89.717 mg/kg	0.00897 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				1.09 mg/kg	2.775	2.481 mg/kg	0.000248 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.129 mg/kg	1.142	0.121 mg/kg	0.0000121 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				6.54 mg/kg	1.462	7.838 mg/kg	0.000784 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				30.1 mg/kg	1.126	27.789 mg/kg	0.00278 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	43.9 mg/kg		35.998 mg/kg	0.0036 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				23.4 mg/kg	2.637	50.593 mg/kg	0.00506 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				103 mg/kg	2.469	208.557 mg/kg	0.0209 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		7.25 pH		7.25 pH	7.25 pH		
15	naphthalene				0.0646 mg/kg		0.053 mg/kg	0.0000053 %	✓	
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		0.0321 mg/kg		0.0263 mg/kg	0.00000263 %	✓	
17	acenaphthene	201-469-6	83-32-9		0.105 mg/kg		0.0861 mg/kg	0.00000861 %	✓	
18	fluorene	201-695-5	86-73-7		0.0745 mg/kg		0.0611 mg/kg	0.00000611 %	✓	
19	phenanthrene	201-581-5	85-01-8		0.889 mg/kg		0.729 mg/kg	0.0000729 %	✓	
20	anthracene	204-371-1	120-12-7		0.17 mg/kg		0.139 mg/kg	0.0000139 %	✓	
21	fluoranthene	205-912-4	206-44-0		1.36 mg/kg		1.115 mg/kg	0.000112 %	✓	
22	pyrene	204-927-3	129-00-0		1.16 mg/kg		0.951 mg/kg	0.0000951 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.584 mg/kg		0.479 mg/kg	0.0000479 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.631 mg/kg		0.517 mg/kg	0.0000517 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.779 mg/kg		0.639 mg/kg	0.0000639 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.238 mg/kg		0.195 mg/kg	0.0000195 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.529 mg/kg		0.434 mg/kg	0.0000434 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.293 mg/kg		0.24 mg/kg	0.000024 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.0724 mg/kg		0.0594 mg/kg	0.00000594 %	✓	
30	benzo[ghi]perylene	205-883-8	191-24-2		0.338 mg/kg		0.277 mg/kg	0.0000277 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	31 mg/kg	1.785	45.379 mg/kg	0.00454 %	✓	
Total:								0.0504 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP18-270624--0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP18-270624--0.20	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
20%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				27.5 mg/kg	1.32	29.047 mg/kg	0.0029 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				145 mg/kg	1.233	143.085 mg/kg	0.0143 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.925 mg/kg	2.775	2.054 mg/kg	0.000205 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.203 mg/kg	1.142	0.186 mg/kg	0.0000186 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				26.2 mg/kg	1.462	30.634 mg/kg	0.00306 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				31.9 mg/kg	1.126	28.733 mg/kg	0.00287 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	60.2 mg/kg		48.16 mg/kg	0.00482 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				15.8 mg/kg	2.637	33.328 mg/kg	0.00333 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				1.82 mg/kg	2.554	3.718 mg/kg	0.000372 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				96.8 mg/kg	2.469	191.222 mg/kg	0.0191 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	TPH (C6 to C40) petroleum group				85.2 mg/kg		68.16 mg/kg	0.00682 %	✓	
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				7.44 pH		7.44 pH	7.44 pH		
			PH							
21	naphthalene				0.0751 mg/kg		0.0601 mg/kg	0.00000601 %	✓	
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				0.131 mg/kg		0.105 mg/kg	0.0000105 %	✓	
		201-469-6	83-32-9							
24	fluorene				0.0966 mg/kg		0.0773 mg/kg	0.00000773 %	✓	
		201-695-5	86-73-7							
25	phenanthrene				1.13 mg/kg		0.904 mg/kg	0.0000904 %	✓	
		201-581-5	85-01-8							
26	anthracene				0.207 mg/kg		0.166 mg/kg	0.0000166 %	✓	
		204-371-1	120-12-7							
27	fluoranthene				1.77 mg/kg		1.416 mg/kg	0.000142 %	✓	
		205-912-4	206-44-0							
28	pyrene				1.54 mg/kg		1.232 mg/kg	0.000123 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				0.742 mg/kg		0.594 mg/kg	0.0000594 %	✓	
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				0.882 mg/kg		0.706 mg/kg	0.0000706 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				0.952 mg/kg		0.762 mg/kg	0.0000762 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				0.303 mg/kg		0.242 mg/kg	0.0000242 %	✓	
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				0.663 mg/kg		0.53 mg/kg	0.000053 %	✓	
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				0.393 mg/kg		0.314 mg/kg	0.0000314 %	✓	
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				0.0859 mg/kg		0.0687 mg/kg	0.00000687 %	✓	
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				0.427 mg/kg		0.342 mg/kg	0.0000342 %	✓	
		205-883-8	191-24-2							
37	vanadium { divanadium pentoxide; vanadium pentoxide }				82.1 mg/kg	1.785	117.251 mg/kg	0.0117 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.0000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0708 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification



Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 5000 mg/kg (0.5%)
because: Given the nature of the samples (soils) the flammability hazardous property is considered unlikely to apply.

Hazard Statements hit:

Fam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00682%)

Classification of sample: TP19-270624--0.20

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP19-270624--0.20	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
18% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 18% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				18.1	mg/kg	1.32	19.596	mg/kg	0.00196 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				93.9	mg/kg	1.233	94.977	mg/kg	0.0095 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				1.05	mg/kg	2.775	2.39	mg/kg	0.000239 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				1.01	mg/kg	3.22	2.667	mg/kg	0.000267 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				0.127	mg/kg	1.142	0.119	mg/kg	0.0000119 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				12.7	mg/kg	1.462	15.221	mg/kg	0.00152 %	✓	
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				29.8	mg/kg	1.126	27.512	mg/kg	0.00275 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	42.3	mg/kg		34.686	mg/kg	0.00347 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				24.2	mg/kg	2.637	52.322	mg/kg	0.00523 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				102	mg/kg	2.469	206.532	mg/kg	0.0207 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	pH				6.68	pH		6.68	pH	6.68 pH		
15	naphthalene				0.0653	mg/kg		0.0535	mg/kg	0.00000535 %	✓	
	601-052-00-2	202-049-5	91-20-3									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		0.141 mg/kg		0.116 mg/kg	0.0000116 %	✓	
18	fluorene	201-695-5	86-73-7		0.106 mg/kg		0.0869 mg/kg	0.00000869 %	✓	
19	phenanthrene	201-581-5	85-01-8		1.22 mg/kg		1 mg/kg	0.0001 %	✓	
20	anthracene	204-371-1	120-12-7		0.241 mg/kg		0.198 mg/kg	0.0000198 %	✓	
21	fluoranthene	205-912-4	206-44-0		1.74 mg/kg		1.427 mg/kg	0.000143 %	✓	
22	pyrene	204-927-3	129-00-0		1.49 mg/kg		1.222 mg/kg	0.000122 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.701 mg/kg		0.575 mg/kg	0.0000575 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.796 mg/kg		0.653 mg/kg	0.0000653 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.832 mg/kg		0.682 mg/kg	0.0000682 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.292 mg/kg		0.239 mg/kg	0.0000239 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.588 mg/kg		0.482 mg/kg	0.0000482 %	✓	
28	indeno[123-cd]pyrene		205-893-2	193-39-5	0.338 mg/kg		0.277 mg/kg	0.0000277 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.0762 mg/kg		0.0625 mg/kg	0.00000625 %	✓	
30	benzo[ghi]perylene		205-883-8	191-24-2	0.37 mg/kg		0.303 mg/kg	0.0000303 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	26.9 mg/kg	1.785	39.378 mg/kg	0.00394 %	✓	
Total:								0.0507 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP20-270624--1.20

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP20-270624--1.20	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
11% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 11% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				27.3	mg/kg	1.32	32.08	mg/kg	0.00321 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				156	mg/kg	1.233	171.258	mg/kg	0.0171 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				2.2	mg/kg	2.775	5.434	mg/kg	0.000543 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				<0.02	mg/kg	1.142	<0.0228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				15.3	mg/kg	1.462	19.902	mg/kg	0.00199 %	✓	
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				26.4	mg/kg	1.126	26.454	mg/kg	0.00265 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	25.2	mg/kg		22.428	mg/kg	0.00224 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				37.2	mg/kg	2.637	87.295	mg/kg	0.00873 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				68.8	mg/kg	2.469	151.2	mg/kg	0.0151 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				6.11 pH		6.11 pH	6.11 pH		
			PH							
21	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
		201-469-6	83-32-9							
24	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7							
25	phenanthrene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
		201-581-5	85-01-8							
26	anthracene				<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
		204-371-1	120-12-7							
27	fluoranthene				<0.017 mg/kg		<0.017 mg/kg	<0.0000017 %		<LOD
		205-912-4	206-44-0							
28	pyrene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
		204-927-3	129-00-0							
29	benzo[a]anthracene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
		205-883-8	191-24-2							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				32.1 mg/kg	1.785	51.001 mg/kg	0.0051 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0585 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- ⚗ Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP21-270624--0.40

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP21-270624--0.40	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
22% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 22% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				16.1	mg/kg	1.32	16.581	mg/kg	0.00166 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				99.1	mg/kg	1.233	95.347	mg/kg	0.00953 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				1.01	mg/kg	2.775	2.186	mg/kg	0.000219 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				0.0571	mg/kg	1.142	0.0509	mg/kg	0.00000509 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				4.68	mg/kg	1.462	5.335	mg/kg	0.000534 %	✓	
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				22.4	mg/kg	1.126	19.672	mg/kg	0.00197 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	29.7	mg/kg		23.166	mg/kg	0.00232 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				20.6	mg/kg	2.637	42.366	mg/kg	0.00424 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				1.94	mg/kg	2.554	3.864	mg/kg	0.000386 %	✓	
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				80.6	mg/kg	2.469	155.24	mg/kg	0.0155 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				7.19 pH		7.19 pH	7.19 pH		
			PH							
21	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				0.0175 mg/kg		0.0137 mg/kg	0.00000137 %	✓	
		201-469-6	83-32-9							
24	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7							
25	phenanthrene				0.118 mg/kg		0.092 mg/kg	0.0000092 %	✓	
		201-581-5	85-01-8							
26	anthracene				<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
		204-371-1	120-12-7							
27	fluoranthene				0.136 mg/kg		0.106 mg/kg	0.0000106 %	✓	
		205-912-4	206-44-0							
28	pyrene				0.117 mg/kg		0.0913 mg/kg	0.00000913 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				0.0629 mg/kg		0.0491 mg/kg	0.00000491 %	✓	
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				0.0769 mg/kg		0.06 mg/kg	0.000006 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				0.0673 mg/kg		0.0525 mg/kg	0.00000525 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				0.0232 mg/kg		0.0181 mg/kg	0.00000181 %	✓	
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				0.0456 mg/kg		0.0356 mg/kg	0.00000356 %	✓	
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				0.0247 mg/kg		0.0193 mg/kg	0.00000193 %	✓	
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
		205-883-8	191-24-2							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				23.3 mg/kg	1.785	32.444 mg/kg	0.00324 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0412 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- ♻️ Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP22-270624--0.50

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP22-270624--0.50	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
14% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 14% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				47.8 mg/kg	1.32	54.276 mg/kg	0.00543 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				76.6 mg/kg	1.233	81.258 mg/kg	0.00813 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.465 mg/kg	2.775	1.11 mg/kg	0.000111 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.0554 mg/kg	1.142	0.0544 mg/kg	0.00000544 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				3.69 mg/kg	1.462	4.638 mg/kg	0.000464 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				23.5 mg/kg	1.126	22.754 mg/kg	0.00228 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	19 mg/kg		16.34 mg/kg	0.00163 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				12.7 mg/kg	2.637	28.798 mg/kg	0.00288 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				30 mg/kg	2.469	63.708 mg/kg	0.00637 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH				7.44 pH		7.44 pH	7.44 pH		
15	naphthalene				0.0126 mg/kg		0.0108 mg/kg	0.00000108 %	✓	
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		0.0145 mg/kg		0.0125 mg/kg	0.00000125 %	✓	
18	fluorene	201-695-5	86-73-7		0.0133 mg/kg		0.0114 mg/kg	0.00000114 %	✓	
19	phenanthrene	201-581-5	85-01-8		0.222 mg/kg		0.191 mg/kg	0.0000191 %	✓	
20	anthracene	204-371-1	120-12-7		<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
21	fluoranthene	205-912-4	206-44-0		0.127 mg/kg		0.109 mg/kg	0.0000109 %	✓	
22	pyrene	204-927-3	129-00-0		0.117 mg/kg		0.101 mg/kg	0.0000101 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.0583 mg/kg		0.0501 mg/kg	0.00000501 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.0972 mg/kg		0.0836 mg/kg	0.00000836 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.0716 mg/kg		0.0616 mg/kg	0.00000616 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.0198 mg/kg		0.017 mg/kg	0.0000017 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.0402 mg/kg		0.0346 mg/kg	0.00000346 %	✓	
28	indeno[123-cd]pyrene		205-893-2	193-39-5	0.0211 mg/kg		0.0181 mg/kg	0.00000181 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
30	benzo[ghi]perylene		205-883-8	191-24-2	0.0307 mg/kg		0.0264 mg/kg	0.00000264 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	12.2 mg/kg	1.785	18.73 mg/kg	0.00187 %	✓	
Total:								0.03 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP23-250624--0.20

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP23-250624--0.20	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
15% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 15% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				11.7	mg/kg	1.32	13.131	mg/kg	0.00131 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				72	mg/kg	1.233	75.49	mg/kg	0.00755 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				0.603	mg/kg	2.775	1.423	mg/kg	0.000142 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				0.315	mg/kg	1.142	0.306	mg/kg	0.0000306 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				7.71	mg/kg	1.462	9.578	mg/kg	0.000958 %	✓	
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				23.5	mg/kg	1.126	22.49	mg/kg	0.00225 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	44.2	mg/kg		37.57	mg/kg	0.00376 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				14.2	mg/kg	2.637	31.825	mg/kg	0.00318 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				1.33	mg/kg	2.554	2.887	mg/kg	0.000289 %	✓	
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				108	mg/kg	2.469	226.681	mg/kg	0.0227 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	pH				6.84	pH		6.84	pH	6.84 pH		
			PH									
15	naphthalene				1.95	mg/kg		1.658	mg/kg	0.000166 %	✓	
	601-052-00-2	202-049-5	91-20-3									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		0.0158 mg/kg		0.0134 mg/kg	0.00000134 %	✓	
17	acenaphthene	201-469-6	83-32-9		1.38 mg/kg		1.173 mg/kg	0.000117 %	✓	
18	fluorene	201-695-5	86-73-7		0.877 mg/kg		0.745 mg/kg	0.0000745 %	✓	
19	phenanthrene	201-581-5	85-01-8		7.89 mg/kg		6.707 mg/kg	0.000671 %	✓	
20	anthracene	204-371-1	120-12-7		1.5 mg/kg		1.275 mg/kg	0.000127 %	✓	
21	fluoranthene	205-912-4	206-44-0		7.8 mg/kg		6.63 mg/kg	0.000663 %	✓	
22	pyrene	204-927-3	129-00-0		6.35 mg/kg		5.398 mg/kg	0.00054 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	2.8 mg/kg		2.38 mg/kg	0.000238 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	3.09 mg/kg		2.626 mg/kg	0.000263 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	3.24 mg/kg		2.754 mg/kg	0.000275 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	1.07 mg/kg		0.91 mg/kg	0.000091 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	2.39 mg/kg		2.031 mg/kg	0.000203 %	✓	
28	indeno[123-cd]pyrene		205-893-2	193-39-5	1.37 mg/kg		1.165 mg/kg	0.000116 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.294 mg/kg		0.25 mg/kg	0.000025 %	✓	
30	benzo[ghi]perylene		205-883-8	191-24-2	1.56 mg/kg		1.326 mg/kg	0.000133 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	20.6 mg/kg	1.785	31.259 mg/kg	0.00313 %	✓	
Total:								0.0494 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP24-250624--0.50

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP24-250624--0.50	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
5.8% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 5.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				5.33 mg/kg	1.32	6.629 mg/kg	0.000663 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				25.3 mg/kg	1.233	29.397 mg/kg	0.00294 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.503 mg/kg	2.775	1.315 mg/kg	0.000132 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.223 mg/kg	1.142	0.24 mg/kg	0.000024 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				7.4 mg/kg	1.462	10.188 mg/kg	0.00102 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				15 mg/kg	1.126	15.909 mg/kg	0.00159 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	7.39 mg/kg		6.961 mg/kg	0.000696 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				24.2 mg/kg	2.637	60.107 mg/kg	0.00601 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				63 mg/kg	2.469	146.543 mg/kg	0.0147 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				6.66 pH		6.66 pH	6.66 pH		
			PH							
21	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				0.0106 mg/kg		0.0099 mg/kg	0.00000999 %	✓	
		201-469-6	83-32-9							
24	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7							
25	phenanthrene				0.0622 mg/kg		0.0586 mg/kg	0.0000586 %	✓	
		201-581-5	85-01-8							
26	anthracene				<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
		204-371-1	120-12-7							
27	fluoranthene				0.0856 mg/kg		0.0806 mg/kg	0.0000806 %	✓	
		205-912-4	206-44-0							
28	pyrene				0.0749 mg/kg		0.0706 mg/kg	0.0000706 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				0.0386 mg/kg		0.0364 mg/kg	0.0000364 %	✓	
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				0.046 mg/kg		0.0433 mg/kg	0.0000433 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				0.0469 mg/kg		0.0442 mg/kg	0.0000442 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				0.0167 mg/kg		0.0157 mg/kg	0.0000157 %	✓	
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				0.0318 mg/kg		0.03 mg/kg	0.000003 %	✓	
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
		205-883-8	191-24-2							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				12.7 mg/kg	1.785	21.357 mg/kg	0.00214 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0317 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- ♻️ Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP25-240624--0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP25-240624--0.20	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
24%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 24% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				15.6	mg/kg	1.32	15.654	mg/kg	0.00157 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				86.8	mg/kg	1.233	81.371	mg/kg	0.00814 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				0.871	mg/kg	2.775	1.837	mg/kg	0.000184 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				0.279	mg/kg	1.142	0.242	mg/kg	0.0000242 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				12.9	mg/kg	1.462	14.329	mg/kg	0.00143 %	✓	
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				33.1	mg/kg	1.126	28.323	mg/kg	0.00283 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	54.8	mg/kg		41.648	mg/kg	0.00416 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				19	mg/kg	2.637	38.074	mg/kg	0.00381 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				113	mg/kg	2.469	212.063	mg/kg	0.0212 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	TPH (C6 to C40) petroleum group				128	mg/kg		97.28	mg/kg	0.00973 %	✓	
			TPH									
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.0115 mg/kg		<0.0115 mg/kg	<0.00000115 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				6.75 pH		6.75 pH	6.75 pH		
			PH							
21	naphthalene				0.332 mg/kg		0.252 mg/kg	0.0000252 %	✓	
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				0.0177 mg/kg		0.0135 mg/kg	0.00000135 %	✓	
		205-917-1	208-96-8							
23	acenaphthene				1.3 mg/kg		0.988 mg/kg	0.0000988 %	✓	
		201-469-6	83-32-9							
24	fluorene				0.785 mg/kg		0.597 mg/kg	0.0000597 %	✓	
		201-695-5	86-73-7							
25	phenanthrene				6.5 mg/kg		4.94 mg/kg	0.000494 %	✓	
		201-581-5	85-01-8							
26	anthracene				1.1 mg/kg		0.836 mg/kg	0.0000836 %	✓	
		204-371-1	120-12-7							
27	fluoranthene				7.5 mg/kg		5.7 mg/kg	0.00057 %	✓	
		205-912-4	206-44-0							
28	pyrene				6.22 mg/kg		4.727 mg/kg	0.000473 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				2.76 mg/kg		2.098 mg/kg	0.00021 %	✓	
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				2.99 mg/kg		2.272 mg/kg	0.000227 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				3.04 mg/kg		2.31 mg/kg	0.000231 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				1.1 mg/kg		0.836 mg/kg	0.0000836 %	✓	
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				2.35 mg/kg		1.786 mg/kg	0.000179 %	✓	
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				1.3 mg/kg		0.988 mg/kg	0.0000988 %	✓	
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				0.284 mg/kg		0.216 mg/kg	0.0000216 %	✓	
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				1.45 mg/kg		1.102 mg/kg	0.00011 %	✓	
		205-883-8	191-24-2							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				27.6 mg/kg	1.785	37.446 mg/kg	0.00374 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0605 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification



Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 5000 mg/kg (0.5%)
because: Given the nature of the samples (soils) the flammability hazardous property is considered unlikely to apply.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00973%)

Classification of sample: TP26-240624--0.40

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP26-240624--0.40	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
11%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				30.6 mg/kg	1.32	35.958 mg/kg	0.0036 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				47.3 mg/kg	1.233	51.926 mg/kg	0.00519 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				0.745 mg/kg	2.775	1.84 mg/kg	0.000184 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.0523 mg/kg	1.142	0.0532 mg/kg	0.00000532 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				6.62 mg/kg	1.462	8.611 mg/kg	0.000861 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				37 mg/kg	1.126	37.076 mg/kg	0.00371 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	21.8 mg/kg		19.402 mg/kg	0.00194 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				20 mg/kg	2.637	46.933 mg/kg	0.00469 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				51.3 mg/kg	2.469	112.741 mg/kg	0.0113 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH		PH		4.62 pH		4.62 pH	4.62 pH		
15	naphthalene				0.0401 mg/kg		0.0357 mg/kg	0.00000357 %	✓	
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		0.0167 mg/kg		0.0149 mg/kg	0.00000149 %	✓	
18	fluorene	201-695-5	86-73-7		0.0324 mg/kg		0.0288 mg/kg	0.00000288 %	✓	
19	phenanthrene	201-581-5	85-01-8		0.919 mg/kg		0.818 mg/kg	0.0000818 %	✓	
20	anthracene	204-371-1	120-12-7		<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
21	fluoranthene	205-912-4	206-44-0		0.145 mg/kg		0.129 mg/kg	0.0000129 %	✓	
22	pyrene	204-927-3	129-00-0		0.291 mg/kg		0.259 mg/kg	0.0000259 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.0906 mg/kg		0.0806 mg/kg	0.00000806 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.178 mg/kg		0.158 mg/kg	0.0000158 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.0676 mg/kg		0.0602 mg/kg	0.00000602 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.0165 mg/kg		0.0147 mg/kg	0.00000147 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.0315 mg/kg		0.028 mg/kg	0.0000028 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	13.4 mg/kg	1.785	21.29 mg/kg	0.00213 %	✓	
Total:								0.0345 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP27-240624--0.50

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP27-240624--0.50	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
11% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 11% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				8.62 mg/kg	1.32	10.129 mg/kg	0.00101 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				74 mg/kg	1.233	81.238 mg/kg	0.00812 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				1.15 mg/kg	2.775	2.841 mg/kg	0.000284 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				0.109 mg/kg	1.142	0.111 mg/kg	0.0000111 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				12.3 mg/kg	1.462	16 mg/kg	0.0016 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				36.8 mg/kg	1.126	36.875 mg/kg	0.00369 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	24.3 mg/kg		21.627 mg/kg	0.00216 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				45.3 mg/kg	2.637	106.303 mg/kg	0.0106 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				111 mg/kg	2.469	243.942 mg/kg	0.0244 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	TPH (C6 to C40) petroleum group				27.1 mg/kg		24.119 mg/kg	0.00241 %	✓	
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.0115 mg/kg		<0.0115 mg/kg	<0.00000115 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				7.24 pH		7.24 pH	7.24 pH		
			PH							
21	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
		201-469-6	83-32-9							
24	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7							
25	phenanthrene				0.0357 mg/kg		0.0318 mg/kg	0.00000318 %	✓	
		201-581-5	85-01-8							
26	anthracene				0.0351 mg/kg		0.0312 mg/kg	0.00000312 %	✓	
		204-371-1	120-12-7							
27	fluoranthene				<0.017 mg/kg		<0.017 mg/kg	<0.0000017 %		<LOD
		205-912-4	206-44-0							
28	pyrene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
		204-927-3	129-00-0							
29	benzo[a]anthracene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
		205-883-8	191-24-2							
37	vanadium { divanadium pentoxide; vanadium pentoxide }				16.8 mg/kg	1.785	26.692 mg/kg	0.00267 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0578 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- 🧪 Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification



Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 5000 mg/kg (0.5%)
because: Given the nature of the samples (soils) the flammability hazardous property is considered unlikely to apply.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00241%)

Classification of sample: TP28-240624--0.20

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP28-240624--0.20	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
20% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 20% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				14.7	mg/kg	1.32	15.527	mg/kg	0.00155 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				90	mg/kg	1.233	88.812	mg/kg	0.00888 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				0.858	mg/kg	2.775	1.905	mg/kg	0.00019 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				0.353	mg/kg	1.142	0.323	mg/kg	0.0000323 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				14.1	mg/kg	1.462	16.486	mg/kg	0.00165 %	✓	
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				35.7	mg/kg	1.126	32.155	mg/kg	0.00322 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	51.6	mg/kg		41.28	mg/kg	0.00413 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				0.13	mg/kg	1.353	0.141	mg/kg	0.0000141 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				20.9	mg/kg	2.637	44.085	mg/kg	0.00441 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				113	mg/kg	2.469	223.224	mg/kg	0.0223 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	pH				7.08	pH		7.08	pH	7.08 pH		
			PH									
15	naphthalene				0.404	mg/kg		0.323	mg/kg	0.0000323 %	✓	
	601-052-00-2	202-049-5	91-20-3									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		0.0169 mg/kg		0.0135 mg/kg	0.0000135 %	✓	
17	acenaphthene	201-469-6	83-32-9		0.879 mg/kg		0.703 mg/kg	0.0000703 %	✓	
18	fluorene	201-695-5	86-73-7		0.594 mg/kg		0.475 mg/kg	0.0000475 %	✓	
19	phenanthrene	201-581-5	85-01-8		4.61 mg/kg		3.688 mg/kg	0.000369 %	✓	
20	anthracene	204-371-1	120-12-7		0.782 mg/kg		0.626 mg/kg	0.0000626 %	✓	
21	fluoranthene	205-912-4	206-44-0		5.08 mg/kg		4.064 mg/kg	0.000406 %	✓	
22	pyrene	204-927-3	129-00-0		4.26 mg/kg		3.408 mg/kg	0.000341 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	1.97 mg/kg		1.576 mg/kg	0.000158 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	2.27 mg/kg		1.816 mg/kg	0.000182 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	2.11 mg/kg		1.688 mg/kg	0.000169 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.761 mg/kg		0.609 mg/kg	0.0000609 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	1.53 mg/kg		1.224 mg/kg	0.000122 %	✓	
28	indeno[123-cd]pyrene		205-893-2	193-39-5	0.836 mg/kg		0.669 mg/kg	0.0000669 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.21 mg/kg		0.168 mg/kg	0.0000168 %	✓	
30	benzo[ghi]perylene		205-883-8	191-24-2	0.87 mg/kg		0.696 mg/kg	0.0000696 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	25.8 mg/kg	1.785	36.846 mg/kg	0.00368 %	✓	
Total:								0.053 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP29-280624-0.20-0.10

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP29-280624-0.20-0.10	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
22%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 22% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				31.3	mg/kg	1.32	32.234	mg/kg	0.00322 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				135	mg/kg	1.233	129.887	mg/kg	0.013 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				1.17	mg/kg	2.775	2.533	mg/kg	0.000253 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				0.107	mg/kg	1.142	0.0953	mg/kg	0.00000953 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				<1.5	mg/kg	1.462	<2.192	mg/kg	<0.000219 %		<LOD
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				30	mg/kg	1.126	26.346	mg/kg	0.00263 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	60.5	mg/kg		47.19	mg/kg	0.00472 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				0.242	mg/kg	1.353	0.255	mg/kg	0.0000255 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				16.2	mg/kg	2.637	33.317	mg/kg	0.00333 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				1.59	mg/kg	2.554	3.167	mg/kg	0.000317 %	✓	
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				100	mg/kg	2.469	192.605	mg/kg	0.0193 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	pH				8.22	pH		8.22	pH	8.22 pH		
			PH									
15	naphthalene				0.256	mg/kg		0.2	mg/kg	0.00002 %	✓	
	601-052-00-2	202-049-5	91-20-3									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		0.125 mg/kg		0.0975 mg/kg	0.0000975 %	✓	
17	acenaphthene	201-469-6	83-32-9		0.397 mg/kg		0.31 mg/kg	0.000031 %	✓	
18	fluorene	201-695-5	86-73-7		0.572 mg/kg		0.446 mg/kg	0.0000446 %	✓	
19	phenanthrene	201-581-5	85-01-8		1.25 mg/kg		0.975 mg/kg	0.0000975 %	✓	
20	anthracene	204-371-1	120-12-7		0.0823 mg/kg		0.0642 mg/kg	0.0000642 %	✓	
21	fluoranthene	205-912-4	206-44-0		0.192 mg/kg		0.15 mg/kg	0.000015 %	✓	
22	pyrene	204-927-3	129-00-0		0.405 mg/kg		0.316 mg/kg	0.0000316 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.0775 mg/kg		0.0604 mg/kg	0.0000604 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.0714 mg/kg		0.0557 mg/kg	0.0000557 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.0589 mg/kg		0.0459 mg/kg	0.0000459 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.0535 mg/kg		0.0417 mg/kg	0.0000417 %	✓	
28	indeno[123-cd]pyrene		205-893-2	193-39-5	0.0295 mg/kg		0.023 mg/kg	0.000023 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
30	benzo[ghi]perylene		205-883-8	191-24-2	0.0534 mg/kg		0.0417 mg/kg	0.0000417 %	✓	
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	36.5 mg/kg	1.785	50.824 mg/kg	0.00508 %	✓	
Total:								0.0528 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP29-280624-1.00-0.90

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
TP29-280624-1.00-0.90	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
14% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 14% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				3.32 mg/kg	1.32	3.77 mg/kg	0.000377 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	barium { barium sulphide }				125 mg/kg	1.233	132.601 mg/kg	0.0133 %	✓	
	016-002-00-X	244-214-4	21109-95-5							
3	beryllium { beryllium oxide }				1.4 mg/kg	2.775	3.342 mg/kg	0.000334 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { diboron trioxide }				<1 mg/kg	3.22	<3.22 mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
5	cadmium { cadmium oxide }				<0.02 mg/kg	1.142	<0.0228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				12.1 mg/kg	1.462	15.209 mg/kg	0.00152 %	✓	
		215-160-9	1308-38-9							
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6 mg/kg	2.27	<1.362 mg/kg	<0.000136 %		<LOD
	024-017-00-8									
8	copper { dicopper oxide; copper (I) oxide }				33.1 mg/kg	1.126	32.05 mg/kg	0.0032 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	19 mg/kg		16.34 mg/kg	0.00163 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel sulfate }				52.8 mg/kg	2.637	119.727 mg/kg	0.012 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
12	selenium { nickel selenate }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
13	zinc { zinc sulphate }				108 mg/kg	2.469	229.348 mg/kg	0.0229 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	pH				7.11 pH		7.11 pH	7.11 pH		
15	naphthalene				<0.009 mg/kg		<0.009 mg/kg	<0.0000009 %		<LOD
	601-052-00-2	202-049-5	91-20-3							



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	acenaphthylene	205-917-1	208-96-8		<0.012 mg/kg		<0.012 mg/kg	<0.0000012 %		<LOD
17	acenaphthene	201-469-6	83-32-9		<0.008 mg/kg		<0.008 mg/kg	<0.0000008 %		<LOD
18	fluorene	201-695-5	86-73-7		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	phenanthrene	201-581-5	85-01-8		<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
20	anthracene	204-371-1	120-12-7		<0.016 mg/kg		<0.016 mg/kg	<0.0000016 %		<LOD
21	fluoranthene	205-912-4	206-44-0		<0.017 mg/kg		<0.017 mg/kg	<0.0000017 %		<LOD
22	pyrene	204-927-3	129-00-0		<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.0132 mg/kg		0.0114 mg/kg	0.00000114 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.014 mg/kg		<0.014 mg/kg	<0.0000014 %		<LOD
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
28	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.018 mg/kg		<0.018 mg/kg	<0.0000018 %		<LOD
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.023 mg/kg		<0.023 mg/kg	<0.0000023 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	19.9 mg/kg	1.785	30.552 mg/kg	0.00306 %	✓	
Total:								0.059 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TP30-280624-0.30-0.20

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
TP30-280624-0.30-0.20	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
20%	Entry:
(wet weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				23.5	mg/kg	1.32	24.822	mg/kg	0.00248 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	barium { barium sulphide }				140	mg/kg	1.233	138.151	mg/kg	0.0138 %	✓	
	016-002-00-X	244-214-4	21109-95-5									
3	beryllium { beryllium oxide }				1.71	mg/kg	2.775	3.797	mg/kg	0.00038 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { diboron trioxide }				<1	mg/kg	3.22	<3.22	mg/kg	<0.000322 %		<LOD
	005-008-00-8	215-125-8	1303-86-2									
5	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				<9.6	mg/kg	1.462	<14.031	mg/kg	<0.0014 %		<LOD
		215-160-9	1308-38-9									
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.6	mg/kg	2.27	<1.362	mg/kg	<0.000136 %		<LOD
	024-017-00-8											
8	copper { dicopper oxide; copper (I) oxide }				42.5	mg/kg	1.126	38.28	mg/kg	0.00383 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	63.9	mg/kg		51.12	mg/kg	0.00511 %	✓	
	082-001-00-6											
10	mercury { mercury dichloride }				<1	mg/kg	1.353	<1.353	mg/kg	<0.000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
11	nickel { nickel sulfate }				26.5	mg/kg	2.637	55.898	mg/kg	0.00559 %	✓	
	028-009-00-5	232-104-9	7786-81-4									
12	selenium { nickel selenate }				<10	mg/kg	2.554	<25.538	mg/kg	<0.00255 %		<LOD
	028-031-00-5	239-125-2	15060-62-5									
13	zinc { zinc sulphate }				98.3	mg/kg	2.469	194.185	mg/kg	0.0194 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	TPH (C6 to C40) petroleum group				247	mg/kg		197.6	mg/kg	0.0198 %	✓	
			TPH									
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									



#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
16	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.015 mg/kg		<0.015 mg/kg	<0.0000015 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
20	pH				7.51 pH		7.51 pH	7.51 pH		
			PH							
21	naphthalene				1.09 mg/kg		0.872 mg/kg	0.0000872 %	✓	
	601-052-00-2	202-049-5	91-20-3							
22	acenaphthylene				<0.024 mg/kg		<0.024 mg/kg	<0.0000024 %		<LOD
		205-917-1	208-96-8							
23	acenaphthene				1.72 mg/kg		1.376 mg/kg	0.000138 %	✓	
		201-469-6	83-32-9							
24	fluorene				1.16 mg/kg		0.928 mg/kg	0.0000928 %	✓	
		201-695-5	86-73-7							
25	phenanthrene				7.92 mg/kg		6.336 mg/kg	0.000634 %	✓	
		201-581-5	85-01-8							
26	anthracene				1.45 mg/kg		1.16 mg/kg	0.000116 %	✓	
		204-371-1	120-12-7							
27	fluoranthene				8.19 mg/kg		6.552 mg/kg	0.000655 %	✓	
		205-912-4	206-44-0							
28	pyrene				6.91 mg/kg		5.528 mg/kg	0.000553 %	✓	
		204-927-3	129-00-0							
29	benzo[a]anthracene				3.49 mg/kg		2.792 mg/kg	0.000279 %	✓	
	601-033-00-9	200-280-6	56-55-3							
30	chrysene				3.95 mg/kg		3.16 mg/kg	0.000316 %	✓	
	601-048-00-0	205-923-4	218-01-9							
31	benzo[b]fluoranthene				3.5 mg/kg		2.8 mg/kg	0.00028 %	✓	
	601-034-00-4	205-911-9	205-99-2							
32	benzo[k]fluoranthene				1.24 mg/kg		0.992 mg/kg	0.0000992 %	✓	
	601-036-00-5	205-916-6	207-08-9							
33	benzo[a]pyrene; benzo[def]chrysene				2.59 mg/kg		2.072 mg/kg	0.000207 %	✓	
	601-032-00-3	200-028-5	50-32-8							
34	indeno[123-cd]pyrene				1.3 mg/kg		1.04 mg/kg	0.000104 %	✓	
		205-893-2	193-39-5							
35	dibenz[a,h]anthracene				0.362 mg/kg		0.29 mg/kg	0.000029 %	✓	
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				1.39 mg/kg		1.112 mg/kg	0.000111 %	✓	
		205-883-8	191-24-2							
37	vanadium { divanadium pentaoxide; vanadium pentoxide }				34.1 mg/kg	1.785	48.7 mg/kg	0.00487 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
38	2-methoxy-2-methylbutane; tert-amyl methyl ether				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-213-00-2	213-611-4	994-05-8							
Total:								0.0835 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification



Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 5000 mg/kg (0.5%)
because: Given the nature of the samples (soils) the flammability hazardous property is considered unlikely to apply.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0198%)

Appendix A: Classifier defined and non GB MCL determinands

- **barium sulphide** (EC Number: 244-214-4, CAS Number: 21109-95-5)

GB MCL index number: 016-002-00-X

Description/Comments:

Additional Hazard Statement(s): EUH031 >= 0.8 %

Reason for additional Hazards Statement(s):

20 Nov 2021 - EUH031 >= 0.8 % hazard statement sourced from: WM3, Table C12.2

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database

Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H332, Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Resp. Sens. 1; H334, Skin Sens. 1; H317, Repr. 1B; H360FD, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **lead compounds with the exception of those specified elsewhere in this Annex**

GB MCL index number: 082-001-00-6

Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html. Review date 29/09/2015

- **pH** (CAS Number: PH)

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H302, Acute Tox. 1; H330, Acute Tox. 1; H310, Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Aquatic Chronic 2; H411

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Acute Tox. 4; H302, Eye Irrit. 2; H319, STOT SE 3; H335, Carc. 2; H351, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Skin Irrit. 2; H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Eye Irrit. 2; H319, STOT SE 3; H335, Skin Irrit. 2; H315, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Acute Tox. 4; H302, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

▀ **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

▀ **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Carc. 2; H351

▀ **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 23 Jul 2015

Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

▀ **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

▀ **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4

Description/Comments:

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds (edit as required)

barium {barium sulphide}

Chromium is at low concentration and therefore barium chromate is considered unlikely to be present within the soils.

beryllium {beryllium oxide}

Reasonable case CLP species based on hazard statements/molecular weight. Industrial sources include: most common (non alloy) form, used in ceramics (edit as required)

boron {diboron trioxide}

Reasonable case CLP species based on hazard statements/ molecular weight, physical form and low solubility. Industrial sources include: fluxing agent for glass/enamels; additive for fibre optics, borosilicate glass (edit as required)

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. (edit as required) Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history (edit as required)

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass (edit as required)

chromium in chromium(VI) compounds {chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex}

Worst case species based on hazard statements/molecular weight (edit as required)

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. (edit as required) Worst case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected. (edit as required)



lead {lead compounds with the exception of those specified elsewhere in this Annex}

Chromium is at low concentration and therefore lead chromate is considered unlikely to be present within the soils.

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

nickel {nickel sulfate}

Chromium is at low concentration and therefore nickel chromate is considered unlikely to be present within the soils.

selenium {nickel selenate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

zinc {zinc sulphate}

Chromium is at low concentration and therefore zinc chromate is considered unlikely to be present within the soils.

vanadium {divanadium pentaoxide; vanadium pentoxide}

Worse case

Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition v1.2.GB - Oct 2021**

HazWasteOnline Classification Engine Version: 2024.213.6193.11387 (31 Jul 2024)

HazWasteOnline Database: 2024.213.6193.11387 (31 Jul 2024)

This classification utilises the following guidance and legislation:

WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021

CLP Regulation - Regulation 1272/2008/EC of 16 December 2008

1st ATP - Regulation 790/2009/EC of 10 August 2009

2nd ATP - Regulation 286/2011/EC of 10 March 2011

3rd ATP - Regulation 618/2012/EU of 10 July 2012

4th ATP - Regulation 487/2013/EU of 8 May 2013

Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013

5th ATP - Regulation 944/2013/EU of 2 October 2013

6th ATP - Regulation 605/2014/EU of 5 June 2014

WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014

Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014

7th ATP - Regulation 2015/1221/EU of 24 July 2015

8th ATP - Regulation (EU) 2016/918 of 19 May 2016

9th ATP - Regulation (EU) 2016/1179 of 19 July 2016

10th ATP - Regulation (EU) 2017/776 of 4 May 2017

HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017

13th ATP - Regulation (EU) 2018/1480 of 4 October 2018

14th ATP - Regulation (EU) 2020/217 of 4 October 2019

15th ATP - Regulation (EU) 2020/1182 of 19 May 2020

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)

Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020

The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020

GB MCL List - version 1.1 of 09 June 2021

GB MCL List v2.0 - version 2.0 of 20th October 2023

GB MCL List v3.0 - version 3.0 of 11th January 2024

GB MCL List v4.0 - version 4.0 of 2nd March 2024

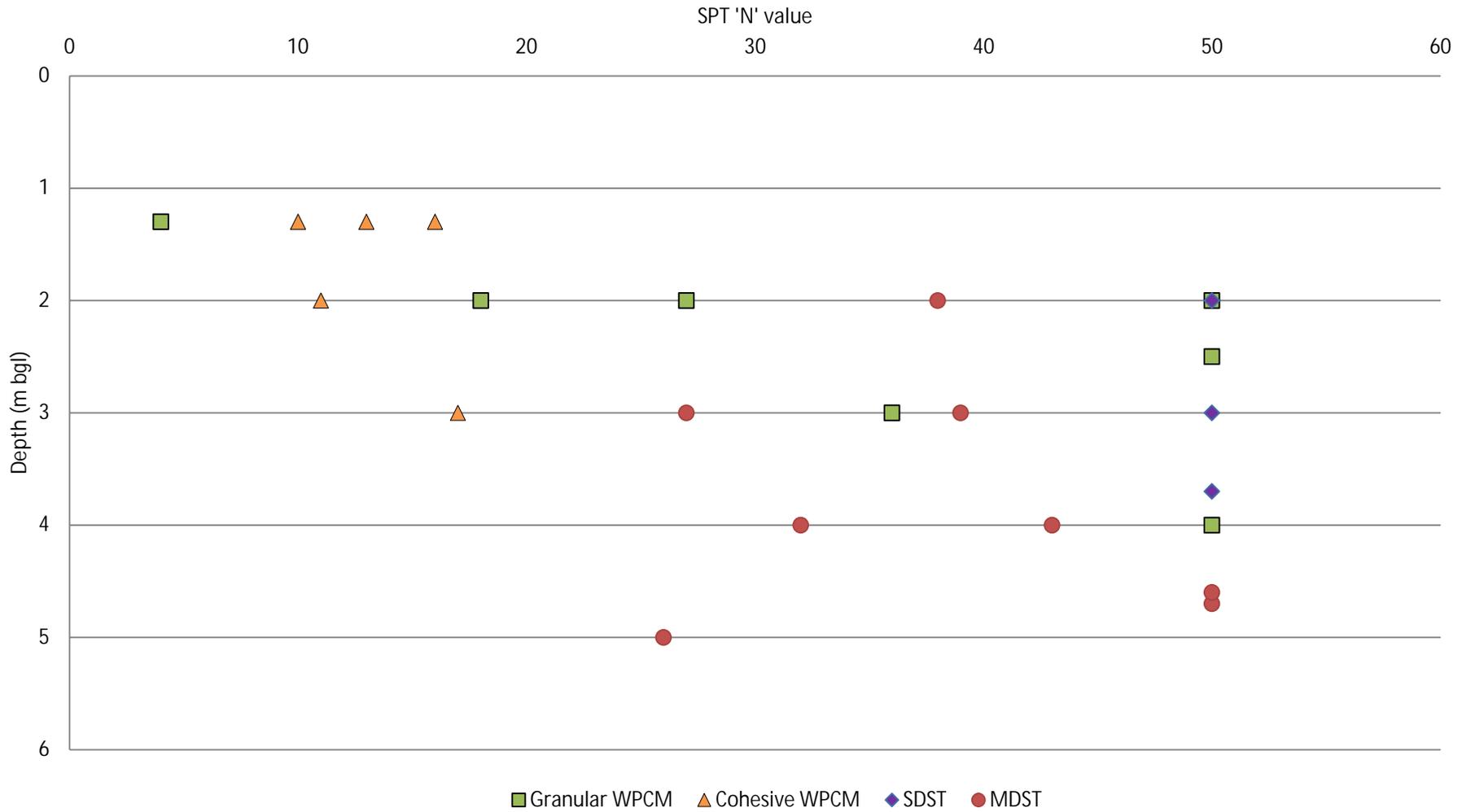
GB MCL List v5.0 - version 5.0 of 26th June 2024

Appendix K

GEOTECHNICAL PLOTS



SPT 'N' vs Depth PLCM



WSP UK Limited
 3 Wellington Place, Leeds, LS1 4AP
 Tel: +44 (0) 113 395 6200
[http:// www.wspgroup.com](http://www.wspgroup.com)

CLIENT: Boom Power LTD

PROJECT: Low Farm

TITLE: Standard penetration test (N value) vs. depth
 PLCM

SCALE@SIZE: NTS

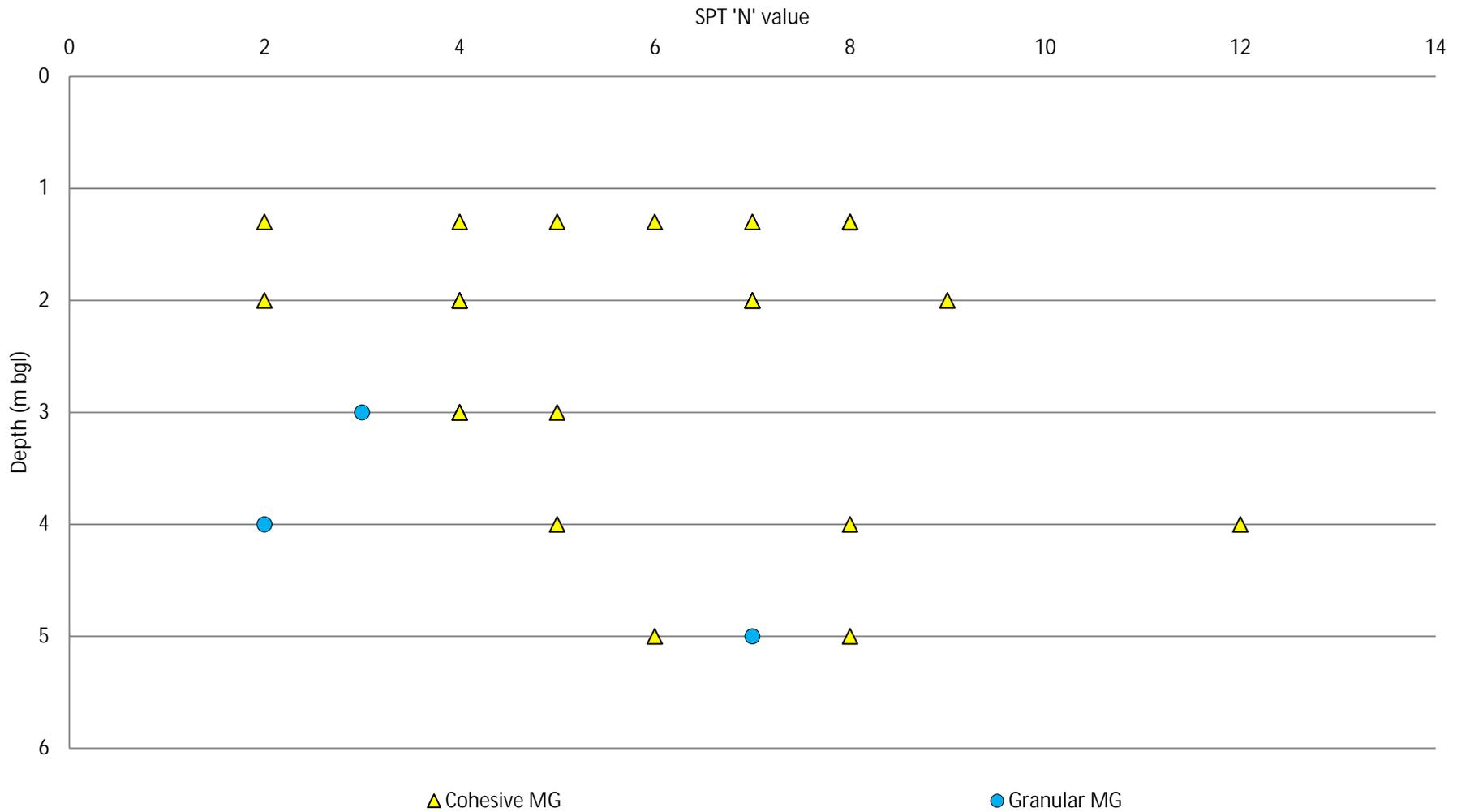
DESIGN/DRAWN: GV

REPORT No:
 UK0037228.1558-100

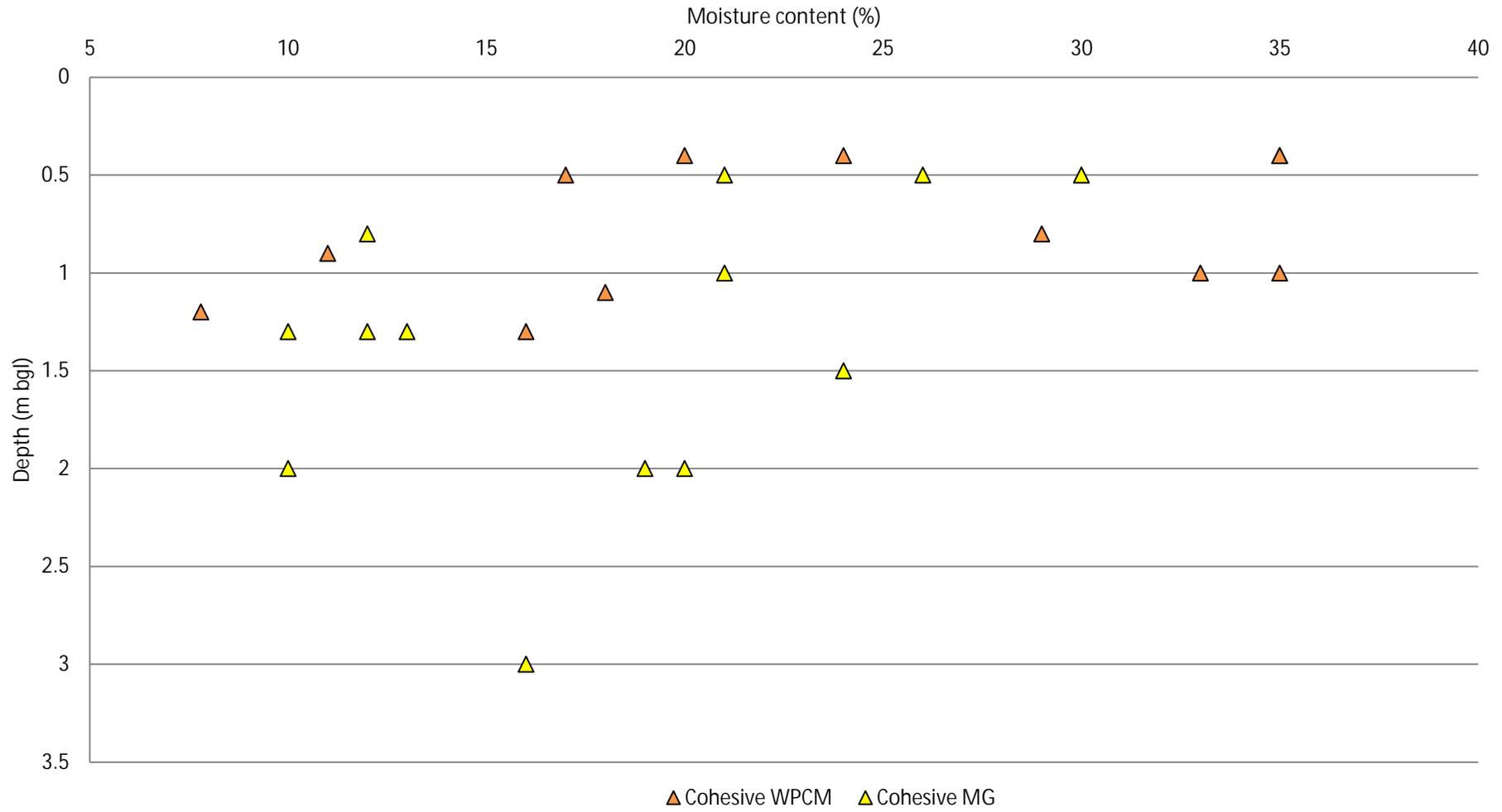
DRAWING No:
 Plot 01

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SPT 'N' vs Depth Made Ground



Moisture content vs Depth



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CLIENT: Boom Power LTD
 PROJECT: Low Farm

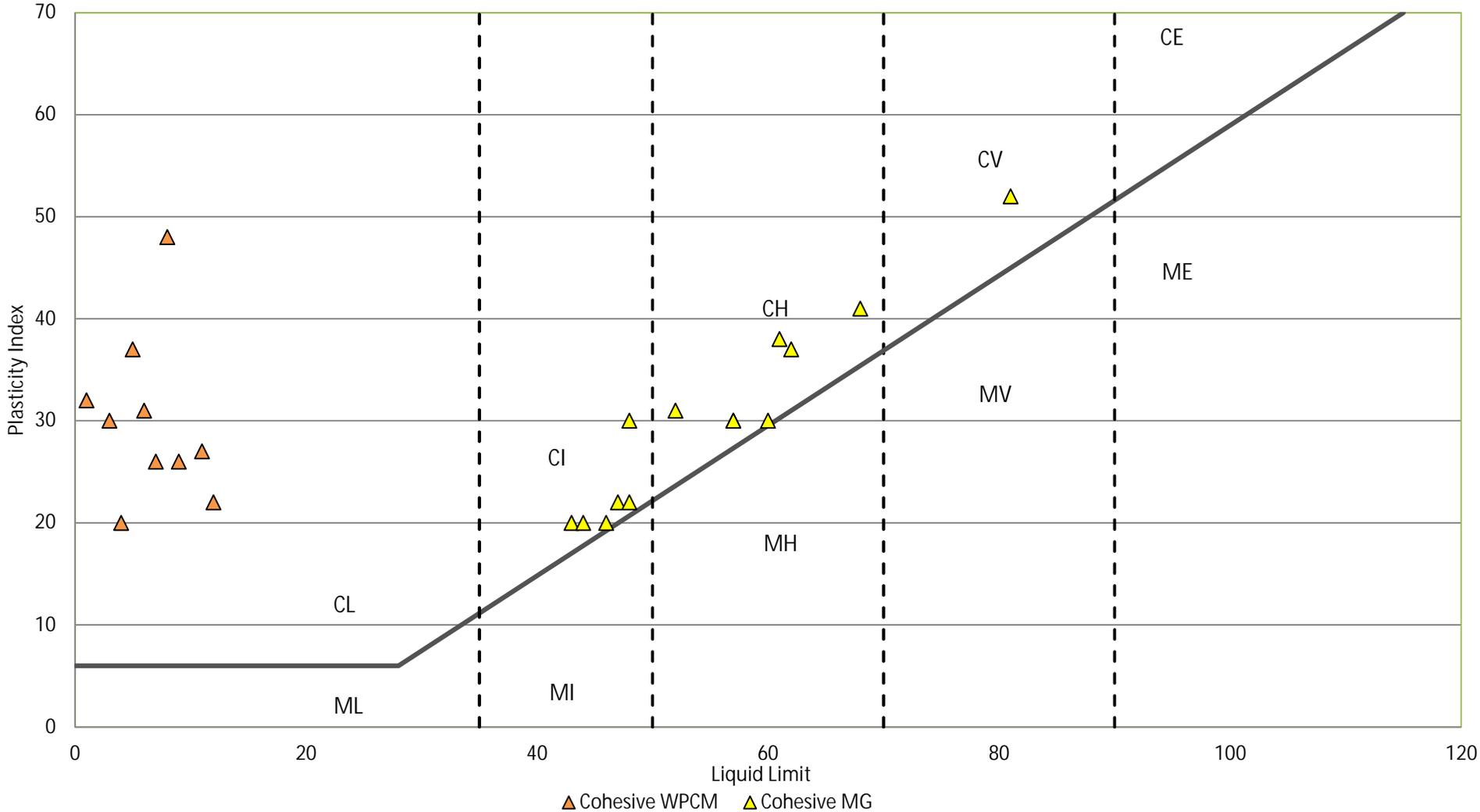
TITLE: Moisture content vs. depth
 SCALE@SIZE: NTS
 DESIGN/DRAWN: GV

REPORT No: UK0037228.1558-100

DRAWING No: Plot 03

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Plasticity chart



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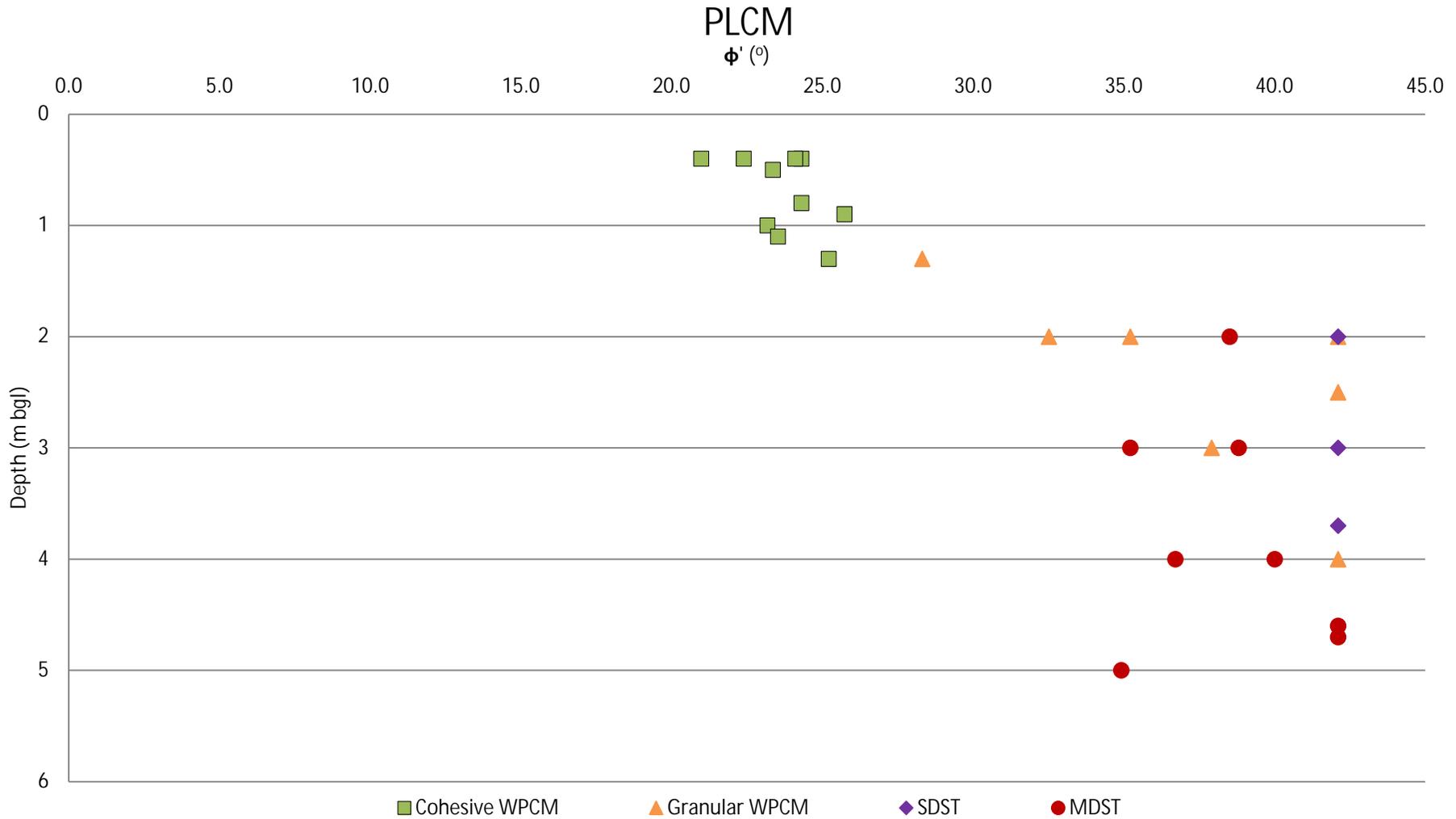
TITLE: Plasticity chart
 SCALE@SIZE: NTS
 DESIGN/DRAWN: GV

REPORT No: UK0037228.1558-100

DRAWING No: Plot 04

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Effective angle of friction (plasticity index and SPT) vs depth



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CLIENT: Boom Power LTD

PROJECT: Low Farm

TITLE: Effective angle of friction (plasticity index and SPT) vs. depth PCLM

SCALE@SIZE:

NTS

DESIGN/DRAWN:

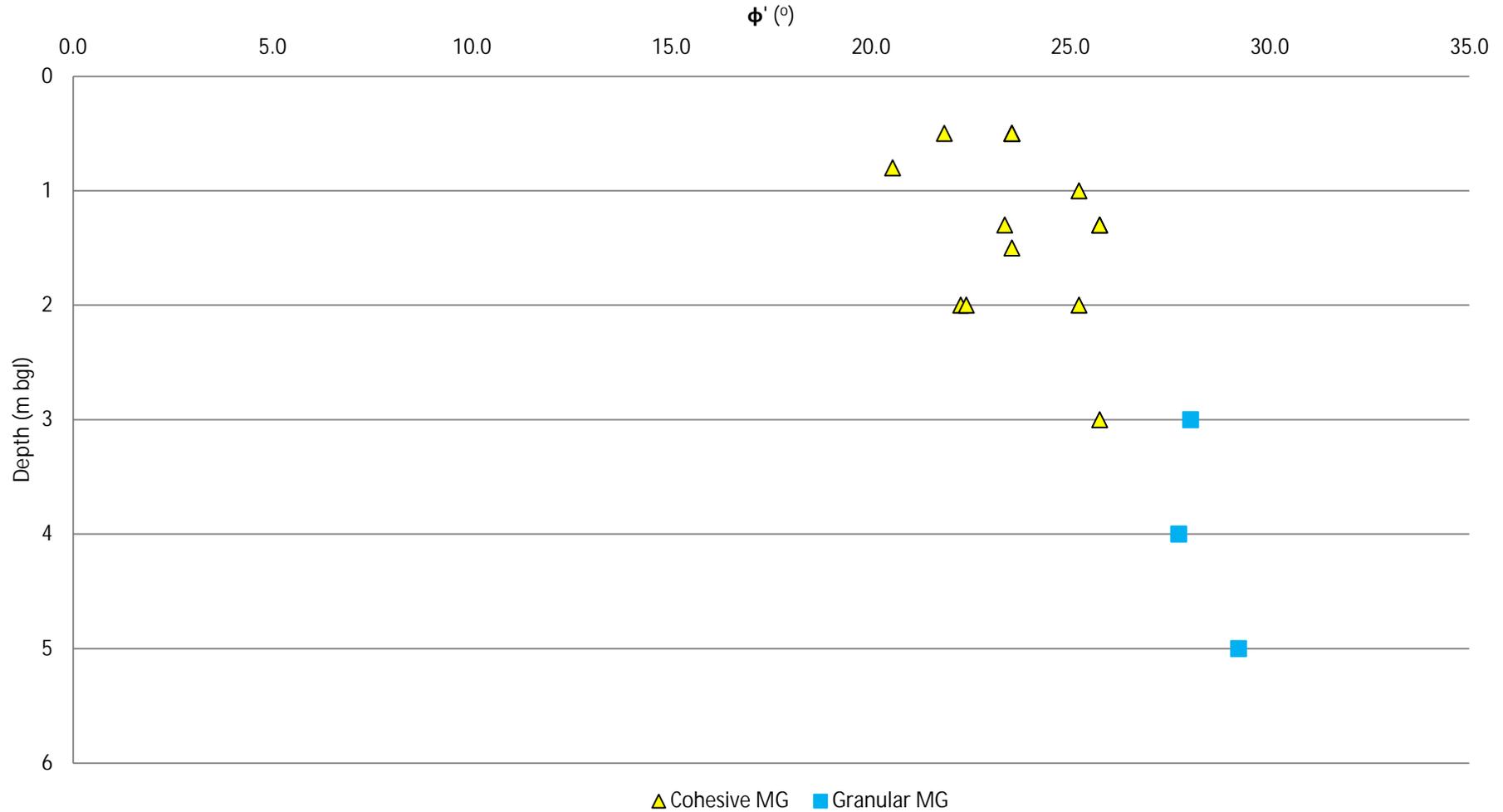
GV

REPORT No:
JK0037228.1558-100

DRAWING No:
Plot 05

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Effective angle of friction (plasticity index and SPT) vs depth Made Ground



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CLIENT: Boom Power LTD

PROJECT: Low Farm

TITLE: Effective angle of friction (plasticity index and SPT) vs. depth Made Ground

SCALE@SIZE:

NTS

DESIGN/DRAWN:

GV

REPORT No: JK0037228.1558-100

DRAWING No: Plot 06

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