ENERGY AND CLIMATE CHANGE ENVIRONMENT AND SUSTAINABILITY INFRASTRUCTURE AND UTILITIES LAND AND PROPERTY MINING AND MINERAL PROCESSING MINERAL ESTATES WASTE RESOURCE MANAGEMENT

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WALSALL COUNCIL

MIDDLEMORE LANE WTS AND HWRC

SITE CONDITION REPORT

JUNE 2024





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JUNE 2024

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BR10255-002	Proposed Permit Boundary	1:500@A0



1 INTRODUCTION

- 1.1.1 Walsall Council proposes to develop a combined Waste Transfer Station (WTS) and Household Waste Recycling Centre (HWRC), including commercial waste recycling centre (referred to as 'small traders' scheme') at Middlemore Lane, Aldridge, Walsall.
- 1.1.2 The site is located north of Middlemore Lane on the former McKechnie Brass Limited factory. It is bounded to the north by Daw End Branch canal, south by Middlemore Lane, west by Dumblederry Lane and existing commercial premises. Section 2 provides the site's full environmental setting and history.
- 1.1.3 The activities undertaken on the site will classify as a waste operation under the Environmental Permitting (England and Wales) Regulations 2016. The WTS will accept up to 125,000 tonnes per year of non-hazardous & hazardous household, commercial and industrial waste, and the HWRC will accept up to 55,000 tonnes per year of household and similar commercial and industrial waste. Treatment of wastes will be limited to manual sorting, separation, shredding or compaction. Section 3 provides details of the permitted activities.
- 1.1.4 The site will be operated under an Environmental Management System (EMS) accredited to ISO14001.
- 1.1.5 This report supports the permit application by identifying previous uses of the site and resulting ground conditions and identifying any contamination that may have resulted. Polluting substances that may be used or generated on site and pollution prevention measures are also identified and described.



2 SITE DETAILS

2.1 Site Location

- 2.1.1 Middlemore WTS and HWRS is located on Middlemore Lane, Aldridge, northeast of Walsall. The site's nearest postcode is WS9 8DL, centred around grid reference NGR SK 04914 00815. A site layout plan, development boundary and permit boundary (shown in green) are shown on drawing BR10255-002.
- 2.1.2 The site sits on an industrial estate, with the surrounding area to the north and west predominantly industrial and commercial units.
- 2.1.3 The east and south of the site is predominantly residential. The nearest residential property is located approximately 170m northeast of the Site on The Briars cul de sac. There is a field located 90m east of the site currently used for sports recreation purposes.
- 2.1.4 A number of designated habitat receptors are located within 2km of the site, including Stubbers Green Bog SSSI located 630m to the north, Swan Pool & The Swag SSSI 1,200m to the north, and Jockey Fields 1,800m to the north. Local Nature Reserves (LNR) Hay Head Wood, and Cuckoo's Nook and the Dingle are located 1,600m and 1,650m south of the site, respectively, each containing areas of designated ancient woodland. Park Lime Pits LNR is located approximately 1,600m west of the permit boundary. Further ancient woodland is located approximately 750m northeast at Leigh's Wood. There are no further designated habitats or European sites within 2km of the permit boundary.
- 2.2 Site Details
- 2.2.1 The site will operate a combined Waste Transfer Station (WTS) and Household Waste Recycling Centre (HWRC), which will include a small trader's scheme handling a selection of waste streams from commercial operators similar to what would be expected from households.
- 2.2.2 The WTS will accept wastes collected through the Council's services, primarily consisting of household waste collections, with secondary streams from grounds maintenance and street sweepings services. Household waste streams will be mixed residual waste (black bin waste), garden waste, mixed dry recycling waste and material collected through bulky waste collections. The facility has been designed with capacity and capability to accept future segregated waste streams, for example food waste.



- 2.2.3 The WTS will be primarily housed in a purpose built, covered building to the northwest of the development site. External bays have been allocated for the storage of suitable materials.
- 2.2.4 The HWRC will be located in the east of the development site, and the small traders' scheme will be located to the south of the WTS. All waste delivered to the HWRC and small traders' scheme will be stored in appropriate sealed containers. The majority of storage will be provided by RoRo skips for separate collection of different material streams. Suitable fully sealed or caged container provision will be provided as appropriate (i.e. for liquid wastes, WEEE, asbestos and dry recyclates). Containers for liquids will be bunded to 110% of the capacity of the primary container.
- 2.2.5 In the WTS, waste will be stored in waste delivery bays consisting of concrete push walls and impermeable surfaces with secondary, site-wide, containment. Site drainage and infrastructure will be regularly inspected for its condition.
- 2.2.6 The whole site will benefit from a sealed surface water drainage system. This also effectively provides secondary containment for the reception areas and outloading areas of the facility.
- 2.2.7 There will be no direct emissions to surface water or groundwater from the WTS, which will drain to foul sewer. Only clean water will be discharged to local surface water sewer system. The drainage system for the HWRC is equipped with interceptors and an Aqua-Filter and Aqua-Swirl to remove oil and suspended solids prior to emission to surface water. Both systems can be isolated in the event of an emergency, such as a fire or major spillage, to prevent water leaving site.



3 CONDITION OF LAND

3.1 Environmental Setting

Superficial Geology

3.1.1 According to BGS mapping, the superficial deposits underlying the southern extent of the site are Devensian Till consisting of diamicton, classified as a Secondary undifferentiated aquifer. In the northern extent the site is underlain by Devensian fluvioglacial deposits consisting of sand and gravel, classified as a Secondary A aquifer.

Bedrock Geology

3.1.2 BGS Mapping indicates that the southern extent of the site is underlain by bedrock geology of the Pennine Middle Coal Measures Formation consisting of mudstone, siltstone and sandstone, while the northern extent is underlain by mudstone, sandstone and conglomerate of the Etruria Formation. Both are classed as a Secondary A Aquifer.

Surface Water Features

- 3.1.3 There are no natural watercourses within the site area, with the closest Main River being the Ford Brook, located over 2.5km to the west. The Daw End Branch Canal flows adjacent to a section of the northern site boundary.
- 3.1.4 The closest natural watercourse is the Anchor Brook which is located approximately 50m to the north-east of the site at its closest point. The watercourse flows in a northwesterly direction in an open channel across the playing fields to the south-east of the site. The watercourse then enters a culvert adjacent to Middlemore Lane, approximately 150m to the east of the site, passing beneath industrial units and sports fields to the east of the site, and then discharging at a small inlet on the southern bank of the canal, approximately 35m to the north-east of the site.
- 3.1.5 An open channel from the canal overflow emerges from a culvert approximately 150m to the north of the site within the industrial estate. The open channel continues to flow north-westwards, passing beneath the Ibstock Brick quarry, then discharges to 'The Swag' waterbody, which ultimately discharges to the Ford Brook.
- 3.1.6 The Environment Agency's Flood Map for Planning shows the site to be located wholly within Flood Zone 1, which indicates a low probability of flooding (less than a 1 in 1,000 annual probability of river or sea flooding).



- 3.1.7 The 'Environmental Network Flood Risk' map in the Walsall Council Site Allocation Document (SAD) shows that eastern areas of the site are located within an area of Flood Zone 3, however a Flood Risk Assessment undertaken by Wardell Armstrong in January 2022 found that more detailed modelling of surface water proved the site to be located within Flood Zone 1 and 2 (low to medium probability of flooding).
- 3.2 Site History
- 3.2.1 The site is located on the former McKechnie Brass Limited factory, built in 1954 and demolished in early 2021. Prior to this, the site was an area of agricultural fields.
- 3.2.2 A review of historical information and maps of the area has been completed. Table 1 below summarises the site's history.

Table 3:1 Summary of Land Use			
Date	Site Land Use	Adjacent Land Use	
c.1903	Agricultural fields	Predominantly agricultural fields. Land labelled Victoria colliery (disused) including several buildings and 2 shafts adjacent to the site on south side of Middlemore Lane. Daw End Branch canal present adjacent to site's northern extent. Railway line labelled Walsall Wood Branch runs east-west approximately 200m south, as well as second railway branching northwards running adjacent to site's south-eastern corner. Residential properties 400m east in Aldridge.	
c.1914	Agricultural fields (no change)	Predominantly agricultural fields. Land adjacent to the site on south side of Middlemore Lane now labelled Speedwell colliery. Additional residential properties in Aldridge.	
c.1947	Agricultural fields. (no change)	Predominantly agricultural fields. Land adjacent to the site on south side of Middlemore Lane no longer labelled as a colliery. Additional residential properties 400m east in Aldridge.	
c. 1954	Construction of McKechnie Brass Ltd Factory. Manufacture of metal products including brass rods and copper wires.	Unknown	
c.1962	No change	Walsall Wood Branch railway closed.	
1967-1989	Historical maps now show the construction of a works building. There are approximately 5no. tanks located within the north of the site. There is a small area of vegetation within the south west of the site.	Tennis court and club immediately east. C.50m south of the site lie industrial buildings including a number of unspecified works. To the west a large industrial building is present c. 50m from the site. Approximately, 250m and beyond to the east, north east and south east of the site lie residential housing and playing fields, intermixed with unspecified industrial works and depots. To the south of the site beyond 250m the number of residential houses has increased. Red House Industrial Estate and Linley Lodge Industrial Estate have been constructed c.300m west of the site.	



Table 3:1 Summary of Land Use			
Date	Site Land Use	Adjacent Land Use	
2021- present	Former McKechnie Brass Limited Land to the northwest is industrial estate,		

- 3.3 Historic Contamination
- 3.3.1 The following documents are available and have been reviewed relating to site condition:
 - CBRE LTD., Phase I Environmental Assessment, April 2012 (BCD.GRP13/320918);
 - CBRE LTD., Phase II Environmental Assessment, August 2012 (BCD.GRP13/320918/PII);
 - Wardell Armstrong LLP, CA11906-005 Phase I Desk Study Report (Middlemore Lane), March 2021;
 - St Francis Group (Aldridge) Ltd, Middlemore Lane, Aldridge, Remediation Verification Report, May 2021;
 - Wardell Armstrong LLP, Technical Note CA11906-REM: Review of Remediation Works at Middlemore Lane, August 2021 (SF/CA11906/TN001).
- 3.3.2 A Phase 1 Desk Study was conducted by Wardell Armstrong LLP in March 2021. It found that there are 7no. records of pollution incidents to date, two records are located on site and relate to contaminated water. These were classified as Category 4 (no impact) and Category 3 (minor impact). The other 5no. pollution incidents were recorded off site (within 250m), and relate to oil and fuels (diesel), dust pollution and noise pollution, with a range of impacts from Category 4 (no impact) to Category 2 (significant impact, noise).
- 3.3.3 Within 250m of the site there are no records of pollution inventory substances pollution inventory waste transfers or pollution inventory radioactive waste.
- 3.3.4 As confirmed in the Remediation Verification Report produced by G&J Geoenvironmental Consultants Ltd, remediation works were undertaken by DSM in 2021. Remediation included:
 - capping of landscaped areas with appropriate clean material;



- excavation and segregation of soils based on visual and olfactory evidence of contamination, followed by direct reuse (subject to validation testing) or bioremediation treatment;
- bioremediation treatment followed by re-use of material, to address potential vapour inhalation by site users and reduce the risk of organic pollution of controlled waters to acceptable levels; and
- pumping out of any contaminated groundwater encountered in excavations, which will then either be passed through a water treatment system or pumped to storage tank prior to off-site disposal.
- 3.3.5 The Remediation Verification Report is provided as Appendix 1 and provides the baseline conditions for the site.
- 3.3.6 Wardell Armstrong's Technical Note reviewing the remediation works (Appendix 2) identifies a number of areas on the site where validation sampling did not pass remedial targets including:
 - north-east corner of the site trichloroethene (TCE) in two samples at concentrations in excess of the commercial generic assessment criteria (GAC) which is considered to be low risk as it will be overlain by a service yard;
 - road/car park surfacing two samples of total (PAHs) in excess of the site remedial target. These materials are not considered to present a significant risk, given the PAHs are bound into a solid matrix;
 - asbestos 11 out of 118 samples which underwent asbestos analysis recorded the presence of asbestos fibres. The risks from asbestos contamination are considered to be low.
- 3.3.7 The technical note concludes that no further remediation works are deemed necessary and the site is suitable for use in the context of a commercial end use and proposed HWRC/WTS redevelopment.



4 PERMITTED ACTIVITIES

- 4.1 Permitted Activities
- 4.1.1 The site will operate under a bespoke environmental permit covering activities undertaken at the WTS and HWRC and Small Traders' scheme.
- 4.1.2 Only Local Authority Collected Waste will be accepted at the WTS, with permitted waste codes limited to waste packaging and household waste expected to be collected from households. The HWRC will accept mixed household waste types and similar commercial and industrial wastes will be delivered to the small trader scheme. These waste types are aligned with those permitted in Standard Rules Standard Rules SR2015 No20 75kte.
- 4.1.3 The Transfer Station shall not accept in excess of 125,000 tonnes per annum, and the Household Waste Recycling Centre and Small Trader Scheme shall not accept in excess of 55,000 tonnes per annum.
- 4.1.4 There will be no treatment of wastes on site, with the exception of manual sorting, separation, shredding or compaction for disposal.
- 4.1.5 The site has been designed to provide environmental protection for land, water and air and will be operated in accordance with the operator's ISO14001 accredited Environmental Management System.
- 4.1.6 Potential hazards that could cause harm are subject to strict preventative or control measures to ensure that all risks are minimised. An Accident and Amenity Risk Assessment has been developed to demonstrate how the site will be operated to prevent unacceptable risk to human heath and the environment, and is provided in support of the environmental permit application.
- 4.2 Potentially Polluting Substances
- 4.2.1 Table 4.1 below lists the potentially polluting substances used or generated at the facility and the control measures employed to protect the environment.



Table 4:1 Potentially Polluting Substances Stored Or Generated At The Site				
Substance	Use/source	Hazardous Substance?	Control measures	Risk to Soil or Water
Diesel	Fuel for site plant	Yes	Fuels will be stored in a bunded fuel tank located on impermeable surfacing. Any fuel spill from vehicles will be contained by impermeable site surfacing and sealed drainage system. Spill kit provided on site to clear any minor spillages.	Very Iow
Adblue	Used to reduce emissions of NO _x from site plant	No	Stored in bunded tank	Very Iow
Cleaning agents	Vehicle washing	Yes	Stored in suitable small containers on a bunded pallet or in a bunded cabinet. Containers are located on impermeable site surfacing with sealed drainage system providing tertiary containment. Spill kit provided on site to clear any minor spillages.	Very Iow



5 CONCLUSION

- 5.1.1 The previous site activities may have had the potential to cause ground pollution, and there are recorded instances of pollution as a result of previous site activities. The Remediation Verification Report is provided as Appendix 1 provides the baseline conditions for the site, following remediation of the identified contaminants.
- 5.1.2 The use of sealed drainage and impermeable surfacing during operation of the permitted activities will ensure that the site will present a low risk to receptors and ensure the current condition of the site does not deteriorate.
- 5.1.3 Permitted activities to be undertaken at the site will not present a significant risk of pollution or harm where appropriate control measures, as outlined, are undertaken.



APPENDICES



APPENDIX 1

Remediation Verification Report



St Francis Group (Aldridge) Ltd

Middlemore Lane, Aldridge

Remediation Verification Report

May 2021

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G&J Geoenvironmental Consultants Ltd

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Report Title	Middlemore Lane, Aldridge, Remediation Verification Report	Site Address	McKechnie Brass Ltd, Middlemore Lane, Aldridge, Walsall, WS9 8SP
Author	G&J Geoenvironmental Consultants Ltd	Contamination / Geotechnical	Contamination
Work Stage	Verification	Report Date	May 2021
Brief Description of the Report Contents	The former McKechnie Brass site is being remediated in accordance with the agreed remediation strategy. This report presents the data collected to validate the site and reviews this data to verify that the site has been remediated in accordance with the agreed specification and is therefore suitable for the proposed use.		

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1.0 Introduction

1.1 Background

G&J Geoenvironmental Consultants Ltd (G&J) has been commissioned by St Francis Group (Aldridge) Ltd to carry out the verification of remediation works at the former McKechnie Brass Works, located off Middlemore Lane, Aldridge, West Midlands. It is proposed to redevelop the site for a commercial use.

This report has been prepared to fulfil Condition 5, parts e), f)and g) of Walsall Council consented Planning Application 17/0485, which read:

5(e) The remedial measures as set out in the Remediation Statement required by part d) of this condition shall be implemented in accordance with the agreed timetable;

5(f). If during the undertaking of remedial works or the construction of the approved development unexpected ground contamination not identified by the site investigation is encountered development shall cease until the Remediation Statement required by part (a) of this condition has been amended to address any additional remedial or mitigation works required and agreed in writing by the Local Planning Authority.

5(g) A validation report confirming / demonstrating completion of the works set out in the approved remediation strategy and the effectiveness of the remediation and the details of the measures implemented together with substantiating information and justification of any changes from the agreed remedial arrangements shall be submitted to and agreed in writing by the Local Planning Authority in consultation with Pollution Control and the Environment Agency prior to the development being brought into use. (see Note for Applicant CL3) The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met.

Ground investigations undertaken across the site have identified ground contamination that has been determined as representing potentially significant risks to human health and controlled waters. The findings of the ground investigations are detailed in the following reports;

- *`Phase I Environmental Assessment, McKechnie Brass Ltd, Middlemore Iane, Aldridge'*, CBRE, Report Reference BCD.GRP13/320918, April 2012.
- '*Phase II Environmental Assessment, McKechnie Brass Ltd., Middlemore Lane, Aldridge'*, CBRE Geoenvironmental, Report Reference: BCD.GRP13/320918/PII, August 2012.



In order to mitigate the risks identified by the site investigations and assessments, a remedial strategy was developed and agreed with the Environment Agency and Walsall Council. The remedial strategy and remedial targets were developed after a detailed Options Appraisal which are described in the following report;

McKechnie Brass, Middlemore Lane, Aldridge – Remedial Options and Implementation Strategy', G&J
 Geoenvironmental Consultants Ltd, Report Reference: GJ049-ROIP-V1, May 2018.

All works have been undertaken in general accordance with industry guidance and best practice including the Environment Agency Land Contamination Risk Management (LCRM) framework and SC030114-R1 - Verification of Remediation of Land Contamination.

1.2 Report Format

This report is presented as follows:

Section 2 presents a summary of the site setting and proposed development;

Section 3 presents a summary of the background to the remedial works and the pre-remediation Conceptual Site Model;

Section 4 of the report presents a summary of the remedial strategy, the remedial targets and their derivation, and the verification strategy;

Section 5 of the report presents a summary of the works undertaken during the remediation of the site;

Section 6 of the report summarises the results of the validation sampling and analysis with reference to the agreed remedial targets and the remediation objectives;

Section 7 summarises the outcome of the remedial works, the post remediation Conceptual Site Model and any further works required to meet the final remedial objectives.

1.3 Terms and Conditions

This report has been prepared for St Francis Group (Aldridge) Ltd in consideration of the proposed commercial end use of the site. Much of the environmental information relates to the site in its present state and should not be used in a different context without reference to G&J.

Although every effort has been made to ensure the accuracy of the information contained herein, no checks have been carried out to ensure the accuracy of information obtained from and collated by third parties and

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no liability can be accepted for any errors or misinterpretation of the third party information where it has been incorporated into this report.

1.4 Policy Context

The primary legal and policy mechanisms for managing contaminated land are Part IIA of the Environmental Protection Act 1990 and the National Planning Policy Framework.

Part IIA provides a statutory definition of Contaminated Land and supporting guidance which defines how to decide whether or not land meets this definition. For land to be determined as contaminated land, the onus is on demonstrating with sufficient certainty that land is in such condition, by reasons of substances in, on or under the ground that;

- a) Significant harm is being caused or there is a significant possibility of such harm being caused; or
- b) Significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused.

Significant harm and how to determine if a significant possibility of such harm exists is defined in the statutory guidance which accompanies Part IIA. The guidance also defines four categories of land with respect to the risks to human health and the water environment and how the degree of risk relates to the statutory definition of contaminated land, as summarised in the following figure:



Figure 1 – Part IIA Categories

Land Category	Human Health	Water	
1	Unacceptably high probability that Significant Harm would occur if no action taken	Strong case that a Significant Possibility of Significant Pollution exists	Part IIA Contaminated
2	The risks are sufficient that a Significant Possibility of Significant Harm exists	Of sufficient concern to present a Significant Possibility of Significant Pollution	Land
3	Not low risk but does not pose a Significant Possibility of Significant Harm	The risks are not sufficient to constitute Significant Possibility of Significant Pollution	Not Part IIA Contaminated
4	Low risk to human health and no possibility of meeting the statutory definition	No/low risk to controlled waters and would not meet the statutory definition	Land

In terms of planning policy, a precautionary approach is adopted whereby it is necessary to demonstrate with sufficient confidence that the site cannot meet the statutory definition of contaminated land. Although the above categorisation is not explicitly applicable to planning decisions, a site classed as Category 4 should be considered suitable for development in accordance with planning policy. While a Category 3 site could be considered suitable, the reduced level of confidence associated with such a site means this is less likely.

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2.0 Site Information

2.1 Site Location

The former McKechnie Brass site is located off Middlemore Lane, approximately 500m to the west of Aldridge town centre. The site covers an area of approximately 6 hectares and is centred on National Grid Reference 404913, 300822.

The site is roughly rectangular in shape and was previously occupied by a brass foundry. The site generally comprised industrial buildings and an office block set on hardstanding. The northern boundary of the site is formed by the Wyrley and Essington Canal, the southern boundary by Middlemore Lane, the western boundary by Dumblederry Lane and a sports and social club to the east. The surrounding area is predominantly industrial.

The site is essentially flat and level. A pre-remediation topographical survey of the main foundry area showed a slight fall from approximately 147mAOD in the south-west and west of the site to 145mAOD in the northeast corner. In the far south-west corner the land was higher at 150mAOD and the change of levels was previously accommodated by a slope (149mAOD to 147.5mAOD).

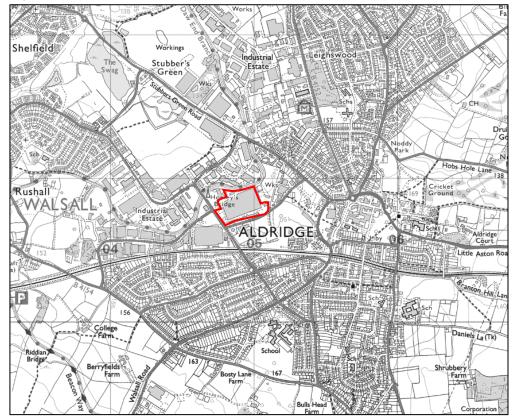


Figure 2.1 - Site Location



2.2 Geology, Hydrogeology and Hydrology

The site is shown to be underlain predominantly by the mudstones of the Etruria Formation, with the Pennine Middle Coal Measures shown in the south western corner of the site. Both these units in turn are overlain by superficial deposits comprising Glaciofluvial Sand and Gravel and / or Glacial Till. Ground investigation data suggests layers of Made Ground up to maximum depths of 3.3mbgl are present and comprise of pockets of sandy clay with fragments of clinker, ash, coal, brick and concrete.

Both the underlying Etruria Formation, Pennine Middle Coal Measures and Glaciofluvial Sand and Gravel are considered to be Secondary A aquifers, meaning that permeable layers are present capable of supporting water supplies at a local rather than strategic scale, and in some cases supporting important base flow to rivers.

The Anchor Brook generally flows in a north westerly direction within a culvert beyond the eastern boundary of the site. It is understood that the culvert is operated with a sluice gate which diverts the water into the Wyrley and Essington Canal when closed and into a public sewer beneath the canal when open.

2.3 Development Proposals

It is understood that it proposed to develop the site for commercial use.

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3.0 Background to the Remedial Works

3.1 General

The investigation undertaken by CBRE, and the subsequent G&J risk assessments, identified contamination at the site that was considered to represent a potentially significant risk to human health and / or controlled waters. A number of primary sources, including historical USTs and ASTs, were identified throughout the site, several of which were not targeted by the previous investigations due to access limitations. These sources are summarised in Table 3.1.

Table 3.1 – Primary Sources

Potential Sources			
Source 1 – Garage Area and UST	Source 8 – Waste Solvent Store		
Source 2 – Diesel ASTs	Source 9 - Effluent treatment plant		
Source 3 – Hydraulic Oil ASTs	Source 10 – Transformer units		
Source 4 – Waste oil ASTs	Source 11 – Infilled Wharf		
Source 5 – Oil Water Separator	Source 12 – Tank farm		
Source 6 – Diesel Generator	Source 14 – Drum Storage		
Source 7 – Pickling tanks and former TCE Plant.			

Localised contamination was identified, primarily in the form of hydrocarbons, based on visual and olfactory evidence of contamination and / or elevated hydrocarbon concentrations. Three potential hotspots were identified based on the investigation data, located around boreholes BH101, BH106 and BH108, otherwise the potential for hotspots of contamination, primarily from hydrocarbons and solvents (TCE), was noted across the site. BH101 and BH106 were located close to former waste oil storage tanks (Source 4), while BH108 was in the location of the former garage (Source 1), which included a below ground tank. The locations of the potential sources and the three hydrocarbon hotspots are shown in Figure 3.1. The locations of transformers are not shown as it is understood there were several and their locations are not recorded in the previous reports.

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Figure 3.1 – I dentified potential hydrocarbon hotspots

3.2 Pre-Remediation Conceptual Site Model (CSM)

The outcome of the investigations and the subsequent risk assessments showed that the following pollution linkages were identified as being potentially significant and would therefore require mitigation.

- PL1 Exposure of future site users to contamination in soil via direct contact and subsequent dermal absorption and ingestion
- PL2 Exposure of future site users to contamination in soil via inhalation of site derived dusts
- PL3 Exposure of future site users to contamination in soil via the inhalation of vapours
- PL4 Leaching of contamination in soil through the unsaturated zone to the shallow groundwater and via the saturated ground to the Anchor Brook / Wyrley and Essington Canal



3.3 Summary of Remediation Objectives

In order to address the identified pollution linkages a remedial scheme was required to meet the following objectives;

- break direct contact pathways by preventing direct exposure of future site users to affected soils (PL1 and PL2);
- remediation of organic contaminants within soil to address potential unacceptable risks to human health via vapour inhalation pathway (PL3);
- remediation of organic contaminants within soil (and groundwater) to address potential unacceptable risks to controlled waters (PL4); and
- to meet planning requirements on the suitability of the site for the proposed redevelopment.



4.0 Summary of Remedial Measures

4.1 Remedial Strategy

After consideration of various remedial options, the following strategy was considered the most appropriate in terms of effectiveness, sustainability and cost;

- Capping of landscaped areas with appropriate clean material to prevent exposure of site users to contamination via dermal contact, ingestion and dust inhalation;
- Excavation and segregation of soils based on visual and olfactory evidence of contamination, followed by direct reuse (subject to validation testing) or bioremediation treatment;
- Bioremediation treatment followed by direct re-use of material, to address potential vapour inhalation by site users and reduce the risk of organic pollution of controlled waters to acceptable levels; and
- Pumping out of any free product / contaminated groundwater encountered in excavations, which will then either be passed through a water treatment system comprising oil separators and sand / carbon filters prior to discharge, or pumped to storage tank prior to off-site disposal.

The remediation strategy is described in detail in the G&J 'Remedial Options and Implementation Strategy' report referenced in Section 1.

Where contamination 'hotspots' have been identified, soils were to be excavated and those showing obvious visual or olfactory evidence of contamination separated for treatment via bioremediation. Those not showing evidence of contamination were to be separated and samples taken to validate the material, which would determine whether it could be re-used or whether treatment would be required.

The rest of the site, particularly the potential source areas of contamination described in Section 3.1, were to be subject to a watching brief and validation sampling and analysis, as appropriate.

In addition, all areas were to be the subject of a 'surge', whereby all slabs, foundations and other below ground structures would be broken out and removed. Any soils showing evidence of contamination that had not been previously identified were to be excavated and treated as above.

The remediation and validation works were referenced to a 20 x 20m site grid, as shown in Figure 4.1 and Appendix A1.



Figure 4.1 – Site Reference Grid



4.2 Remedial Targets

In the absence of a site specific DQRA, and in line with remediation works previously agreed with the EA representative for the area, nominal soil remedial targets were derived for the avoidance of gross pollution. The remedial targets used to validate excavations and determine the suitability of the soils for re-use are presented in Table 4.1.

Table 4.1 - Remedial	Targets
----------------------	---------

Contaminant	Remedial Targets (mg/kg)
Total Petroleum Hydrocarbons	5000
Total PAHs	500
LNAPL Free Product	Removal
N/A	No obvious visual or olfactory evidence of significant contamination



In addition to the targets in Table 4.1, reference has been made to Generic Site Assessment Criteria for a commercial land use for other any other contaminants and individual hydrocarbon fractions.

4.3 Verification Sampling

As part of the works to verify the remediation has been completed successfully, a programme of verification sampling and analysis was undertaken which comprised the following;

- Site wide verification sampling was undertaken on a grid based system, with samples of Made Ground taken from each 20 x 20m grid square. Each sample was tested for its suitability for use with a chemical suite comprising metals, asbestos, sulphate, cyanide, pH, phenols, PAHs, petroleum hydrocarbons (TPHCWG) and BTEX, with selected samples tested for VOCs and PCBs.
- Verification samples taken from remediation (hotspot) excavations at a frequency of minimum 1 per 20 x 20m grid square from the base, and every 10m along the faces of excavations. Any small excavations would be verified by a minimum of 1 sample from each excavation face and base. Verification samples would be analysed for the contaminants of concern (i.e. those which had resulted in the identification of a hotspot) as a minimum.
- Remediated, clean site won and imported material (if required) tested at a rate of one sample per 250m³ for the first 5000m³ reducing to 1 sample per 1000m³ thereafter if materials are reasonably consistent.
- Verification samples taken from the trial pits targeting the potential primary 'source' areas described in Section 3.1. Each sample was tested for a suite reflecting the nature of the source and the potential contaminants.

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5.0 Remediation Works

5.1 Summary of Works Undertaken

The main remediation and validation works were preceded by enabling works, which comprised the demolition / removal of the remaining structures on site which were undertaken during late 2020. A number of hard standing areas were left in situ to a) protect live sewer infrastructure running beneath the road or b) provide the post-remediation construction team with hard surfaced lay down areas / site compounds.

Following this, the site was subjected to a 'surge' (turn over down to 2.0m.bgl, or natural ground whichever was the shallower), where slabs, foundations and other below ground obstructions were broken out and removed to be crushed.

All remediation and earthworks were referenced to the 20 x 20m site grid (shown in Figure 4.1), to aid with the tracking of material movements and recording the locations of hotspots and other site features.

The remediation and validation works comprised 3 main elements;

- a) The inspection of surged soils and collection of verification samples from across the site at a frequency of 1 per 20 x 20m square which made up the site grid, as shown in Figure 4.1;
- b) The excavation of contaminated soils from the three potential hotspots identified through the previous investigation works (as described in Section 3.1), plus any others identified during the remediation works through visual and olfactory evidence during the earthworks ('gross contamination') or the failure of verification samples taken as part of a). Following excavation, verification samples were collected from the faces and bases of the remedial excavations; and
- c) The collection of verification samples collected from trial pits targeting the primary sources described in Section 3.1.

In addition to the above, samples were also taken of hard materials that formed car parks and roads that were to remain in-situ, to determine whether or not they contained coal tar (i.e. were tarmac or asphalt). Further validation samples were also taken along the edges of the surged areas where they abutted retained roads to provide certainty that the likelihood of residual contamination beneath the roads was negligible to very low following the remediation works.

Remediation and validation work began on the eastern boundary of the site in January 2021 with surging generally progressing westwards across the site. All Made Ground was excavated down to 2.0m.bgl or natural ground, which was inspected to identify any obvious evidence of contamination.



Photographs taken during the remediation works are presented in Appendix B.

5.1.1 Treatment Area

Soils identified as contaminated were excavated and transported to a treatment area located on hardstanding in the south-east of the site, within grid squares N14 and N15. Soils were formed into windrows to undergo bioremediation treatment, whereby soils would be turned to introduce oxygen and enhance natural biodegradation processes.

5.2 Grid Square Validation

The first validation grid samples were taken on 27 January 2021 from around grid rows J to N, columns 13 and 14, in the east of the site. Remediation and validation works continued until April 2021, with the final grid square samples taken on 30 March 2021. The last grid squares to be validated were K8-K9 and L8-L9 in the south-central part of the site, and N14-N16 in the south-east. Samples were generally taken from shallow trial pits at the centre of each grid square after surging had taken place or where soils were less homogenous via the collection of representative composite samples from across the entire grid square.

Figure 5.1 shows an outline around the grid squares from which validation samples were taken.



Figure 5.1 – Grid Squares Validated



5.3 Hotspot Validation

The three hotspots described in Section 3.1 were subject to excavation in order to remove affected soils, followed by validation sampling of the faces and bases. The hotspots were centred around former investigation positions, and were named as follows:

- Hotspot 1 (HS1) In the south-east of the site around BH108 and underground tanks associated with the garage;
- Hotspot 2 (HS2) In the north-east around BH106; and
- Hotspot 3 (HS3) In the north-west, around BH101 and close to former tanks and the effluent treatment plant

Excavation of HS1 was undertaken on 1 March 2021. This essentially involved removing the underground tanks and obviously contaminated soil to the treatment area, and subsequent validation of the excavation. The standpipe within BH108 was excavated during these works.

HS2 (BH106) was located beneath the road on a bend in the north-eastern corner of the site. The road ran close to a live sewer and was to remain in situ. As such, excavation of the potential hotspot was not possible. Instead, verification samples were taken from trial pits on the inside of the road bend. The samples were taken on 22 March 2021. No obvious evidence of significant contamination was noted in the trial pits.

Similarly, HS3 (BH101) was also located within the retained road that runs along the northern site boundary, and excavation was again not possible. Trial pits were therefore excavated on both sides of the road to allow the collection of validation samples from as close to the location of BH101 as possible.

5.4 Source Area Validation

Trial pits were excavated to target the source areas described in Section 3.1, and validation samples taken for analysis. Given the location of many of the former transformers was unknown, PCBs were added to the analysis suite for most of the source areas and some of the grid squares where transformers are believed to have been present.

Excavation works were undertaken around Source 2 to remove contaminated soils, after elevated hydrocarbon concentrations were detected in the validation samples. The excavation was subsequently validated through taking further validation samples from the faces and base.



5.5 Car Park and Road Validation

It was initially planned to retain only the eastern and northern roads around the site, which were located above the live sewer. However, it was subsequently decided (in agreement with the site purchaser) to retain the entirety of the western road that runs around the edge of the site (which contained the 'live' sewer infrastructure for the previous buildings), plus the access road to the south, plus a small car park in the southwest of the site for the potential use as a lay down area / site compound for the subsequent development construction works.

Validation samples were therefore taken from trial pits excavated along both sides of the southern and western sections of the road. Samples of the surfacing material were also taken from the road and the car park, to determine if coal tar was present.

5.6 Volumes Excavated

Approximately 300 – 400m³ of material was excavated from HS1, with a further 50 – 100m³ removed from the excavation around Source 2. The contaminated material was transported to the treatment area.

May 2021



6.0 Validation Sampling and Analysis

6.1 General

Validation sampling was undertaken for the following reasons:

- To demonstrate the suitability of soils for direct re-use;
- To demonstrate that contaminated soils (those not meeting the site remedial targets) had been removed from hotspot areas, and from any other locations identified during earthworks;
- To demonstrate the suitability of soils for re-use after treatment;

The results of all validation sample analysis are presented in Appendices C1 to C5

6.2 Grid Square Validation Sampling

As described in Section 5.1, the whole **site was subjected to a 'surge'** down to 2.0m.bgl or natural ground. One representative sample of Made Ground was taken from each 20 x 20m grid square, providing a total of 94 samples from 94 grid squares. Each grid square sample was analysed for a suite comprising metals, asbestos, sulphate, cyanide, pH, phenols, PAHs, petroleum hydrocarbons (TPHCWG), BTEX with selected samples tested for VOCs and / or PCBs.

None the 94 grid samples exceeded remedial targets, or generic assessment criteria for a commercial land use, and were therefore considered to verify the soils as suitable for use.

A screening sheet and laboratory analysis certificates for samples collected during the grid square validation testing are included in Appendix C1.

6.3 Hotspot Validation

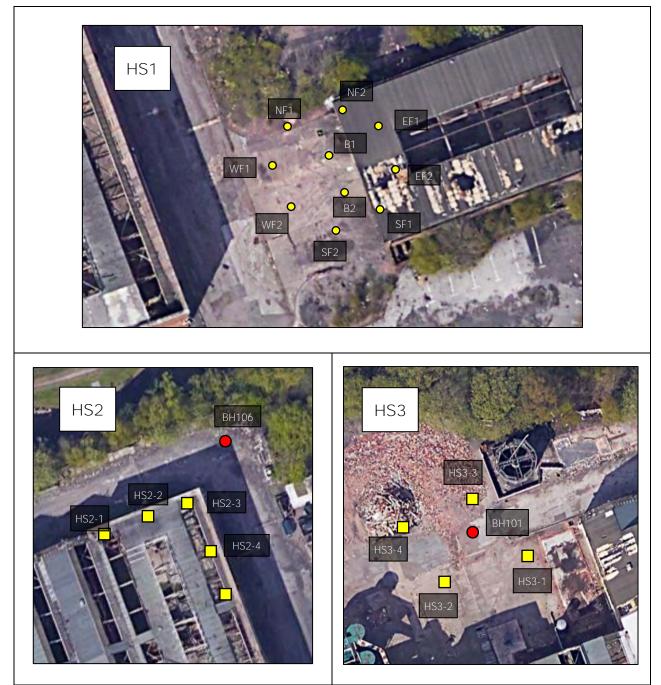
Contaminated soils were excavated from HS1, with the removal of contaminated soils confirmed by visual inspection and by taking validation samples from the sides of the excavation at a minimum frequency of 1 every 10m, and from the base of the excavation at a frequency of 1 every 20m x 20m area. A total of 10 validation samples were taken from the faces and base of the HS1 excavation (2 from each face and base), as shown in Figure 6.1.

As discussed in Section 5.3, excavation of HS2 and HS3 was not possible due to the original boreholes around which the hotspots were centred being located within the road, beneath which ran a live sewer and which



was therefore being retained. Validation samples were therefore taken from trial pits located in accessible areas along the edge of the road, as shown in Figure 6.1.





None of the validation samples from HS1, or from the trial pits around HS3 failed the remedial targets, or exceeded the GAC for a commercial land use.



However, two of the samples from trial pits close to HS2 recorded trichloroethene (TCE) at concentrations in excess of the commercial GAC. Concentrations of 13.8mg/kg and 5.6mg/kg were recorded in HS2-2 and HS2-5, compared to a GAC of 2.6mg/kg. No further excavation was possible in this area due to the presence of the road and the sewer, and it is considered that a localised hotspot may therefore remain in this area beneath a portion of the road. Whilst the published commercial GACs are considered to be a conservative criteria, the elevated TCE concentrations may need further consideration if buildings are to be constructed in this area in the future in order to address any potential vapour risks.

A screening sheet and laboratory analysis certificates for samples collected from the hotspots are included in Appendix C2.

6.4 Source Validation

A series of trial pits were excavated in or close to the locations of the primary sources described in Section 3.1, several of which were in the form of either ASTs or USTs, the majority of which were decommissioned and removed prior to the commencement of groundworks. A cluster of these sources were located in the north west of the site (in the same general location as HS3), with others either associated with the hotspots described above (and therefore not subject to additional investigation), or in isolated locations.

The drawing in Appendix A2 shows the locations of all trial pits excavated to target the identified primary sources.

Two of the samples from the primary source trial pits recorded contaminant concentrations in excess of the remedial targets. These were both from the vicinity of Source 2 (former diesel tanks to the south of HS1 and the former garage). The maximum recorded concentration of 7309mg/kg was only marginally above the remedial target of 5000mg/kg. However, excavation works were undertaken in this area to remove potentially contaminated soils, with validation samples taken from faces and base. All these samples recorded contaminant concentrations below remedial targets or commercial GACs.

A screening sheet and laboratory analysis certificates for samples collected from the primary source trial pits are included in Appendix C3.

6.5 Road Validation Samples.

It was agreed with Walsall District Council that the existing site roads would be retained to provide suitable haul roads and laydown areas for future development of the site. A validation exercise was undertaken to confirm if there was potential for contamination to be present underneath the road surface. A number of validation trial pits were excavated at 20m intervals along either side of the road where there was access.



The samples were then tested for a suite of contaminants comprising metals, asbestos, inorganics, PAHs, petroleum hydrocarbons (TPHCWG), BTEX and VOCs.

In addition, samples of the surfacing material were taken from along the road and the car park in the southwest, to determine if coal tar was present.

The locations of the road validation samples and the surface material samples are shown in the drawing in Appendix A3.

All the road face validation samples recorded contaminant concentrations below the remedial targets and / or commercial GACs.

Of the nine samples of surfacing material taken from the road and car park, two recorded high concentrations of PAHs, indicating the potential presence of coal tar. These samples were Road Tarmac 2 (total PAH 1260mg/kg), and Tarmac 5 (Total PAH 2420mg/kg). All the other samples recorded very low PAH concentrations and were therefore considered not to contain coal tar. The results suggest a mixture of surfacing materials of different ages are present along the road and car park.

Although two samples recorded PAHs above the remedial target, the target for PAH is not risk driven and was agreed with the EA as a mechanism to prevent gross pollution. Given that they are bound in a solid surfacing material, there is not considered to be any significant human health or controlled waters risks associated with this material in its current location. In addition, the affected materials could also be re-used on site (following crushing into an aggregate) once the roads and car parks have been removed by the subsequent development.

A screening sheet and laboratory certificates for the road validation and surfacing material samples is presented in Appendix A4.

6.6 Validation of Treated Soils

Approximately 400-500m³ of contaminated soil was removed to the treatment area during the remediation works. The treatment area was located on good quality hardstanding in a former car park in the south-eastern corner of site.

Validation samples were taken at a minimum frequency of 1 for every 250m³ of treated material. Contaminated soils were formed into a single windrow (Windrow 1), and three samples (Windrow 1-1 to Windrow 1-3) were initially taken on 25 March 2021, of the material that had originated from HS1. Two of the three samples recorded total hydrocarbons above the remedial target of 5,000mg/kg, with the three samples recording concentrations of 8,864mg/kg, 85mg/kg and 12,793mg/kg.



It was intended that the soils would undergo further treatment, along with the small amount of soil added from excavations at Source 2. However, towards the end of April, the soils were re-used in error by the contactor. Inspection by the geo-environmental consultant of the approximate area where it is understood to be re-used did not reveal any evidence of significant contamination, and no evidence of contaminated soils near the surface was noted across the site as a whole.

Although in excess of the remedial target, none of the concentrations recorded in the three samples exceeded generic assessment criteria for a commercial land use, and were therefore highly unlikely to represent a significant risk. It was therefore considered that no further action was required, and that the soils were suitable for use in the context of a proposed commercial development.

Laboratory certificates for the samples taken from the windrow are included in Appendix A5.

6.7 Asbestos

Previous investigations on site included only limited testing for asbestos. As such, testing for asbestos on validation samples was undertaken to allow a post-remediation assessment of the risks from asbestos to the proposed development.

During the site works, 11 out of 118 samples which underwent asbestos analysis recorded the presence of asbestos fibres, which was generally in the form of microscopic fibre bundles or cement debris.

The risks from asbestos contamination are considered to be low, however it is considered that a cover layer may be required in any landscaped areas given that appropriate soil is required to act as a suitable growing media. This capping layer may need to comprise a barrier layer of 100mm coarse aggregate or a geotextile membrane (subject to further testing confirming presence of asbestos), overlain by 300mm of clean imported soil to act as a suitable growing media.

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7.0 Summary & Conclusions

7.1 Remediation Validation

Remediation works on have resulted in approximately 400-500m³, of hydrocarbon contaminated soil being removed for treatment, primarily from an excavation around an old underground storage tank. The excavated material was re-used in error prior to it being confirmed that it passed the site remedial targets. However, although the original testing of the material showed concentrations exceeding the site remedial target for **total hydrocarbons, which is a nominal target considered to be indicative of potential 'gross' contamination,** there were no exceedances of the generic assessment criteria (GAC) for a commercial land use, suggesting the material does not present a significant risk. Furthermore, inspection of the area where it is understood the material was re-used did not reveal any evidence of significant or gross contamination. It is therefore considered that there are no residual significant risks associated with this material.

Validation sampling and analysis undertaken across the site, either based on the site grid, investigation of potential primary sources or to validate soils abutting a road to left in-situ, have resulted in all samples passing remedial targets, with the following exceptions;

7.1.1 North-east corner of the site

Excavation of a potential hotspot in the north-east of the site was not possible due the presence of a live sewer and retained site road. Trial pits were undertaken to the edge of the road and samples taken for analysis, which revealed trichloroethene (TCE) in two samples at concentrations in excess of the commercial GAC. Although there is a likelihood of a hotspot of TCE remaining in this area beneath a portion of the road, it is considered that this localised contamination does not currently present a significant risk. Whilst the published commercial GACs are considered to be a conservative criteria, the elevated TCE concentrations may need further consideration if buildings are to be constructed in this area in the future in order to address any potential risks via the vapour inhalation pathway.

The approximate affected area is shown in Figure 7.1.

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Figure 7.1 – Area of Residual TCE Contamination

7.1.2 Road / Car Park Surfacing

Two out of nine samples of surfacing material recorded total PAHs in excess of the site remedial target, indicating the presence of coal tar. The remediation target for PAH is not risk driven and was agreed with the EA as a mechanism to prevent gross pollution. These materials are not considered to present a significant risk, given the PAHs are bound into a solid matrix. In addition, the affected materials could also be re-used on site (following crushing into an aggregate) once the roads and car parks have been removed by the subsequent development.

7.2 Post Remediation Conceptual Model

Prior to the remediation of the site, the following pollutant linkages were considered to be potentially significant;

- PL1 Exposure of future site users to contamination in soil via direct contact and subsequent dermal absorption and ingestion
- PL2 Exposure of future site users to contamination in soil via inhalation of site derived dusts



- PL3 Exposure of future site users to contamination in soil via the inhalation of vapours
- PL4 Leaching of contamination in soil through the unsaturated zone to the shallow groundwater and via the saturated ground to the Anchor Brook / Wyrley and Essington Canal

The removal of primary sources such as tanks and the successful remediation / validation of the organic contamination in soil is considered to have addressed PL4, and partly addressed PL1 and PL2 (direct contact and dust generation will also be addressed by the clean cover, described below) and PL3 (inhalation of vapour).

PL3 would only remain potentially significant if a building was constructed in the very north-eastern corner of the site, where residual contamination from TCE remains and the risks from vapour may need to be reassessed.

7.3 Further Works

No further remediation works are deemed necessary, as it is considered that the aims of the remediation works have been achieved and the site is suitable for use in a commercial end use context. However, should the north and eastern road and / or sewer be removed in the future, it may be beneficial to excavate any localised materials with residual TCE contamination as part of the redevelopment works.

7.3.1 Cover Layer

Given that appropriate soil is required to act as a suitable growing media, and in order to address any residual risks associated with PL1 and PL2, a cover of clean soil should be placed in any landscaped areas. The cover layer may need to comprise a barrier layer of 100mm coarse aggregate or a geotextile membrane (subject to further testing confirming presence of asbestos), overlain by 300mm of clean imported soil to act as a suitable growing media.

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Appendix A – Drawings

Appendices



A1 – Site Grid

. Appendices

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The Author of this drawing does not accept any liability for details or information provided by outside organisations.

Boundaries are shown for indicative purposes only, all boundaries are to be confirmed by the legal owner.

Client

ntract number *C10051*

^{dress} Middlemore Lane, Walsall WS9 8DN

Remediation grid



Arden House, Arden Road, Heartlands, Birmingham, B8 1DE Tel: +44 (0)121 322 2225, Fax: +44 (0)121 322 2227 Email: mail@dsmgroup.info

 n/a
 A1

 Date
 Drawn

 16/01/2021
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A2 - Primary Source Trial Pit Locations

Appendices

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A3 – Road Validation and Surfacing Material Sample Locations



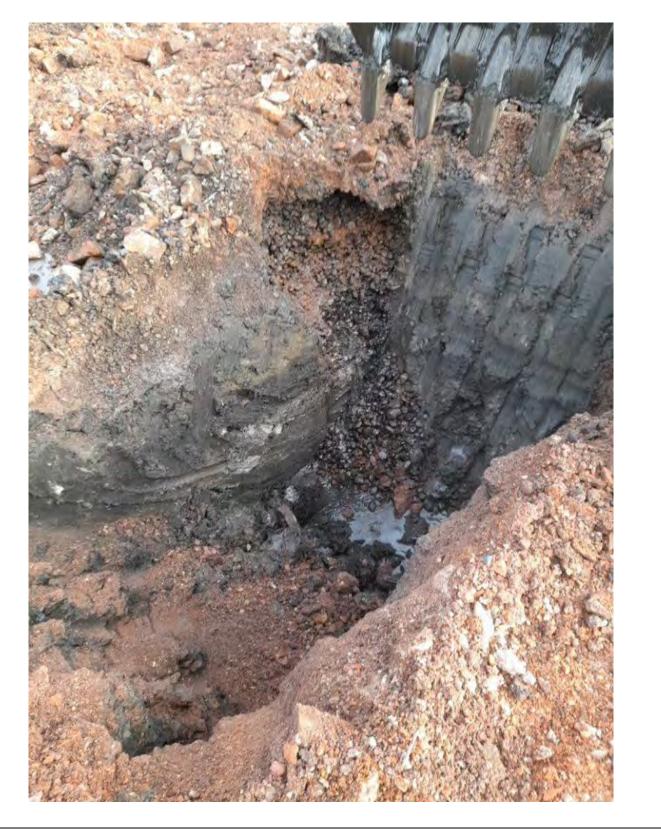


Appendix B – Photographs

Appendices



01/02/21 By the start of February the majority of the remaining building had been demolished



27/01/21 Surging on the eastern half of the site was underway, several trial pits were excavated to validate grid square (K14) soils.



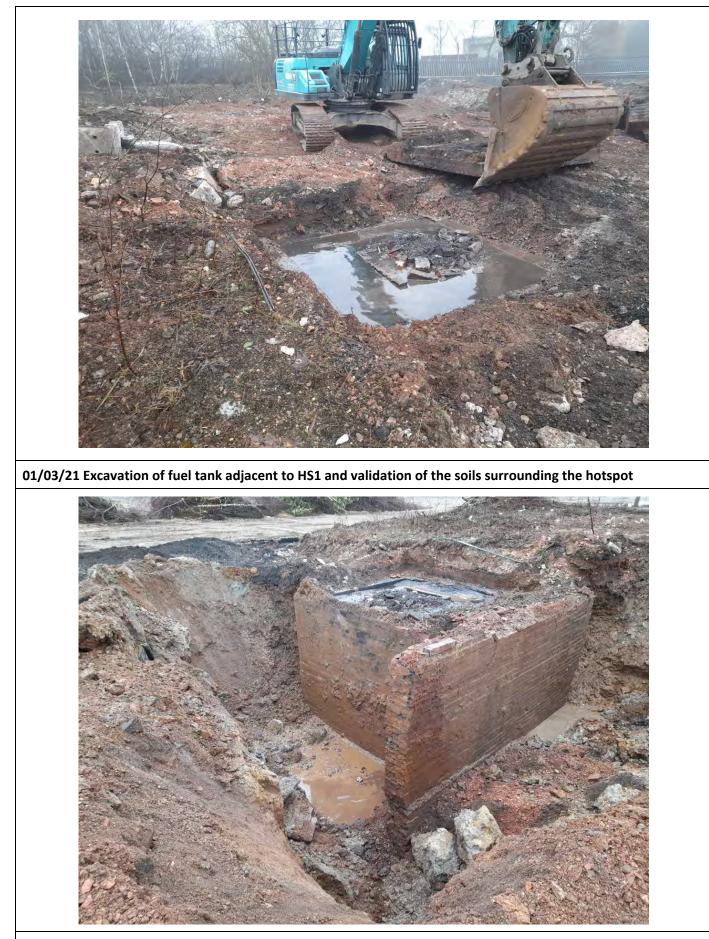
19/02/21 Surging also commenced from the western end of site in late February where ground was generally drier



24/02/21 Surging and validation were completed in the footprint of the western half of the original warehouse structure



24/02/21 Looking from the west towards the centre of the site. Due to wet ground conditions limited surging had taken place since January



01/03/21 Excavation of fuel tank adjacent to HS1 and validation of the soils surrounding the hotspot



01/03/21 Fuel tank removed from the surrounding brick chamber. The tank was in good condition and showed no signs of leaking



01/03/21 Photo shows the natural clean soils in the base and face of the excavation



01/03/21 Impacted ground from around HS1 placed in the treatment area, placed upon a impermeable membrane and surrounded by a bund.



16/03/21 Surging of the site and grubbing out of concrete foundations and pipe runs continued in March



22/03/21 The photo above shows the excavation of validation trial pits adjacent to the retained road infrastructure and HS2



22/03/21 The photo above shows the excavation of validation trial pits around HS2



22/03/21 Excavation of validation trial pits around the location of Source 2. The tank wall shown in the picture would be removed in April









25/03/21 Excavation of validation trial pits around the location of Source 9









Appendix C – Chemical Analysis Results

Appendices



C1 - Validation Grid Samples

DETS Report No: 21-01136 G & J Geoenvironmental Consultants Ltd Site Reference: Middlemore Lane	d Ti	ate Sampled 27/01/21 me Sampled None Supplied TP / BH No 114	I 27/01/21 I None Supplied J J11	27/01/2 None Supplie K1	21 27/01/2 21 27/01/2 23 None Supplier 24 K1	1 27/01/21 d None Supplied 3 L14	27/01/21 None Supplied L13	27/01/21 None Supplied N13	27/01/21 None Supplied N12	01/02/21 None Supplied G11	01/02/21 None Supplied G12	01/02/2 None Supplie G1	1 01/02/2 d None Supplie 3 G1	1 01/02/21 d None Supplied 4 H11	01/02/21 None Supplied H12	01/02/21 None Supplied H13	01/02/21 None Supplied H14	01/02/21 None Supplied	01/02/21 None Supplied 112	01/02/21 None Supplied	01/02/21 None Supplied J12	01/02/21 None Supplied J13	01/02/21 None Supplied J14	19/02/2021 None Supplied K12	19/02/2021 None Supplied L12	24/02/2021 None Supplied H5	24/02/2021 None Supplied H6	24/02/2021 None Supplied 15	24/02/2021 None Supplied	24/02/2021 None Supplied J5	24/02/2021 None Supplied J7
Project / Job Ref: GJ049 Order No: None Supplied	Adı	ditional Refs None Supplied Depth (m) None Supplied S Sample No 523266	i None Supplied	None Supplie	ed None Supplier	d None Supplied None Supplied 523270	None Supplied	None Supplied	None Supplied None Supplied	None Supplied	None Supplied None Supplied	None Supplie None Supplie	d None Supplie d None Supplie	d None Supplied None Supplied	None Supplied None Supplied	None Supplied	None Supplied None Supplied	None Supplied None Supplied	None Supplied None Supplied	None Supplied None Supplied	None Supplied None Supplied	None Supplied None Supplied	None Supplied None Supplied	None Supplied None Supplied	None Supplied None Supplied	None Supplied	None Supplied None Supplied	None Supplied	None Supplied	None Supplied None Supplied 528443	None Supplied
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Determinand Asbestos Screen ^(S)	Unit RL A N/a N/a	Accreditation	Not Detected	Not Detecte	ed Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Detecte	d Not Detecte	d Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Sample Matrix ^(S) Material	al Type N/a	NONE										Small bundle o Chrysotil	of										s	Small bundle of Chrysotile							
рН рН	H Units N/a	ISO17025 MCERTS 6.8	3 7	6	.8 6.1	5 7.3	7.4	7.3	8	7.9	8.3	Chrysotil	le 8 7.	5 7.8	7.6	7.8	7.30	7.4	7.1	7.4	7	7.4	6.7	Chrysotile 8.3	8.1	5.2	6.4	7	6.7	8.2	7.5
Total Sulphate as SO₄ n Total Sulphate as SO₄	mg/kg < 2 mg/kg < 200 % < 0.02 mg/kg < 5	NONE < 2	2 < 2 571 2 0.06	< 28 0.0	2 < 36 36 310 33 0.00	2 < 2 5 < 200 3 < 0.02	< 2 < 200 < 0.02	< 2 368 0.04	< 2 468 0.05	< 2 2238 0.22	< 2 1146 0.11	< 121 0.1	2 < 1 284 2 0.2 0 5	2 < 2 6 2329 8 0.23 5 < 5	< 2 1785 0.18	< 2 1764 0.18	< 2 1561 0.16	< 2 1144 0.11	< 2 1696 0.17	< 2 1648 0.16	< 2 2789 0.28	< 2 2413 0.24	< 2 613 0.06	< 2 2607 0.26	< 2 813 0.08	< 2 4604 0.46	< 2 8052 0.81	< 2 733 0.07	< 2 11120 1.11	< 2 1587 0.16	< 2 3466 0.35
Organic Matter Total Organic Carbon (TOC)	% < 0.1 % < 0.1 mg/kg < 2	NONE < 5 MCERTS 0.3 MCERTS 0.2 MCERTS < 2 MCERTS < 2	3 4.2 2 2.4 2 <2	0	.4 < 0.1 .3 < 0.1 2 < 2	1 < 0.1 1 < 0.1 2 < 2	0.2	< 0.1 < 0.1 < 2	0.2	2.2 1.2 10	2.2 1.3 8	3.	1 2. 8 1. 8	9 2.7 7 1.6 8 9	3.4	3.5	2.3 1.3 7	2.9 1.7 7	3.5	4.2 2.4 9	4.3 2.5 14	3.2 1.8 16	6.3 3.6 9	3.7 2.1 8	2.1 1.2 5	5.2 3 9	3.8 2.2 13	0.8 0.5 4	1.2 0.7 20	0.5	2.9 1.7 9
W/S Boron m Cadmium (Cd) m	mg/kg < 1 mg/kg < 0.2 mg/kg < 2	NONE < 1 NONE < 0.2 MCERTS 9 MCERTS < 4	1 < 1 2 0.2 14	< 0	1 < 1 .2 < 0.1 9	1 < 1 2 < 0.2 7 8	< 1 < 0.2 6	< 1 < 0.2 12	< 1 < 0.2 4	2.6 0.5 14	< 1 0.4 13	< 0. 1	1 1. 2 0. 1 1	1 1.2 3 0.3 1 14	< 1 0.2 13	< 1 < 0.2 14	< 1 < 0.2 12	< 1 < 0.2 14	< 1 < 0.2 11	< 1 0.3 11	2.4 0.3 15	2.6 0.4 17	1.6 0.3 15	< 1 < 0.2 12	< 1 < 0.2 9	< 1 0.3 12	< 1 0.5 10	< 1 < 0.2 6	< 1 0.3 14	< 1 < 0.2 11	< 1 0.4 12
Lead (Pb) n Mercury (Hg) n	mg/kg < 4 mg/kg < 3 mg/kg < 1 mg/kg < 3	MCERTS < 4	1 44 5 48 1 < 1 3 29	<	4 < 4 6 1 < 1 5 < 3	4 7 5 7 1 < 1 3 7	5 6 < 1 4	< 4 16 < 1 6	5 4 < 1 3	98 73 < 1 23	213 126 < 1 16	9 5 < 1	10 5 1 < 4 1	2 50 5 39 1 < 1 9 21	64 63 < 1 20	39 40 < 1 20	35 32 < 1 18	41 33 < 1 24	41 30 < 1 22	69 39 < 1 21	55 261 < 1 32	347 178 < 1 27	57 48 < 1 38	59 254 < 1 21	37 103 < 1 9	88 75 < 1 24	224 80 < 1 22	15 13 < 1 5	120 51 < 1 38	47 21 < 1 12	55 23 < 1 20
Selenium (Se) n Zinc (Zn) n	mg/kg < 2 mg/kg < 3 mg/kg < 2	MCERTS < 3 MCERTS 10 NONE < 2 MCERTS < 6	3 < 3 132 2 < 2	3 < 2 1 2 <	3 < 17 (2)	3 < 3 5 26 2 < 2	< 3 22 < 2	< 3 14 < 2	< 3 15 < 2	< 3 314 < 2	< 3 349 < 2	< 15 <	3 < 0 18 2 <	3 < 3 9 166 2 < 2	< 3 131 < 2	 < 3 103 < 2 	< 3 88 < 2	< 3 102 < 2	< 3 114 < 2	< 3 147 < 2	< 3 157 < 2	< 3 488 < 2	< 3 166 < 2	< 3 115 < 2	< 3 61 < 2	< 3 183 < 2	< 3 404 < 2	< 3 39 < 2	< 3 215 < 2	< 3 128 < 2	< 3 156 < 2
EPH (C10 - C40) n Naphthalene n Acenaphthylene n	mg/kg < 6 mg/kg < 0.1 mg/kg < 0.1	MCERTS < 0.1 MCERTS < 0.1	2780 1 < 0.1 1 < 0.1	0 2 < 0 < 0	24 < 0 .1 < 0.1 .1 < 0.1	5 < 6 1 < 0.1 1 < 0.1	579 < 0.1 < 0.1	< 6 < 0.1 < 0.1	< 6 < 0.1 < 0.1	212 < 0.1 < 0.1	51 0.16 < 0.1	9 0.1 < 0.	6 1 8 0.1 1 < 0.	6 36 1 < 0.1 1 < 0.1	40 < 0.1 < 0.1	0 65 0.15 < 0.1	12 < 0.1 < 0.1	29 < 0.1 < 0.1	40 0.16 < 0.1	99 0.18 < 0.1	54 < 0.1 < 0.1	156 < 0.1 < 0.1	47 < 0.1 < 0.1	125 0.12 < 0.1	349 0.12 < 0.1	87 0.18 < 0.1	109 < 0.1 < 0.1	22 < 0.1 < 0.1	< 6 < 0.1 < 0.1	21 < 0.1 < 0.1	40 < 0.1 < 0.1
Fluorene n Phenanthrene n		MCERTS < 0.1	< 0.1 < 0.1 0.28	< 0 < 0 3 < 0	.1 < 0.1 .1 < 0.1 .1 < 0.1	1 < 0.1 1 < 0.1 1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 0.26	0.32 0.26 2.15	< 0. < 0. 0.2	1 < 0. 1 < 0. 26 0.1	1 < 0.1 1 < 0.1 8 0.29 1 .01	< 0.1 < 0.1 0.35	< 0.1 < 0.1 0.63	< 0.1 < 0.1 0.6	< 0.1 < 0.1 0.34	< 0.1 < 0.1 0.33	0.41 0.37 3.58 0.07	< 0.1 < 0.1 0.47	0.25 0.23 1.37	< 0.1 < 0.1 0.29	< 0.1 < 0.1 0.31	< 0.1 < 0.1 0.33	< 0.1 < 0.1 0.36	< 0.1 < 0.1 0.23	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 0.19
Fluoranthene m Pyrene m	mg/kg < 0.1 mg/kg < 0.1 mg/kg < 0.1 mg/kg < 0.1	MCERTS < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0 < 0 < 0 < 0	.1 < 0. .1 < 0. .1 < 0. .1 < 0.	1 < 0.1 1 < 0.1 1 < 0.1 1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	0.17 0.19 < 0.1	1.31 1.03 0.22	0.3	2 < 0. 2 < 0. 3 < 0.	1 0.19 1 0.21 1 < 0.1	0.1 0.21 0.22 < 0.1	0.5 0.47 < 0.1	0.13 0.44 0.39 < 0.1	0.16 0.2 < 0.1	0.17 0.19 < 0.1	2.74 2.14 0.72	0.25	1.4 1.12 0.32	0.31 0.31 < 0.1	0.28	0.34 0.3 < 0.1	0.12 0.13 < 0.1	0.16 0.16 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	0.14 0.12 < 0.1
Chrysene m Benzo(b)fluoranthene m Benzo(k)fluoranthene m Benzo(k)fluoranthene m	mg/kg < 0.1 mg/kg < 0.1 mg/kg < 0.1 mg/kg < 0.1 mg/kg < 0.1	MCERTS < 0.1	< 0.1 < 0.1 < 0.1	< 0. < 0. < 0.	.1 < 0.1 .1 < 0.1 .1 < 0.1	 < 0.1 < 0.1 < 0.1 < 0.1 	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	0.3 0.23 < 0.1	0.1 0.1 < 0.	6 < 0. 7 < 0. 1 < 0.	1 < 0.1 1 < 0.1 1 < 0.1 1 < 0.1	< 0.1 < 0.1 < 0.1	0.17 0.12 < 0.1	0.15 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	0.7 0.62 0.29	< 0.1 < 0.1 < 0.1	0.36 0.32 0.15	0.16 0.17 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1
Dibenz(a,h)anthracene m	mg/kg < 0.1 mg/kg < 0.1 mg/kg < 0.1 mg/kg < 0.1 mg/kg < 0.1	MCERTS < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0. < 0. < 0. < 0.	.1 < 0. .1 < 0. .1 < 0. .1 < 0.	 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	0.14 < 0.1 < 0.1 < 0.1	< 0. < 0. < 0. < 0.	1 < 0. 1 < 0. 1 < 0. 1 < 0.	1 < 0.1 1 < 0.1 1 < 0.1 1 < 0.1 1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	0.5 0.23 < 0.1 0.22	< 0.1 < 0.1 < 0.1 < 0.1	0.25 0.13 < 0.1 0.13	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1
Total EPA-16 PAHs m	mg/kg < 1.6 mg/kg < 0.01 mg/kg < 0.05	MCERTS < 1.6 NONE < 0.01	< 0.01 < 0.01 < 0.05	< 0.0	.6 < 1.6 01 < 0.01 05 < 0.05	 < 1.6 < 0.01 < 0.01 < 0.05 	< 0.01 < 0.01 < 0.05	< 0.01 < 0.01 < 0.05	< 0.01 < 0.01 < 0.05	< 0.01 < 0.01 < 0.05	6.60 < 0.01 < 0.05	< 0.0 < 0.0 < 0.0	6 < 1. 1 0.0 5 13.	6 < 1.6 4 < 0.01 9 < 0.05	< 0.01 < 0.01 < 0.05	 2.00 < 0.01 < 0.05 	< 0.01 < 0.01 < 0.05	< 0.01 < 0.01 < 0.05	< 0.01 < 0.01 < 0.05	13.70 < 0.01 0.07	< 0.01 < 0.01 < 0.05	6.30 < 0.01 < 0.05	< 0.01 < 0.01 < 0.05	< 0.01 < 0.01 < 0.05	< 0.01 < 0.01 < 0.05	< 0.01 < 0.01 < 0.05	< 0.01 < 0.01 < 0.05	< 0.1 < 1.6 < 0.01 < 0.05	< 0.1 < 1.6 < 0.01 < 0.05	< 0.1 < 1.6 < 0.01 < 0.05	< 1.6 < 0.01 < 0.05
Aliphatic >C10 - C12 m Aliphatic >C12 - C16 m	mg/kg < 2 mg/kg < 2 mg/kg < 3	MCERTS < 2 MCERTS < 2	2 < 2 2 < 2 3	<	2 < 2 < 2 < 3 < 3 < 3 < 3 < 3 < 3 < 3 <	2 < 2 2 < 2 3 < 3	26 161 259	< 2 < 2 < 3	< 2 < 2 < 3	< 2 < 2 < 3	< 2 < 2 < 3	1	5 < 6 < 3 <	2 < 2 2 < 2 3 < 3	< 2 < 2 < 3	< 2 < 2 < 3	< 2 < 2 < 3	< 2 < 2 < 3	< 2 < 2 < 3	< 2 < 2 < 3	< 2 < 2 < 3	< 2 < 2 < 3	< 2 < 2 < 3	< 2 < 2 < 3	4 47 75	< 2 < 2 < 3	< 2 2 4	< 2 < 2 < 3	< 2 < 2 < 3	< 2 < 2 < 3	< 2 < 2 < 3
Aliphatic (C5 C24) m	mg/kg < 3 mg/kg < 10 mg/kg < 21 mg/kg < 0.01	MCERTS < 3 MCERTS < 3 MCERTS < 10 NONE < 21 NONE < 0.01	98 2344 2446	< 1 < 2 < 0.0	3 < 3 0 < 10 21 < 2 1 < 0.0	3 < 3 0 < 10 1 < 21 4 0.01	4 58 508	< 3 < 10 < 21	< 3 < 10 < 21	27 88 115	< 3 < 10 < 21	< 1 3	3 < 0 < 1 4 < 2	3 < 3 0 < 10 1 < 21	< 3 < 10 < 21	< 3 < 10 < 21	< 3 < 10 < 21	< 3 < 10 < 21	< 3 < 10 < 21	< 3 < 10 < 21	< 3 < 10 < 21	< 3 < 10 < 21	< 3 < 10 < 21	< 3 47 47	4 101 231	< 3 < 10 < 21	4 30 40	< 3 < 10 < 21	< 3 < 10 < 21	< 3 < 10 < 21	< 3 < 10 < 21
Aromatic >C7 - C8 m Aromatic >C8 - C10 m	mg/kg < 0.01 mg/kg < 0.05 mg/kg < 2 mg/kg < 2	NONE < 0.05 MCERTS < 2	< 0.05 < 0.05 2 < 2 2 < 2	< 0.0	2 < 2	2 < 0.01 2 < 2 2 < 2	< 0.05 < 2 12	< 0.01 < 0.05 < 2 < 2	< 0.01 < 0.05 < 2 < 2	< 0.01 < 0.05 < 2 < 2	< 0.05 < 2 < 2	< 0.0	2 < 0.0 4 <	5 < 0.05 2 < 2 2 < 2	< 0.01 < 0.05 < 2 < 2	< 0.01	< 0.01 < 0.05 < 2 < 2	< 0.05 < 2 < 2	< 0.01 < 0.05 < 2 < 2	< 0.01 < 0.05 < 2 < 2	< 0.05	< 0.01 < 0.05 < 2 < 2	< 0.05 < 2 < 2	< 0.01 < 0.05 < 2 < 2	< 0.01 < 0.05 < 2 11	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2 < 2	< 0.01 < 0.05 < 2 < 2	< 0.01 < 0.05 < 2 < 2	< 0.01 < 0.05 < 2 < 2	< 0.05 < 0.05 < 2 < 2
Aromatic >C12 - C16 n Aromatic >C16 - C21 n Aromatic >C21 - C35 n	mg/kg < 2 mg/kg < 3 mg/kg < 10	MCERTS < 2 MCERTS < 2 MCERTS < 3 MCERTS < 10	2 5 3 29 0 456	<pre></pre>	2 < 3 3 < 10	2 < 2 3 < 3 0 < 10	31 < 3 < 10	< 2 < 3 < 10	< 2 < 3 < 10	< 2 18 47	4 11 < 10	< 1	8 < 4 < 0 < 1	2 < 2 3 < 3 0 < 10	< 2 < 3 < 10	< 2 < 3 < 10	< 2 < 3 < 10	3 5 < 10	< 2 < 3 < 10	7 30 20	< 2 < 3 < 10	5 19 72	< 2 < 3 < 10	< 2 < 3 < 10	32 < 3 < 10	9 10 < 10	4 7 37	< 2 < 3 < 10	< 2 < 3 < 10	< 2 < 3 < 10	< 2 < 3 < 10
Benzene	mg/kg < 21 mg/kg < 42 ug/kg < 2	NONE < 21	2 2935 2 < 2 2 < 5		21 < 2 12 < 4 2 < 2 5	1 < 21 2 < 42 2 < 2	43 551 < 2	< 21 < 42 < 2	< 21 < 42 < 2	64 179 < 2	< 21 < 42 < 2	< 2 5 <	21 < 2 60 < 4 2 <	1 < 21 2 < 42 2 < 2 5	< 21 < 42 < 2	< 21 < 42 < 2	< 21 < 42 < 2	< 21 < 42 < 2	< 21 < 42 < 2	57 57 < 2	< 21 < 42 < 2	95 95 < 2	< 21 < 42 < 2	< 21 47 < 2	43 274 < 2	< 42	49 88 < 2	< 21 < 42 < 2	< 21 < 42 < 2	< 21 < 42 < 2	< 21 < 42 < 2
Ethylbenzene u p & m-xylene u	ug/kg < 5 ug/kg < 2 ug/kg < 2 ug/kg < 2	MCERTS < 5 MCERTS < 2 MCERTS < 2 MCERTS < 2 MCERTS < 2 MCERTS < 5	2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2		2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 <	2 < 2 2 < 2 2 < 2 2 < 2	< 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 3 < 4 < 4 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 3 < 3 < 4 < 4 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5	< 2 < 2 < 2 < 2 < 2 < 2 < 2	6 8 5	<	2 < 2 < 2 <	2 < 2 2 < 2 2 < 2 2 < 2	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 3 < 4 < 4 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 3 < 4 < 4 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 3 < 3 < 4 < 4 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5	< 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 3 < 4 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2
MTBE I Dichlorodifluoromethane I Vinyl Chloride I	ug/kg < 5 ug/kg < 5 ug/kg < 5	MCERTS < 5 MCERTS MCERTS MCERTS	5 < 5	i <	5 <	5 < 5 5	< 5	<pre>> </pre>	< 5	< 5	< 5	<	5 < 5 5	5 < 5 < 5 < 5	< 5	5 < 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5 < 5 < 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chloroethane u Bromomethane u	ug/kg < 10 ug/kg < 5 ug/kg < 10 ug/kg < 5	MCERTS MCERTS MCERTS MCERTS			< 1	5 5 5		< 10 < 5 < 10 < 5				< 1	5	< 10 < 5 < 10 < 5									< 10 < 5 < 10 < 5								
1,1-Dichloroethene u MTBE u trans-1,2-Dichloroethene	ug/kg < 5 ug/kg < 5	MCERTS MCERTS MCERTS			<	5 5						<	5 5	< 5 < 5 < 5 < 5									< 5 < 5 < 5 < 5								
1,1-Dichloroethane u cis-1,2-Dichloroethene u 2,2-Dichloropropane u Chloroferm		MCERTS MCERTS MCERTS MCERTS			<	5		< 5 < 5 < 5				<	5 5	< 5 < 5 < 5									< 5 < 5 < 5								
Chloroform u Bromochloromethane u 1,1,1-Trichloroethane u 1,1-Dichloropropene u	ug/kg < 5 ug/kg < 5 ug/kg < 5 ug/kg < 10	MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS			<	5 5 0		< 5 < 5 < 10 < 10				< < < <1	5	< 5 < 5 < 5 < 10									< 5 < 5 < 5 < 10								
Carbon Tetrachloride	ug/kg < 5 ug/kg < 5 ug/kg < 2 ug/kg < 5	MCERTS MCERTS MCERTS			<	5		< 5 < 5 < 2				<	5 5 2	< 5 < 5 < 2									< 5 < 5 < 2								
Trichloroethene	ug/kg < 5 ug/kg < 5 ug/kg < 5 ug/kg < 5 ug/kg < 5	MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS			<	5		< 5 < 5 < 5				< 1 <	5 5	< 5									< 5 < 5 < 5								
	ug/kg < 5 ug/kg < 5 ug/kg < 5 ug/kg < 5 ug/kg < 5	MCERTS MCERTS MCERTS			<	5		< 5 < 5 < 5 < 5				<	5	< 5 < 5 < 5 < 5									< 5 < 5 < 5	_							
1,1,2-meniorbernane	ug/kg < 5 ug/kg < 10 ug/kg < 5	MCERTS MCERTS MCERTS			< 10	5		< 5 < 10 < 5				< 1	5 0 5	< 5 < 10 < 5									< 5 < 10 < 5								
1,2-Dibromoethane	ug/kg < 5 ug/kg < 5 ug/kg < 5 ug/kg < 5	MCERTS MCERTS MCERTS MCERTS			<	5		< 5				<	5 5 5	< 5 < 5 < 5									< 5 < 5 < 5								
Ethyl Benzene	ug/kg < 5 ug/kg < 5 ug/kg < 2 ug/kg < 2	MCERTS MCERTS MCERTS			<	2		< 5 < 2 < 2				<	2	< 5 < 2 < 2 < 2									< 5 < 2 < 2								
Styrene u Bromoform u	ug/kg < 2 ug/kg < 5 ug/kg < 10 ug/kg < 5	MCERTS MCERTS			< 1	5		< 2 < 5 < 10				< < < 1	2 5 0	< 2 < 5 < 10									< 2 < 5 < 10								
1,1,2,2-Tetrachloroethane	ug/kg < 5 ug/kg < 5 ug/kg < 5 ug/kg < 5 ug/kg < 5	MCERTS MCERTS MCERTS MCERTS			<	5		< 5< 5< 5< 5				<	5 5 9	< 5 < 5 < 5									< 5 < 5 < 5								
2-Chlorotoluene u 1,3,5-Trimethylbenzene u	ug/kg < 5 ug/kg < 5 ug/kg < 5 ug/kg < 5	MCERTS MCERTS MCERTS			<	5		< 5				< < 1	5 5 0	< 5 < 5 < 5 < 5									< 5 < 5 < 5 < 5								
1,2,4-Trimethylbenzene	ug/kg < 5 ug/kg < 5 ug/kg < 5 ug/kg < 5	MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS			<	5		< 5 < 5 < 5				<	5	< 5 < 5 < 5									< 5 < 5 < 5								
1,3-Dichlorobenzene	ug/kg < 5 ug/kg < 5 ug/kg < 5 ug/kg < 5	MCERTS MCERTS MCERTS MCERTS			<	5		< 5< 5< 5< 5				<	2 6 5	< 5 < 5 < 5									< 5 < 5 < 5 < 5								
n-Butylbenzene u 1,2-Dichlorobenzene u .2-Dibromo-3-chloropropane u	ug/kg < 5	MCERTS MCERTS MCERTS MCERTS			<	5		< 5				<	5 0	< 5 < 5 < 10 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>< 5 < 5 < 10</th> <th>_</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>									< 5 < 5 < 10	_							
PCB Congener 28 m PCB Congener 52 m	ug/kg < 10 ug/kg < 5 mg/kg: 0.008 mg/kg: 0.008	NONE			<	5		< 5				<	5	< 5									< 5								
PCB Congener 101 m PCB Congener 118 m PCB Congener 138 m	mg/kg: 0.008 mg/kg: 0.008 mg/kg: 0.008	NONE NONE NONE																													
PCB Congener 153 m PCB Congener 180 m Total PCB (7 Congeners) m	mg/kg: 0.008 mg/kg: 0.008 mg/kg < 0.1	NONE NONE NONE																													

24/02/2021 26/02/2021 26/02/2021 04/03/21 04/03/21 None Supplied None Su	04/03/21 04/03/21 None Supplied None Supplied	04/03/21 None Supplied No	04/03/21 04/03/21 one Supplied None Supplied	04/03/21 None Supplied	04/03/21 None Supplied	04/03/21 None Supplied	04/03/21	04/03/21 None Supplied	04/03/21 None Supplied	04/03/21 None Supplied	12/03/21 None Supplied	18/03/21 None Supplied N	18/03/21	18/03/21 one Supplied No	23/03/21 ne Supplied Non	27/01/21 27/0 e Supplied None Sur	1/21 27/01/2 blied None Supplier	27/01/21 None Supplied	27/01/21 None Supplied	27/01/21 None Supplied						
J8 N5 N6 K5 L5	J6 K6	L6	K11 L15	M15	L16	M16	H7	17	H8	18	H9	19	9	G10	H10	110	J10	G9	К9	L9	N7	NB	N9 N1	N11	M5	M6
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											1	microscopic loose fibrous asbestos														
6 8.7 9 7.8 7.9	7.6 8.6	7.9	7.4 7.7	7.8	7.7	7.4	8.5	7.1	7.9	7.3	7.2	debris Chrysotile 7.7	10	8	7.7	7.7	7	8	9.3	8.4	8.1	7.9	7.6 7.1	5 7.2	8	7.5
< 2	< 2 < 2 2178 2396 0.22 0.24	< 2 1382 0.14	< 2 < 2 1730 951 0.17 0.1	< 2 417 0.04	< 2 637 0.06	< 2 248 0.02	< 2 1729 0.17	< 2 3824 0.38	< 2 4308 0.43	< 2 6306 0.63	< 2 1527 0.15	< 2 3017 0.3	< 2 1048 0.1	< 2 2587 0.26	< 2 3133 0.31	< 2 2508 0.25	< 2 389 0.04	< 2 1385 0.14	< 2 910 0.09	< 2 865 0.09	< 2 427 0	< 2 1332 0	< 2 < 3 276 < 200 0 < 0.00	2 < 2 0 < 200 2 < 0.02	< 2 220 0.02	< 2 1183 0.12
< 5	< 5 < 5 1.6 0.8 0.9 0.5	< 5 0.2 0.1	< 5 < 5 2.6 0.7 1.5 0.4	< 5 0.4 0.2	< 5 0.1 < 0.1	< 5 0.2 0.1	< 5 3.6 2.1	< 5 2.8 1.6	< 5 2.3 1.3	< 5 5 2.9	< 5 6.5 3.8	< 5 3.7 2.2	< 5 3.1 1.8	< 5 3.2 1.9	< 5 5.8 3.4	< 5 4.7 2.7	< 5 1.4 0.8	18 4.3 2.5	< 5 0.4 0.2	< 5 0.9 0.5	< 5 < 0.1 < 0.1	< 5 0.9 0.5	< 5 < 1 1.1 < 0. 0.6 < 0.	c < 5 < 0.1 < 0.1 < 0.1	< 5 0.2 0.1	< 0.1 < 0.1
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Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Detected	Not Detected	Not Detected	Not Detected	Detected	Detected	Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	i Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	d
								Chrysotile present in microscopic				Chrysotile present in Microscopic Cement debris &	Bundle of Chrysotile fibres	Bundles of Chrysotile fibres													
6	7.6	8	7	7.3	7.3	7.5	7.6	Cement debris Chrysotile 7.8	9.5	6.8	7.1	Cernent debris & Bundles Chrysotile 7 9	Chrysotile 7.6	Chrysotile	0.8	7.8	8.8	7.8	7.4	0.6	7.0	2.4	62	5.2	4.9	7	7
< 2 3658 0.37	< 2 4601 0.46	< 2 1344 0.13	< 2 555 0.06	< 2 < 200 < 0.02	< 2 2161 0.22	< 2 856 0.09	< 2 222 0.02	< 2 1203 0.12	< 2 1849 0.18	< 2 1339 0.13	< 2 636 0.06	< 2 3304 0.33	< 2 1814 0.18	< 2 1652 0.17	< 2 2441 0.24	< 2 3703 0.37	< 2 814 0.08	< 2 706 0.07	< 2 277 0.03	< 2 700 0.07	< 2 1281 0.13	2 < 2 279	< 2 725 0.07	< 2 3939 0.39	< 2 4435 0.44	< 2 12260 1.23	2
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18 370 56	16 3510 340	25 188 107	12 21 13	10 12 7	11 33 76	6 33 26	6 12 8	58 19600 1790	14 860 105	12 616 68	11 66 21	1030 26100 2960	222 4360 660	35 1300 536	193 10800 668	21 564 68	12 128 24	26 70 25	10 107 25	19 378 66	26 550 185	5 8 0 168 33	14 10 7	16 76 49	13 73 43	7350) 0 6
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< 2	< 2 134	< 2 325	< 2 < 6	< 2 < 6	< 2 320	< 2 481	< 2 < 2 81	22300 < 2 112	< 2 63	< 2 89	< 2	32200 < 2 1270	< 2 277 < 0.1	< 2	< 2 278	< 2 5710 < 0.1	< 2 45	< 2 48	<pre>142 < 2 1740 1 24</pre>	< 2 25	< 2	2 < 2 < 2 59	< 2 < 6	< 2 78 0.14	< 2	4720 < 1 15!	2
< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	0.13 3.55 3.13	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	1 < 0.1 1 < 0.1 1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1	1
< 0.1 < 0.1 < 0.1	0.18 < 0.1 0.31	0.55 0.13 1.02	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	0.26 < 0.1 0.28	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	0.12 < 0.1 0.15	0.15 < 0.1 0.16	< 0.1 < 0.1 < 0.1	0.13 < 0.1 < 0.1	51.4 13.3 51.4	< 0.1 < 0.1 0.22	0.26 < 0.1 0.58	0.52 0.24 3 2.63	< 0.1 < 0.1 < 0.1	0.54 < 0.1 0.21	0.71 < 0.1 0.22	0.22 < 0. 	2
< 0.1 < 0.1 < 0.1	0.26 < 0.1 0.13	0.99 0.47 0.41	< 0.1 < 0.1 < 0.1	0.24 < 0.1 0.15	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	0.16 < 0.1 < 0.1	0.14 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	42.4 15.8 13.9	0.12	0.52 0.21 0.22	2 2.28 0.93 2 0.83	< 0.1 < 0.1 < 0.1	0.19 < 0.1 < 0.1	0.23 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1						
< 0.1 < 0.1 < 0.1	0.15 < 0.1 < 0.1	0.66 0.2 0.51	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	13.2 6.18 10.7	0.38 0.18 0.28	0.47	7 1.12 2 0.34 2 0.83	< 0.1 < 0.1 < 0.1	0.14 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	1					
< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	0.29 < 0.1 0.26 5.5	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1 < 1.6	5.96 1.08 4.56 238		0.34 < 0.1 0.36	0.47 0.1 0.38 0.38 0.38	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1	
< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 5	< 0.01 < 0.05 7	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05	1 < 0.01 < 0.05 2 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	1
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< 3 < 10 < 21 </td <td>< 3 26 26</td> <td>6 81 87</td> <td>< 3 < 10 < 21</td> <td>< 3 < 10 < 21</td> <td>21 13 83</td> <td>7 23</td> <td>11 < 10 < 21</td> <td>< 10</td> <td>< 3 < 10 < 21</td> <td>20 < 10 23</td> <td>< 3 < 10 < 21</td> <td>9</td> <td>< 3 45 45</td> <td>< 10</td> <td>10 249 259</td> <td>35 476 514</td> <td>< 3 < 10 < 21</td> <td>< 3 < 10 < 21</td> <td>361 433 831</td> <td>< 3 < 10 < 21</td> <td>< 10</td> <td>11 11 15 10 10 10</td> <td>< 10</td> <td>13 < 10 < 21</td> <td>< 10</td> <td>< 1</td> <td>3</td>	< 3 26 26	6 81 87	< 3 < 10 < 21	< 3 < 10 < 21	21 13 83	7 23	11 < 10 < 21	< 10	< 3 < 10 < 21	20 < 10 23	< 3 < 10 < 21	9	< 3 45 45	< 10	10 249 259	35 476 514	< 3 < 10 < 21	< 3 < 10 < 21	361 433 831	< 3 < 10 < 21	< 10	11 11 15 10 10 10	< 10	13 < 10 < 21	< 10	< 1	3
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0/03/21	30	30/03/21	30/03/21	21
upplied	None Su	None Supplied	None Supplied	Эđ
N16		N15	N14	18
upplied	None Su	None Supplied	None Supplied	∋d
upplied	None Su	None Supplied	None Supplied	ed
535200		535199	535198	97

i	Not Detected	Detected	Not Detected
Ī		Chrysotile	7
		present as fibre bundles	
1	8.4	Chrysotile 8	7 4
2	8.4 < 2 2528	< 2 2919	7.6
3	2528 0.25 < 5	0.29	0.02
3	2.8	< 5 5.4 3.1	< 5
3	1.6 12 1.2	14	4 2.3 4 < 1
4	1.1	1.4 5.6 41	< 0.2
2	37 5480	10600	11 173
5	335	750	173 23 < 1
3	35 < 3	52 < 3	5 < 3
2	4440	14600	260
5	472 < 0.1	1550 0.14	< 6 < 0.1
1	< 0.1	< 0.1 0.4 0.37	< 0.1 < 0.1
1	0.14	5.37	< 0.1 < 0.1
1	0.37 5.04	1.45	< 0.1 < 0.1
1	5.09 3.31	16.3 8.53	< 0.1 < 0.1
	2.79 4.88	7.44 9.33	< 0.1 < 0.1
ſ	1.5 4.05	4.31 7.45	< 0.1
	1.96	3.69	< 0.1
1	1.86	85.8	< 0.1 < 1.6
1	< 0.01 < 0.05	< 0.01 < 0.05	< 0.01 < 0.05
2	< 2	< 2 5 40	< 2 < 2
3	11 26	120	< 3
5	137 174	566 731	< 10 < 21
5	< 0.01 < 0.05	< 0.01	< 0.01 < 0.05
2	< 2 < 2	< 2 < 2	< 2 < 2
2	7	12	< 2
1	151 196	309 419	< 10 < 21
5	369	1150	< 42
5	< 2 < 5 < 2	10	< 2 < 5 < 2
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74.00 2.60 135.00 1030.00 26100.00 2960.00 0.00 767.00 2.60 32200.00		640 240000 410 86000 2300 1100 980 12000 730000
5710.00 ; 24 0.13 3.55 3.13 51.40 13.30 51.40 13.30 15.80 13.20	500	460 97000 9700 68000 540000 540000 540000 170 350 44 41 2200 536 44 4000 1900 22000 22000 22000 22000
361.00 476 3964.00 7.00 10.00 31.00 87.00 5.00 0.00 0.00 0.00 0.00 0.00 0.00	5000	28000 28000 1920000 1220000 2820000 1120000 77 1200 1300000
0.00 0.00		1.3E+07 81000 850000 24000 170000 1300000 6300 970 5900 2600 3700
0.00 0.00 0.00 0.00 6.00 0.00 0.00 0.00		190000 130000 550000
69.00 0.00 0.00 35.00 0.00 94.00 0.00 0.00 0.00 127.00		6500000 1500000 3300000 9700000 220000
0.00 0.00 127.00 60.00 44.00 0.00 0.00 0.00 0.00 0.00		99000 73000 1E+07 4800000 66000

Highest RT GAC



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY



DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-01136

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	01/02/2021
Sample Scheduled Date:	01/02/2021
Report Issue Number:	1
Reporting Date:	05/02/2021

Authorised by:

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. 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 except in full, without the prior written approval of the laboratory.





Soil Analysis Certificate								
DETS Report No: 21-01136			Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	27/01/21
G & J Geoenvironmental Consultants Ltd	t k		Time Sampled	None Supplied				
Site Reference: Middlemore Lane		TP / BH No		114	J11	K14	K13	L14
Project / Job Ref: GJ049		A	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 05/02/2021		DI	ETS Sample No	523266	523267	523268	523269	523270
Determinand	Unit	RL	Accreditation					
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected				
pH	pH Units	N/a	MCERTS	6.8	7.0	6.8	6.6	7.3
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	< 200	571	286	316	< 200
Total Sulphate as SO ₄	%	< 0.02	MCERTS	< 0.02	0.06	0.03	0.03	< 0.02
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter	%	< 0.1	MCERTS	0.3	4.2	0.4	< 0.1	< 0.1
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	0.2	2.4	0.3	< 0.1	< 0.1
Arsenic (As)	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	NONE	< 0.2	0.2	< 0.2	< 0.2	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	9	14	9	7	8
Copper (Cu)	mg/kg	< 4	MCERTS	< 4	44	< 4	< 4	7
Lead (Pb)	mg/kg	< 3	MCERTS	6	48	6	5	7
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	3	29	5	< 3	7
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	MCERTS	10	132	17	6	26
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
EPH (C10 - C40)	mg/kg	< 6	MCERTS	< 6	2780	24	< 6	< 6





Soil Analysis Certificate							
DETS Report No: 21-01136			Date Sampled	27/01/21	27/01/21	27/01/21	
G & J Geoenvironmental Consultants	s Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	1
Site Reference: Middlemore Lane		TP / BH No		L13	N13	N12	
Project / Job Ref: GJ049		/	Additional Refs	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	
Reporting Date: 05/02/2021		D	ETS Sample No	523271	523272	523273	
Determinand	Unit	RL	Accreditation				
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected	1
Ha	pH Units	N/a	MCERTS	7.4	7.3	8.0	1
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	
Total Sulphate as SO₄	mg/kg	< 200	MCERTS	< 200	368	468	
Total Sulphate as SO ₄	%	< 0.02	MCERTS	< 0.02	0.04	0.05	
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	
Organic Matter	%	< 0.1	MCERTS	0.2	< 0.1	0.2	
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	0.1	< 0.1	< 0.1	
Arsenic (As)	mg/kg	< 2	MCERTS	< 2	< 2	< 2	
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	
Cadmium (Cd)	mg/kg	< 0.2	NONE	< 0.2	< 0.2	< 0.2	
Chromium (Cr)	mg/kg	< 2	MCERTS	6	12	4	
Copper (Cu)	mg/kg	< 4	MCERTS	5	< 4	5	
Lead (Pb)	mg/kg	< 3	MCERTS	6	16	4	
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	
Nickel (Ni)	mg/kg	< 3	MCERTS	4	6	3	
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	ļ
Zinc (Zn)	mg/kg	< 3	MCERTS	22	14	15	
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	
EPH (C10 - C40)	mg/kg	< 6	MCERTS	579	< 6	< 6	





Soil Analysis Certificate	- Speciated PAHs							
DETS Report No: 21-0113	36		Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	27/01/21
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	114	J11	K14	K13	L14
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 05/02/2	021	D	ETS Sample No	523266	523267	523268	523269	523270
Determinand	Unit		Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	0.1	0.1	0.1	0.1	0.1
	5 5	-	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1						< 0.1
Fluorene	mg/kg		MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	0.28	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	0 0	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene	0 0	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6





Soil Analysis Certificate - Speciated PAHs											
DETS Report No: 21-0113			Date Sampled	27/01/21	27/01/21	27/01/21					
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied					
Site Reference: Middlemo	ore Lane		TP / BH No	L13	N13	N12					
Project / Job Ref: GJ049 Order No: None Supplied		/	Additional Refs	None Supplied	None Supplied	None Supplied					
Reporting Date: 05/02/2		D	Depth (m) ETS Sample No	None Supplied	None Supplied	None Supplied					
Reporting Date: 05/02/2	2021	D	ETS Sample No	523271	523272	523273					
Determinand	Unit	RI	Accreditation								
Naphthalene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Acenaphthylene	0 0	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Chrysene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Benzo(b)fluoranthene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Benzo(k)fluoranthene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Benzo(a)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Indeno(1,2,3-cd)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Dibenz(a,h)anthracene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Benzo(ghi)perylene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1					
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6					





Soil Analysis Certificate	- TPH CWG Bande	d						
DETS Report No: 21-011	36		Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	27/01/21
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	114	J11	K14	K13	L14
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 05/02/2	021	DI	ETS Sample No	523266	523267	523268	523269	523270
		D.						
Determinand	Unit	RL	Accreditation	0.04	0.04	0.04	0.01	0.01
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	0 0	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16	mg/kg	< 3		< 3	3	< 3	< 3	< 3
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	98	< 3	< 3	< 3
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	2344	< 10	< 10	< 10
Aliphatic (C5 - C34)	mg/kg			< 21	2446	< 21	< 21	< 21
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	5	< 2	< 2	< 2
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	29	< 3	< 3	< 3
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	< 10	456	< 10	< 10	< 10
Aromatic (C5 - C35)	mg/kg	< 21	NONE	< 21	490	< 21	< 21	< 21
Total >C5 - C35	mg/kg	< 42	NONE	< 42	2935	< 42	< 42	< 42





Soil Analysis Certificate	Soil Analysis Certificate - TPH CWG Banded											
DETS Report No: 21-011	36		Date Sampled	27/01/21	27/01/21	27/01/21						
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied						
Site Reference: Middlemo	ore Lane		TP / BH No	L13	N13	N12						
Project / Job Ref: GJ049		A	Additional Refs Depth (m)	None Supplied	None Supplied	None Supplied						
Order No: None Supplied				None Supplied	None Supplied	None Supplied						
Reporting Date: 05/02/2	DI	ETS Sample No	523271	523272	523273							
Determine real	11-14	DI										
Determinand			Accreditation NONE	0.01	0.01	0.01						
Aliphatic >C5 - C6	5 5	< 0.01		< 0.01	< 0.01	< 0.01						
Aliphatic >C6 - C8	0 0	< 0.05	NONE	< 0.05	< 0.05	< 0.05						
Aliphatic >C8 - C10	5 5		MCERTS	26	< 2	< 2						
Aliphatic >C10 - C12	5 5		MCERTS	161	< 2	< 2						
Aliphatic >C12 - C16	5.5			259	< 3	< 3						
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	4	< 3	< 3						
Aliphatic >C21 - C34			MCERTS	58	< 10	< 10						
Aliphatic (C5 - C34)			NONE	508	< 21	< 21						
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01						
Aromatic >C7 - C8	3 3	< 0.05	NONE	< 0.05	< 0.05	< 0.05						
Aromatic >C8 - C10	5 5	< 2	MCERTS	< 2	< 2	< 2						
Aromatic >C10 - C12	mg/kg		MCERTS	12	< 2	< 2						
Aromatic >C12 - C16	5.5			31	< 2	< 2						
Aromatic >C16 - C21	mg/kg		MCERTS	< 3	< 3	< 3		l				
Aromatic >C21 - C35				< 10	< 10	< 10						
Aromatic (C5 - C35)	mg/kg			43	< 21	< 21						
Total >C5 - C35	mg/kg	< 42	NONE	551	< 42	< 42						





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-0113	6		Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	27/01/21
G & J Geoenvironmental C	onsultants Ltd	Time Sampled		None Supplied				
Site Reference: Middlemore Lane			TP / BH No	114	J11	K14	K13	L14
Project / Job Ref: GJ049	Additional Refs		None Supplied					
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 05/02/20	021	DETS Sample No		523266	523267	523268	523269	523270
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate - BTEX / MTBE										
DETS Report No: 21-01136		Date Sampled		27/01/21	27/01/21	27/01/21				
G & J Geoenvironmental Consulta	nts Ltd		Time Sampled	None Supplied	None Supplied	None Supplied				
Site Reference: Middlemore Lane		TP / BH No		L13	N13	N12				
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied				
Reporting Date: 05/02/2021		DETS Sample No		523271	523272	523273				
Determinand	Unit	RL	Accreditation							
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2				
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5				
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2				
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2				
o-xylene	ug/kg	ug/kg < 2 MCERTS		< 2	< 2	< 2				
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5				





Soil Analysis Certificate					_		
DETS Report No: 21-01136 G & J Geoenvironmental Consultants Ltd		Date Sampled		27/01/21	27/01/21		
			Time Sampled	None Supplied	None Supplied		+
Site Reference: Middlemo	ore Lane		TP / BH No	K13	N13		
Project / Job Ref: GJ049		A	dditional Refs	None Supplied	None Supplied		-
Order No: None Supplied			Depth (m)	None Supplied	None Supplied		-
Reporting Date: 05/02/2	2021	DE	TS Sample No	523269	523272		
Determinand	Unit	RL	Accreditation				
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5		
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5		
Chloromethane	ug/kg	< 10	MCERTS	< 10	< 10		
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5		-
Bromomethane Trichlorofluoromethane	ug/kg ug/kg	< 10	MCERTS MCERTS	< 10 < 5	< 10 < 5		-
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5		-
MTBE	ug/kg	< 5	MCERTS	< 5	< 5		-
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5		-
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5		
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5		
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5		
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5		_
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5		
1,1,1-Trichloroethane	ug/kg	< 5	MCERTS	< 5	< 5		4
1,1-Dichloropropene Carbon Tetrachloride	ug/kg ug/ka	< 10	MCERTS MCERTS	< 10	< 10		+
1,2-Dichloroethane	ug/kg ug/kg	< 5 < 5	MCERTS	< 5	< 5		-
Benzene	ug/kg ug/kg	< 2	MCERTS	< 5 < 2	< 5 < 2		-
1,2-Dichloropropane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5		-
Trichloroethene	ug/kg	< 5	MCERTS	< 5	< 5		
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5		-
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5		
TAME	ug/kg	< 5	MCERTS	< 5	< 5		
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5		
Toluene	ug/kg	< 5	MCERTS	< 5	< 5		_
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5		
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10		-
1,3-Dichloropropane Tetrachloroethene	ug/kg ug/kg	< 5	MCERTS MCERTS	< 5 < 5	< 5 < 5		
Dibromochloromethane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5		-
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5	< 5		-
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5		
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5		
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	< 2		
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2		
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2		_
Styrene	ug/kg	< 5	MCERTS	< 5	< 5		-
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10		-
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		+
1,1,2,2-Tetrachloroethane 1,2,3-Trichloropropane	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	<u> </u>	1
n-Propylbenzene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5		+
Bromobenzene	ug/kg	< 5	MCERTS	< 5	< 5	<u> </u>	1
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5		1
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5		
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5		-
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5		-
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5		+
n-Butylbenzene 1,2-Dichlorobenzene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	├──── ┨	+
,2-Dibromo-3-chloropropane	ug/kg ug/kg	< 10	MCERTS	< 10	< 10	<u> </u>	+
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	<u> </u>	1
riskasi norobutudiche	ug/ kg	- 0	OERTO	· 0	× 5		





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-01136	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 05/02/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
523266	114	None Supplied	None Supplied	8.6	Brown sandy clay
523267	J11	None Supplied	None Supplied	12.9	Grey sandy clay
523268	K14	None Supplied	None Supplied	7	Light grey sandy clay with stones
523269	K13	None Supplied	None Supplied	6.6	Light grey sandy clay with stones
523270	L14	None Supplied	None Supplied	9.1	Light brown sandy clay with stones
523271	L13	None Supplied	None Supplied	6.5	Grey sandy clay with stones
523272	N13	None Supplied	None Supplied	8.5	Light grey sandy clay
523273	N12	None Supplied	None Supplied	10.1	Red sandy clay with stones

Moisture content is part of procedure E003 & is not an accredited test

Insufficient Sample^{1/S} Unsuitable Sample^{U/S}





Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 21-01136
G & J Geoenvironmental Consultants Ltd
Site Reference: Middlemore Lane
Project / Job Ref: GJ049
Order No: None Supplied
Reporting Date: 05/02/2021

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR		Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by agua-regia digestion followed by ICP-OES	E002
Soil	D		Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cvanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D		Gravimetrically determined through extraction with cyclohexane	E013
	AR		Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil Soil	AR	Electrical Conductivity	Determination of relative action extractable hydrocarbons by GC-FD Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
3011			Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	
Soil	AR			E004
Call	D	C12-C16, C16-C21, C21-C40)		E009
Soil			Determination of Fluoride by extraction with water & analysed by ion chromatography	
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (11) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D		Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR		Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR		Determination of phenols by distillation followed by colorimetry	E021
Soil	D		Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of phosphate by extraction with water & analysed by for chromatography Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E009
Soil	D		Determination of total sulphate by extraction with 10% HCI followed by ICP-DES Determination of sulphate by extraction with water & analysed by ion chromatography	E013 E009
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography Determination of water soluble sulphate by extraction with water followed by ICP-OES	E009 E014
	AR			E014 E018
Soil			Determination of sulphide by distillation followed by colorimetry	
Soil Soil	D AR	Sulphur - Total SVOC	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by	E024 E006
Soil	AR	Thiocyanate (as SCN)	GC-MS Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of force pitcate followed by colorization	E017
			addition of ferric nitrate followed by colorimetry	
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
3011				



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY



DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-01255

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	03/02/2021
Sample Scheduled Date:	03/02/2021
Report Issue Number:	1
Reporting Date:	08/02/2021

Authorised by: UN

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

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Soil Analysis Certificate

DETS Ltd Unit 1, Rose Lane Industrial Estate Rose Lane Lenham Heath Maidstone Kent ME17 2JN Tel : 01622 850410



Son Analysis certificate								
DETS Report No: 21-01255			Date Sampled	01/02/21	01/02/21	01/02/21	01/02/21	01/02/21
G & J Geoenvironmental Consultant	ts Ltd	Time Sampled		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Middlemore Lane			TP / BH No	G11	G12	G13	G14	H11
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 08/02/2021		DI	ETS Sample No	523597	523598	523599	523600	523601
Determinand	Unit	RL	Accreditation					
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Detected	Not Detected	Not Detected
Sample Matrix ^(S)	Material Type	N/a	NONE			Small bundle of Chrysotile		
Asbestos Type (S)	PLM Result	N/a	ISO17025			Chrysotile		
pH	pH Units	N/a	MCERTS	7.9	8.3	8.0	7.5	7.8
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	2238	1146	1211	2846	2329
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.22	0.11	0.12	0.28	0.23
Sulphide	mg/kg	< 5	NONE	< 5	< 5	10	< 5	< 5
Organic Matter	%	< 0.1	MCERTS	2.2	2.2	3.1	2.9	2.7
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	1.2	1.3	1.8	1.7	1.6
Arsenic (As)	mg/kg	< 2	MCERTS	10	8	8	8	9
W/S Boron	mg/kg	< 1	NONE	2.6	< 1	< 1	1.1	1.2
Cadmium (Cd)	mg/kg	< 0.2	NONE	0.5	0.4	0.2	0.3	0.3
Chromium (Cr)	mg/kg	< 2	MCERTS	14	13	11	11	14
Copper (Cu)	mg/kg	< 4	MCERTS	98	213	93	102	50
Lead (Pb)	mg/kg	< 3	MCERTS	73	126	50	55	39
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	23	16	14	19	21
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	MCERTS	314	349	150	189	166
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
EPH (C10 - C40)	mg/kg	< 6	MCERTS	212	51	96	16	36



Soil Analysis Certificate

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DETS Report No: 21-01255		Date Sampled		01/02/21	01/02/21	01/02/21	01/02/21	01/02/21
G & J Geoenvironmental Consultants Ltd			Time Sampled	None Supplied				
Site Reference: Middlemore Lane			TP / BH No	H12	H13	H14	111	112
Project / Job Ref: GJ049		A	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 08/02/2021		DE	ETS Sample No	523602	523603	523604	523605	523606
Determinand	Unit	RL	Accreditation					
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected				
Sample Matrix ^(S)	Material Type	N/a	NONE					
Asbestos Type ^(S)	PLM Result	N/a	ISO17025					
рН	pH Units	N/a	MCERTS	7.6	7.8	7.3	7.4	7.1
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	1785	1764	1561	1144	1696
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.18	0.18	0.16	0.11	0.17
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter	%	< 0.1	MCERTS	3.4	3.5	2.3	2.9	3.5
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	2	2	1.3	1.7	2
Arsenic (As)	mg/kg	< 2	MCERTS	8	9	7	7	8
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	NONE	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	13	14	12	14	11
Copper (Cu)	mg/kg	< 4	MCERTS	64	39	35	41	41
Lead (Pb)	mg/kg	< 3	MCERTS	63	40	32	33	30
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	20	20	18	24	22
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	MCERTS	131	103	88	102	114
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
EPH (C10 - C40)	mg/kg	< 6	MCERTS	40	65	12	29	40



Soil Analysis Certificate

DETS Ltd Unit 1, Rose Lane Industrial Estate Rose Lane Lenham Heath Maidstone Kent ME17 2JN Tel : 01622 850410



DETS Report No: 21-01255			Date Sampled	01/02/21	01/02/21	01/02/21	01/02/21	
G & J Geoenvironmental Consultar	& J Geoenvironmental Consultants Ltd Time Sampled			None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemore Lane			TP / BH No	113	J12	J13	J14	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 08/02/2021		DE	ETS Sample No	523607	523608	523609	523610	
Determinand	Unit	RL	Accreditation					
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected	Not Detected	
Sample Matrix ^(S)	Material Type	N/a	NONE					
Asbestos Type (S)	PLM Result	N/a	ISO17025					
pH	pH Units	N/a	MCERTS	7.4	7.0	7.4	6.7	
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	1648	2789	2413	613	
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.16	0.28	0.24	0.06	
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	
Organic Matter	%	< 0.1	MCERTS	4.2	4.3	3.2	6.3	
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	2.4	2.5	1.8	3.6	
Arsenic (As)	mg/kg	< 2	MCERTS	9	14	16	9	
W/S Boron	mg/kg	< 1	NONE	< 1	2.4	2.6	1.6	
Cadmium (Cd)	mg/kg	< 0.2	NONE	0.3	0.3	0.4	0.3	
Chromium (Cr)	mg/kg	< 2	MCERTS	11	15	17	15	
Copper (Cu)	mg/kg	< 4	MCERTS	69	55	347	57	
Lead (Pb)	mg/kg	< 3	MCERTS	39	261	178	48	
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	
Nickel (Ni)	mg/kg	< 3	MCERTS	21	32	27	38	
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	
Zinc (Zn)	mg/kg	< 3	MCERTS	147	157	488	166	
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	
EPH (C10 - C40)	mg/kg	< 6	MCERTS	99	54	156	47	





Soil Analysis Certificate	- Speciated PAHs							
DETS Report No: 21-0125	55		Date Sampled	01/02/21	01/02/21	01/02/21	01/02/21	01/02/21
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	G11	G12	G13	G14	H11
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 08/02/2	2021	D	ETS Sample No	523597	523598	523599	523600	523601
Determinent	11-24	DI						
Determinand		< 0.1	Accreditation MCERTS	0.4	0.47	0.40	0.44	0.1
Naphthalene	mg/kg	-		< 0.1	0.16	0.18	0.11	< 0.1
Acenaphthylene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	5.5	< 0.1	MCERTS	< 0.1	0.32	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	0.26	< 0.1	< 0.1	< 0.1
Phenanthrene	5 5	< 0.1	MCERTS	0.26	2.15	0.26	0.18	0.29
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	0.43	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	0.17	1.31	0.32	< 0.1	0.19
Pyrene	5 5	< 0.1	MCERTS	0.19	1.03	0.32	< 0.1	0.21
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	0.22	0.13	< 0.1	< 0.1
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	0.30	0.16	< 0.1	< 0.1
Benzo(b)fluoranthene		< 0.1	MCERTS	< 0.1	0.23	0.17	< 0.1	< 0.1
Benzo(k)fluoranthene	0 0	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	5 5	< 0.1	MCERTS	< 0.1	0.14	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene	0 0	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(qhi)perylene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	6.6	< 1.6	< 1.6	< 1.6





Soil Analysis Certificate	- Speciated PAHs							
DETS Report No: 21-0125	55		Date Sampled	01/02/21	01/02/21	01/02/21	01/02/21	01/02/21
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	H12	H13	H14	11	I12
Project / Job Ref: GJ049		A	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 08/02/2	021	DI	ETS Sample No	523602	523603	523604	523605	523606
Determinand		RL						
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	0.15	< 0.1	< 0.1	0.16
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	0.35	0.63	0.60	0.34	0.33
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.13	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	0.21	0.50	0.44	0.16	0.17
Pyrene	mg/kg	< 0.1	MCERTS	0.22	0.47	0.39	0.20	0.19
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	0.17	0.15	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	0.12	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	2	1.7	< 1.6	< 1.6





Soil Analysis Certificate	- Speciated PAHs							
DETS Report No: 21-0125	55		Date Sampled	01/02/21	01/02/21	01/02/21	01/02/21	
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	113	J12	J13	J14	
Project / Job Ref: GJ049		/	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 08/02/2	2021	D	ETS Sample No	523607	523608	523609	523610	
Determinand	Linit	DI	Accorditation					
	Unit	RL < 0.1	Accreditation MCERTS	0.10	0.1	0.1	0.1	
Naphthalene	mg/kg			0.18	< 0.1	< 0.1	< 0.1	
Acenaphthylene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Acenaphthene	mg/kg	< 0.1	MCERTS		< 0.1	0.25	< 0.1	
Fluorene	mg/kg	< 0.1	MCERTS	0.37	< 0.1	0.23	< 0.1	
Phenanthrene	mg/kg	< 0.1	MCERTS	3.58	0.47	1.37	0.29	
Anthracene	mg/kg	< 0.1	MCERTS	0.97	< 0.1	0.30	< 0.1	
Fluoranthene	mg/kg	< 0.1	MCERTS	2.74	0.25	1.40	0.31	
Pyrene		< 0.1	MCERTS	2.14	0.25	1.12	0.31	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.72	< 0.1	0.32	< 0.1	
Chrysene	mg/kg	< 0.1	MCERTS	0.70	< 0.1	0.36	0.16	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.62	< 0.1	0.32	0.17	
Benzo(k)fluoranthene	0 0	< 0.1	MCERTS	0.29	< 0.1	0.15	< 0.1	
Benzo(a)pyrene		< 0.1	MCERTS	0.50	< 0.1	0.25	< 0.1	
Indeno(1,2,3-cd)pyrene		< 0.1	MCERTS	0.23	< 0.1	0.13	< 0.1	
Dibenz(a,h)anthracene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(ghi)perylene		< 0.1	MCERTS	0.22	< 0.1	0.13	< 0.1	
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	13.7	< 1.6	6.3	< 1.6	





Soil Analysis Certificate	- TPH CWG Bande	d						
DETS Report No: 21-012			Date Sampled	01/02/21	01/02/21	01/02/21	01/02/21	01/02/21
G & J Geoenvironmental (Consultants Ltd	Time Sampled		None Supplied				
Site Reference: Middlemore Lane			TP / BH No	G11	G12	G13	G14	H11
Project / Job Ref: GJ049		,	Additional Refs	None Cupplied	None Cumplied	None Cupplied	None Cumplied	Nana Cumplied
Order No: None Supplied		,	Depth (m)	None Supplied None Supplied				
Reporting Date: 08/02/2		DI	ETS Sample No	523597	523598	523599		523601
Determinand		RL	Accreditation					
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	0.04	< 0.01
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	13.90	< 0.05
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	5	< 2	< 2
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	16	< 2	< 2
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	13	< 3	< 3
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	27	< 3	< 3	< 3	< 3
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	88	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	115	< 21	34	< 21	< 21
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8	mg/kg	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	4	< 2	< 2
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	4	8	< 2	< 2
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	18	11	4	< 3	< 3
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	47	< 10	< 10	< 10	< 10
Aromatic (C5 - C35)	mg/kg		NONE	64	< 21	< 21	< 21	< 21
Total >C5 - C35	mg/kg	< 42	NONE	179	< 42	50	< 42	< 42





Soil Analysis Certificate	e - TPH CWG Bande	d						
DETS Report No: 21-012			Date Sampled	01/02/21	01/02/21	01/02/21	01/02/21	01/02/21
G & J Geoenvironmental (Consultants Ltd	Time Sampled		None Supplied				
Site Reference: Middlemore Lane			TP / BH No	H12	H13	H14	11	112
Project / Job Ref: GJ049		/	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied		None Supplied
Reporting Date: 08/02/2	2021	D	ETS Sample No	523602	523603	523604	523605	523606
Determinent	11-14	DI						
Determinand Aliphatic >C5 - C6		RL	Accreditation NONE	0.01	0.01	0.01	0.01	0.01
Aliphatic >C5 - C6 Aliphatic >C6 - C8		< 0.01		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	5 5	< 2		< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12	5 5			< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16	5 5			< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21	mg/kg			< 3	< 3	< 3	< 3	< 3
Aliphatic >C21 - C34		< 10		< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34)				< 21	< 21	< 21	< 21	< 21
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8	J J	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	3.3			< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg			< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16	5 5	< 2		< 2	< 2	< 2	3	< 2
Aromatic >C16 - C21	mg/kg	< 3		< 3	< 3	< 3	5	< 3
Aromatic >C21 - C35		< 10		< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35)			NONE	< 21	< 21	< 21	< 21	< 21
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	< 42





Soil Analysis Certificate	- TPH CWG Bande	b						
DETS Report No: 21-012	55		Date Sampled	01/02/21	01/02/21	01/02/21	01/02/21	
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	113	J12	J13	J14	
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied		
Reporting Date: 08/02/2	2021	DI	ETS Sample No	523607	523608	523609	523610	
Determinand			Accreditation					
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Aliphatic >C6 - C8		< 0.05	NONE	0.07	< 0.05	< 0.05	< 0.05	
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	7	< 2	5	< 2	
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	30	< 3	19	< 3	
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	20	< 10	72	< 10	
Aromatic (C5 - C35)	mg/kg	< 21	NONE	57	< 21	95	< 21	
Total >C5 - C35	mg/kg	< 42	NONE	57	< 42	95	< 42	





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-0125	55		Date Sampled	01/02/21	01/02/21	01/02/21	01/02/21	01/02/21
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemore Lane TP / BH No			G11	G12	G13	G14	H11	
Project / Job Ref: GJ049 Additional Refs			None Supplied					
Order No: None Supplied Dep			Depth (m)	None Supplied				
Reporting Date: 08/02/2021			ETS Sample No	523597	523598	523599	523600	523601
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	9	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	6	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	8	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	5	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-0125	5		Date Sampled	01/02/21	01/02/21	01/02/21	01/02/21	01/02/21
G & J Geoenvironmental C	onsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemore Lane TP / BH No			H12	H13	H14	111	112	
Project / Job Ref: GJ049 Additio			Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 08/02/20	DETS Sample No		523602	523603	523604	523605	523606	
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate - E	BTEX / MTBE							
DETS Report No: 21-01255		Date Sampled		01/02/21	01/02/21	01/02/21	01/02/21	
G & J Geoenvironmental Con	sultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemore	te Reference: Middlemore Lane TP / BH No		113	J12	J13	J14		
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied	Order No: None Supplied Depth		Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 08/02/2021		DETS Sample No		523607	523608	523609	523610	
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	





Soil Analysis Certificate - V DETS Report No: 21-01255	roiatile Organic (Jornpo	unds (VOC) Date Sampled	01/02/21	01/00/01	01/02/21	
G & J Geoenvironmental Con	sultants Ltd		Time Sampled		01/02/21	01/02/21	
Site Reference: Middlemore			TP / BH No	None Supplied G13	None Supplied H11	None Supplied J14	
Site Reference: Middlemore	Lane		TP / BH NO	G13	нп	J14	
Project / Job Ref: GJ049		A	dditional Refs	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	
Reporting Date: 08/02/2027	1	DE	TS Sample No	523599	523601	523610	
Determinand	Unit	RL	Accreditation				
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Chloromethane Chloroethane	ug/kg	< 10	MCERTS MCERTS	< 10 < 5	< 10 < 5	< 10 < 5	
Bromomethane	ug/kg ug/kg	< 10	MCERTS	< 10	< 10	< 10	
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,1,1-Trichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	 -
1,1-Dichloropropene	ug/kg	< 10	MCERTS MCERTS	< 10	< 10	< 10	
Carbon Tetrachloride 1,2-Dichloroethane	ug/kg ug/kg	< 5 < 5	MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	
Benzene	ug/kg ug/kg	< 2	MCERTS	< 2	< 2	< 2	
1,2-Dichloropropane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Trichloroethene	ug/kg	< 5	MCERTS	19	15	< 5	
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
TAME	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,2-Dibromoethane Chlorobenzene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	
1,1,1,2-Tetrachloroethane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Ethyl Benzene	ug/kg ug/kg	< 2	MCERTS	< 2	< 2	< 2	
m,p-Xylene	ug/kg ug/kg	< 2	MCERTS	< 2	< 2	< 2	
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
Styrene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10	< 10	
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
n-Propylbenzene	ug/kg	< 5	MCERTS	9	< 5	< 5	
Bromobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	10	< 5	< 5	
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5 < 5	< 5	< 5	
tert-Butylbenzene 1,2,4-Trimethylbenzene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 18	< 5 < 5	< 5 < 5	
sec-Butylbenzene	ug/kg ug/kg	< 5	MCERTS	18	< 5	< 5	
p-Isopropyltoluene	ug/kg ug/kg	< 5	MCERTS	6	< 5	< 5	
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-01255	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 08/02/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Content (%)	Sample Matrix Description
523597	G11	None Supplied	None Supplied	13.9	Brown loamy sand with brick and concrete
523598	G12	None Supplied	None Supplied	13.8	Brown sandy clay with stones
523599	G13	None Supplied	None Supplied		Brown loamy sand with stones
523600	G14	None Supplied	None Supplied	11.9	Brown loamy sand with brick
523601	H11	None Supplied	None Supplied	15.1	Brown loamy sand
523602	H12	None Supplied	None Supplied		Brown loamy sand with stones
523603	H13	None Supplied	None Supplied	15.3	Brown loamy sand with stones
523604	H14	None Supplied	None Supplied	16.1	Brown loamy sand with stones
523605	11	None Supplied	None Supplied		Brown loamy sand with stones
523606	112	None Supplied	None Supplied	16.3	Brown loamy clay with brick
523607	113	None Supplied	None Supplied	17.2	Brown loamy sand with stones
523608	J12	None Supplied	None Supplied	17.2	Brown loamy sand with stones
523609	J13	None Supplied	None Supplied	15.9	Brown loamy sand with stones and brick
523610	J14	None Supplied	None Supplied	19.4	Brown loamy sand with stones

Moisture content is part of procedure E003 & is not an accredited test

Insufficient Sample ^{1/S} Unsuitable Sample ^{U/S}





Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 21-01255
G & J Geoenvironmental Consultants Ltd
Site Reference: Middlemore Lane
Project / Job Ref: GJ049
Order No: None Supplied
Reporting Date: 08/02/2021

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR		Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by agua-regia digestion followed by ICP-OES	E002
Soil	D		Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cvanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D		Gravimetrically determined through extraction with cyclohexane	E010
Soil	AR		Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR		Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
			Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	
Soil	AR	C12-C16, C16-C21, C21-C40)		E004
Soil	D		Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	AR		Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (11) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by agua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR		Determination of sulphide by distillation followed by colorimetry	E018
Soil	D		Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (11) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	7415			



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY



DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-02133

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	GJ049
Sample Receipt Date:	23/02/2021
Sample Scheduled Date:	23/02/2021
Report Issue Number:	1
Reporting Date:	01/03/2021

Authorised by:

Dave Ashworth

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. 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 except in full, without the prior written approval of the laboratory.





Soil Analysis Certificate							
DETS Report No: 21-02133			Date Sampled	19/02/21	19/02/21		
G & J Geoenvironmental Consultan	G & J Geoenvironmental Consultants Ltd			None Supplied	None Supplied		
Site Reference: Middlemore Lane			TP / BH No	K12	L12		
Draigat / Job Daf. C 1040			Additional Refs		N 0 1 1		
Project / Job Ref: GJ049 Order No: GJ049		F	Depth (m)	None Supplied None Supplied	None Supplied None Supplied		
Reporting Date: 01/03/2021		DI	ETS Sample No	527428	527429		
Reporting Date. 01/03/2021		DI	ETS Sample NO	527428	527429		<u> </u>
Determinand	Unit	RL	Accreditation				
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Detected	Not Detected		
Sample Matrix ^(S)	Material Type	N/a	NONE	Small bundle of Chrysotile			
Asbestos Type (S)	PLM Result	N/a	ISO17025	Chrysotile			
pH	pH Units	N/a	MCERTS	8.3	8.1		
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2		
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	2607	813		
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.26	0.08		
Sulphide	mg/kg	< 5	NONE	< 5	< 5		
Organic Matter	%	< 0.1	MCERTS	3.7	2.1		
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	2.1	1.2		
Arsenic (As)	mg/kg	< 2	MCERTS	8	5		
W/S Boron	mg/kg	< 1	NONE	< 1	< 1		
Cadmium (Cd)	mg/kg	< 0.2	NONE	< 0.2	< 0.2		
Chromium (Cr)	mg/kg	< 2	MCERTS	12	9		
Copper (Cu)	mg/kg	< 4	MCERTS	59	37		
Lead (Pb)	mg/kg	< 3	MCERTS	254	103		
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1		
Nickel (Ni)	mg/kg	< 3	MCERTS	21	9		
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3		
Zinc (Zn)	mg/kg	< 3	MCERTS	115	61		
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2		
EPH (C10 - C40)	mg/kg	< 6	MCERTS	125	349		1





Soil Analysis Certificate	- Speciated PAHs					
DETS Report No: 21-0213	33		Date Sampled	19/02/21	19/02/21	
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	K12	L12	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	
Order No: GJ049	001		Depth (m)	None Supplied	None Supplied	
Reporting Date: 01/03/2	2021	D	ETS Sample No	527428	527429	
	11-24	DI	A			
Determinand			Accreditation MCERTS	0.40	0.10	
Naphthalene	mg/kg	< 0.1		0.12	0.12	
Acenaphthylene	0 0	< 0.1	MCERTS	< 0.1	< 0.1	
Acenaphthene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	
Phenanthrene	mg/kg	< 0.1	MCERTS	0.31	0.33	
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	
Fluoranthene	mg/kg	< 0.1	MCERTS	0.28	0.34	
Pyrene		< 0.1	MCERTS	0.24	0.30	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	
Benzo(b)fluoranthene		< 0.1	MCERTS	< 0.1	< 0.1	
Benzo(k)fluoranthene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	
Benzo(a)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	
Indeno(1,2,3-cd)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	
Dibenz(a,h)anthracene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	
Benzo(ghi)perylene		< 0.1	MCERTS	< 0.1	< 0.1	
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	





Soil Analysis Certificate	- TPH CWG Bande	d					
DETS Report No: 21-021	33		Date Sampled	19/02/21	19/02/21		
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemo	ore Lane		TP / BH No	K12	L12		
Project / Job Ref: GJ049		Å	Additional Refs	None Supplied	None Supplied		
Order No: GJ049			Depth (m)	None Supplied	None Supplied		
Reporting Date: 01/03/2	2021	DI	ETS Sample No	527428	527429		
Determiner	11-24	DL	A				
Determinand Aliphatic >C5 - C6			Accreditation NONE	0.01	0.01		
	0 0	< 0.01		< 0.01	< 0.01		
Aliphatic >C6 - C8	5 5	< 0.05	NONE	< 0.05	< 0.05		
Aliphatic >C8 - C10	5 5		MCERTS	< 2	4		
Aliphatic >C10 - C12	mg/kg		MCERTS	< 2	47		
Aliphatic >C12 - C16	5 5		MCERTS	< 3	75		
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	4		
Aliphatic >C21 - C34	mg/kg		MCERTS NONE	47 47	101 231		
Aliphatic (C5 - C34)	mg/kg						
Aromatic >C5 - C7	0 0	< 0.01	NONE	< 0.01	< 0.01		
Aromatic >C7 - C8	5 5	< 0.05	NONE	< 0.05	< 0.05		
Aromatic >C8 - C10	mg/kg		MCERTS	< 2	< 2		
Aromatic >C10 - C12	mg/kg		MCERTS	< 2	11		
Aromatic >C12 - C16	mg/kg		MCERTS	< 2	32		
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3		
Aromatic >C21 - C35	<i>u_u</i>	< 10	MCERTS	< 10	< 10		
Aromatic (C5 - C35)	mg/kg			< 21	43		
Total >C5 - C35	mg/kg	< 42	NONE	47	274		





Soil Analysis Certificate - BT	EX / MTBE						
DETS Report No: 21-02133			Date Sampled	19/02/21	19/02/21		
G & J Geoenvironmental Consu	Iltants Ltd		Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemore Lane TP / BH N			TP / BH No	K12	L12		
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied	None Supplied		
Order No: GJ049	Depth (m)		Depth (m)	None Supplied	None Supplied		
Reporting Date: 01/03/2021			ETS Sample No	527428	527429		
Determinand	Unit	RL	Accreditation				
Benzene	ug/kg	< 2	MCERTS	< 2	< 2		
Toluene	ug/kg	< 5	MCERTS	< 5	< 5		
Ethylbenzene	Ethylbenzene ug/kg < 2 MCERTS		< 2	< 2			
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2		
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2		
MTBE	ug/kg	< 5	MCERTS	< 5	< 5		





DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
527428	K12	None Supplied	None Supplied	14.2	Brown loamy sand with brick and concrete
527429	L12	None Supplied	None Supplied	12	Brown sandy clay with stones

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample $^{\rm VS}$ Unsuitable Sample $^{\rm US}$

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Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 21-02133	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: GJ049	
Reporting Date: 01/03/2021	

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX		E001
Soil	D		Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR		Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR D		Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane	E015 E011
Soil Soil	AR		Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D		Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil	D	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil	D	TOC (Total Organic Carbon)	Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Turnace	E019
Soil	D	Magnesium - Water Soluble		E025
Soil	D	Metals		E002
Soil	AR	Mineral Oil (C10 - C40)	cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil Soil	D	Nitrate - Water Soluble (2:1) Organic Matter	Determination of nitrate by extraction with water & analysed by ion chromatography Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E009 E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of DAH compounds by extraction in acctance and beyone followed by CC MS with the	E005
Soil	AR	PCB - 7 Congeners		E008
Soil	D		Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR		Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR		Determination of phenols by distillation followed by colorimetry	E021
Soil	D		Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR D		Determination of sulphide by distillation followed by colorimetry	E018
Soil Soil	AR	Suppor - Total SVOC	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by	E024 E006
Soil	AR	Thiocyanate (as SCN)	GC-MS Determination of thiocyanate by extraction in caustic soda followed by acidification followed by	E017
Soil	D	Toluene Extractable Matter (TEM)	addition of ferric nitrate followed by colorimetry Gravimetrically determined through extraction with toluene	E011
Soil	D	Toluene Extractable Matter (TEM) Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with	E011 E010
		TPH CWG (ali: C5- C6, C6-C8, C8-C10,	iron (II) sulphate	
Soil	AR	C10-C12, C12-C16, C16-C21, C21-C34,	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)		E004
Soil	AR		Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR		Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried AR As Received





DETS Report No: 21-02429

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	01/03/2021
Sample Scheduled Date:	01/03/2021
Report Issue Number:	1
Reporting Date:	05/03/2021

Authorised by:

Dave Ashworth

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. 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 except in full, without the prior written approval of the laboratory.





Soil Analysis Certificate								
DETS Report No: 21-02429			Date Sampled	24/02/21	24/02/21	24/02/21	24/02/21	24/02/21
G & J Geoenvironmental Consultants Lt	td		Time Sampled	None Supplied				
Site Reference: Middlemore Lane			TP / BH No	H5	H6	15	16	J5
Project / Job Ref: GJ049		A	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 05/03/2021		DI	ETS Sample No	528439	528440	528441	528442	528443
Determinand	Unit	RL	Accreditation					
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected				
рН	pH Units	N/a	MCERTS	5.2	6.4	7.0	6.7	8.2
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	4604	8052	733	11120	1587
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.46	0.81	0.07	1.11	0.16
Sulphide	mg/kg	< 5	NONE	8	< 5	< 5	< 5	< 5
Organic Matter	%	< 0.1	MCERTS	5.2	3.8	0.8	1.2	0.5
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	3	2.2	0.5	0.7	0.3
Arsenic (As)	mg/kg	< 2	MCERTS	9	13	4	20	7
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	NONE	0.3	0.5	< 0.2	0.3	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	12	10	6	14	11
Copper (Cu)	mg/kg	< 4	MCERTS	88	224	15	120	47
Lead (Pb)	mg/kg	< 3	MCERTS	75	80	13	51	21
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	24	22	5	38	12
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	MCERTS	183	404	39	215	128
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
EPH (C10 - C40)	mg/kg	< 6	MCERTS	87	109	22	< 6	21





Soil Analysis Certificate							
DETS Report No: 21-02429			Date Sampled	24/02/21	24/02/21		
G & J Geoenvironmental Consultan	teltd		Time Sampled	None Supplied			
	IS LIU			None Supplied	None Supplied		
Site Reference: Middlemore Lane			TP / BH No	JI	J8		
Project / Job Ref: GJ049		/	Additional Refs	None Supplied	None Supplied		
Order No: None Supplied			Depth (m)	None Supplied	None Supplied		
Reporting Date: 05/03/2021		D	ETS Sample No	528444	528445		
Determinand	Unit	RL	Accreditation				
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected	Not Detected		
рН	pH Units	N/a	MCERTS	7.5	6.0		
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2		
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	3466	5017		
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.35	0.50		
Sulphide	mg/kg	< 5	NONE	6	< 5		
Organic Matter	%	< 0.1	MCERTS	2.9	3.8		
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	1.7	2.2		
Arsenic (As)	mg/kg	< 2	MCERTS	9	10		
W/S Boron	mg/kg	< 1	NONE	< 1	< 1		
Cadmium (Cd)	mg/kg	< 0.2	NONE	0.4	0.4		
Chromium (Cr)	mg/kg	< 2	MCERTS	12	13		
Copper (Cu)	mg/kg	< 4	MCERTS	55	46		
Lead (Pb)	mg/kg	< 3	MCERTS	23	36		
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1		
Nickel (Ni)	mg/kg	< 3	MCERTS	20	22		
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3		
Zinc (Zn)	mg/kg	< 3	MCERTS	156	142		
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2		
EPH (C10 - C40)	mg/kg	< 6	MCERTS	40	153		

 EPH (CT0 - C40)
 ING/Kg
 < 6</td>
 MCERTS
 40
 153

 Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion

 Subcontracted analysis (S)





Soil Analysis Certificate - Speciated PAHs											
DETS Report No: 21-0242	29		Date Sampled	24/02/21	24/02/21	24/02/21	24/02/21	24/02/21			
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied							
Site Reference: Middlemo	ore Lane		TP / BH No	H5	H6	15	16	J5			
Project / Job Ref: GJ049		/	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied				
Order No: None Supplied		D	Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied				
Reporting Date: 05/03/2	2021	D	ETS Sample No	528439	528440	528441	528442	528443			
Determinand	Unit	RI	Accreditation								
Naphthalene		< 0.1	MCERTS	0.10	< 0.1	. 0.1	. 0.1	. 0.1			
Acenaphthylene	5 5	< 0.1	MCERTS	0.18 < 0.1	< 0.1	< 0.1	< 0.1	< 0.1			
	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1 < 0.1			
Acenaphthene	5 5	< 0.1	MCERTS	-			-				
Fluorene	mg/kg	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			
Phenanthrene	5 5	-	MCERTS	0.36	0.23	< 0.1	< 0.1	< 0.1			
Anthracene Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			
	mg/kg	< 0.1	MCERTS	0.12	0.16	< 0.1	< 0.1	< 0.1			
Pyrene	0 0	-	MCERTS	0.13	0.16	< 0.1	< 0.1	< 0.1			
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			
Chrysene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			
Benzo(b)fluoranthene	0 0	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			
Benzo(k)fluoranthene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			
Benzo(a)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			
Indeno(1,2,3-cd)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			
Dibenz(a,h)anthracene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			
Benzo(ghi)perylene		< 0.1		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6			





Soil Analysis Certificate	Soil Analysis Certificate - Speciated PAHs									
DETS Report No: 21-0242			Date Sampled	24/02/21	24/02/21					
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied					
Site Reference: Middlemo	ore Lane		TP / BH No	J7	J8					
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied					
Order No: None Supplied			Depth (m)	None Supplied	None Supplied					
Reporting Date: 05/03/2	2021	D	TS Sample No	528444	528445					
Determinand		RL	Accreditation							
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	0.16					
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1					
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1					
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1					
Phenanthrene	mg/kg	< 0.1	MCERTS	0.19	0.41					
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1					
Fluoranthene	mg/kg	< 0.1	MCERTS	0.14	0.23					
Pyrene	mg/kg	< 0.1	MCERTS	0.12	0.22					
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1					
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	0.14					
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	0.11					
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1					
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1					
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1					
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1					
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1					
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6					





Soil Analysis Certificate - TPH CWG Banded											
DETS Report No: 21-024	29		Date Sampled	24/02/21	24/02/21	24/02/21	24/02/21	24/02/21			
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied							
Site Reference: Middlemo	ore Lane		TP / BH No	H5	H6	15	16	J5			
Project / Job Ref: GJ049		/	Additional Refs	None Supplied							
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied		None Supplied			
Reporting Date: 05/03/2	2021	D	ETS Sample No	528439	528440	528441	528442	528443			
		D.									
Determinand	Unit	RL	Accreditation	0.04	0.01	0.01	0.01	0.01			
Aliphatic >C5 - C6	5 5	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01			
Aliphatic >C6 - C8	5 5	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05			
Aliphatic >C8 - C10	5 5	< 2		< 2	< 2	< 2	< 2	< 2			
Aliphatic >C10 - C12	mg/kg	< 2		< 2	2	< 2	< 2	< 2			
Aliphatic >C12 - C16	5 5			< 3	4	< 3	< 3	< 3			
Aliphatic >C16 - C21	mg/kg			< 3	4	< 3	< 3	< 3			
Aliphatic >C21 - C34	mg/kg	< 10		< 10	30	< 10	< 10	< 10			
Aliphatic (C5 - C34)	mg/kg			< 21	40	< 21	< 21	< 21			
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01			
Aromatic >C7 - C8		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05			
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2			
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	3	< 2	< 2	< 2	< 2			
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	9	4	< 2	< 2	< 2			
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	10	7	< 3	< 3	< 3			
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	< 10	37	< 10	< 10	< 10			
Aromatic (C5 - C35)	mg/kg		NONE	22	49	< 21	< 21	< 21			
Total >C5 - C35	mg/kg	< 42	NONE	< 42	88	< 42	< 42	< 42			





Soil Analysis Certificate	- TPH CWG Bande	d					
DETS Report No: 21-024	29		Date Sampled	24/02/21	24/02/21		
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemo	ore Lane		TP / BH No	J7	J8		
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied		
Order No: None Supplied			Depth (m)	None Supplied	None Supplied		
Reporting Date: 05/03/2	2021	DI	ETS Sample No	528444	528445		
Determinand			Accreditation				
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01		
Aliphatic >C6 - C8	0 0	< 0.05		< 0.05	< 0.05		
Aliphatic >C8 - C10	5 5	< 2	MCERTS	< 2	< 2		
Aliphatic >C10 - C12	mg/kg		MCERTS	< 2	< 2		
Aliphatic >C12 - C16	5 5		MCERTS	< 3	< 3		
Aliphatic >C16 - C21	mg/kg		MCERTS	< 3	< 3		
Aliphatic >C21 - C34			MCERTS	< 10	< 10		
Aliphatic (C5 - C34)	mg/kg		NONE	< 21	< 21		
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01		
Aromatic >C7 - C8		< 0.05	NONE	< 0.05	< 0.05		
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2		
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2		
Aromatic >C12 - C16	mg/kg		MCERTS	< 2	5		
Aromatic >C16 - C21	mg/kg		MCERTS	< 3	7		
Aromatic >C21 - C35	mg/kg		MCERTS	< 10	27		
Aromatic (C5 - C35)	mg/kg	< 21	NONE	< 21	39		
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42		





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-0242	9		Date Sampled	24/02/21	24/02/21	24/02/21	24/02/21	24/02/21
G & J Geoenvironmental C	onsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemore	re Lane		TP / BH No	H5	H6	15	16	J5
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 05/03/2021			ETS Sample No	528439	528440	528441	528442	528443
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate - BTEX / MTBE									
DETS Report No: 21-02429			Date Sampled	24/02/21	24/02/21				
G & J Geoenvironmental Consultants Ltd			Time Sampled	None Supplied	None Supplied				
Site Reference: Middlemore Lane			TP / BH No	J7	J8				
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied	None Supplied				
Reporting Date: 05/03/2021		DETS Sample No		528444	528445				
Determinand	Unit	RL	Accreditation						
Benzene u	ug/kg	< 2	MCERTS	< 2	< 2				
Toluene	ug/kg	< 5	MCERTS	< 5	< 5				
Ethylbenzene u	ug/kg	< 2	MCERTS	< 2	< 2				
p & m-xylene u	ıg∕kg	< 2	MCERTS	< 2	< 2				
o-xylene u	ug/kg	< 2 MCERTS		< 2	< 2				
MTBE	ig/kg	< 5	MCERTS	< 5	< 5				





Soil Analysis Certificate		_ompc		24/02/24	24/02/24	1	
DETS Report No: 21-0242 G & J Geoenvironmental (Date Sampled Time Sampled	24/02/21	24/02/21		
Site Reference: Middlemo			TP / BH No	None Supplied H5	None Supplied J8		
Site Reference. Middlemo			IF / BITNU	115	70		
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied		
Order No: None Supplied			Depth (m)	None Supplied	None Supplied		
Reporting Date: 05/03/2	2021	D	TS Sample No	528439	528445		
Determinand	Unit		Accreditation	F	-		
Dichlorodifluoromethane Vinyl Chloride	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5		
Chloromethane	ug/kg ug/kg	< 10	MCERTS	< 10	< 10		+
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5		-
Bromomethane	ug/kg	< 10	MCERTS	< 10	< 10		-
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5	< 5		
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5		
MTBE	ug/kg	< 5	MCERTS	< 5	< 5		
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5		_
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5		
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	├ ─── │	
2,2-Dichloropropane Chloroform	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5		
Bromochloromethane	ug/kg ug/ka	< 5	MCERTS	< 5	< 5	<u> </u>	-
1,1,1-Trichloroethane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	<u> </u>	+
1,1-Dichloropropene	ug/kg	< 10	MCERTS	< 10	< 10		1
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5	< 5		
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5		
Benzene	ug/kg	< 2	MCERTS	< 2	< 2		
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5		
Trichloroethene	ug/kg	< 5	MCERTS	< 5	< 5		
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5		
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5		-
Cis-1,3-Dichloropropene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5		
Toluene	ug/kg	< 5	MCERTS	< 5	< 5		-
trans-1,3-Dichloropropene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5		
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10		-
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5		
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5	< 5		
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5		
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5	< 5		
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5		
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5		
Ethyl Benzene m,p-Xylene	ug/kg ug/kg	< 2	MCERTS MCERTS	< 2 < 2	< 2 < 2		
o-Xylene	ug/kg ug/kg	< 2	MCERTS	< 2	< 2		
Styrene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	<u> </u>	1
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10		1
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5		
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5	< 5		_
n-Propylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
Bromobenzene	ug/kg	< 5	MCERTS	< 5	< 5		
2-Chlorotoluene 1,3,5-Trimethylbenzene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5		
4-Chlorotoluene	ug/kg ug/kg	< 5 < 5	MCERTS	< 5	< 5 < 5	<u> </u>	+
tert-Butylbenzene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	<u> </u>	-
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	<u> </u>	1
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		1
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5		
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5		
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5		
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5		
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10		
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5		





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-02429	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 05/03/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
528439	H5	None Supplied	None Supplied	13.1	Brown sandy clay
528440	H6	None Supplied	None Supplied	13.9	Brown loamy sand with stones
528441	15	None Supplied	None Supplied	7.6	Brown sandy clay with stones
528442	16	None Supplied	None Supplied	11.9	Brown sandy clay with stones
528443	J5	None Supplied	None Supplied	7.6	Light brown sandy clay with stones
528444	J7	None Supplied	None Supplied	12	Brown loamy sand with stones
528445	J8	None Supplied	None Supplied	12.5	Brown loamy sand with stones and brick

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample $^{\rm US}$ Unsuitable Sample $^{\rm US}$





Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 21-02429	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 05/03/2021	

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX		E001
Soil	D	Cations		E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)		E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D		Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Call		EPH TEXAS (C6-C8, C8-C10, C10-C12,	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	F004
Soil	AR	C12-C16, C16-C21, C21-C40)	headspace GC-MS	E004
Soil	D		Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil	D	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium		E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble		E025
Soil	D	Metals		E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC EID fractionating with SPE	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexage followed by GC MS with the	E005
Soil	AR	PCB - 7 Congeners		E008
Soil	D	Petroleum Ether Extract (PEE)		E011
Soil	AR	, Ha	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D		Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of total sulphate by extraction with 10% HCI followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR		Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)		E004
Soil	AR AR	VOCs	Determination of volatile organic compounds by headspace GC-MS Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried AR As Received



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY

DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-02523

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	GJ049
Sample Receipt Date:	02/03/2021
Sample Scheduled Date:	02/03/2021
Report Issue Number:	1
Reporting Date:	08/03/2021

Authorised by:

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

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Soil Analysis Certificate							
DETS Report No: 21-02523			Date Sampled	26/02/21	26/02/21		
G & J Geoenvironmental Consultan	ts Ltd		Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemore Lane			TP / BH No	N5	N6		
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied		
Order No: GJ049			Depth (m)	None Supplied	None Supplied		
Reporting Date: 08/03/2021		DI	ETS Sample No	528824	528825		
Determinand	Unit	RL	Accreditation				
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected	Not Detected		
рН	pH Units	N/a	MCERTS	8.7	9.0		
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2		
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	1078	2287		
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.11	0.23		
Sulphide	mg/kg	< 5	NONE	< 5	< 5		
Organic Matter	%	< 0.1	MCERTS	0.2	0.9		
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	< 0.1	0.5		
Arsenic (As)	mg/kg	< 2	MCERTS	7	5		
W/S Boron	mg/kg	< 1	NONE	< 1	< 1		
Cadmium (Cd)	mg/kg	< 0.2	NONE	< 0.2	< 0.2		
Chromium (Cr)	mg/kg	< 2	MCERTS	12	9		
Copper (Cu)	mg/kg	< 4	MCERTS	19	42		
Lead (Pb)	mg/kg	< 3	MCERTS	21	43		
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1		l i i i i i i i i i i i i i i i i i i i
Nickel (Ni)	mg/kg	< 3	MCERTS	13	11		
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3		
Zinc (Zn)	mg/kg	< 3	MCERTS	43	64		
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2		
EPH (C10 - C40)	mg/kg	< 6	MCERTS	< 6	1270		

 EPH (CT0 - C40)
 INIG/Rg
 < 6</td>
 MCERTS
 < 6</td>
 1270

 Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion

 Subcontracted analysis (S)





Soil Analysis Certificate	- Speciated PAHs					
DETS Report No: 21-02523			Date Sampled	26/02/21	26/02/21	
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	N5	N6	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	
Order No: GJ049			Depth (m)	None Supplied	None Supplied	
Reporting Date: 08/03/2	021	D	ETS Sample No	528824	528825	
		DI				
Determinand			Accreditation		<u>.</u>	
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	
Acenaphthylene	0 0	< 0.1	MCERTS	< 0.1	< 0.1	
Acenaphthene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	0.17	
Phenanthrene	mg/kg	< 0.1	MCERTS	0.13	0.42	
Anthracene	mg/kg	< 0.1	MCERTS	0.14	0.20	
Fluoranthene	mg/kg	< 0.1	MCERTS	0.29	0.52	
Pyrene	0 0	< 0.1	MCERTS	0.26	0.48	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.54	0.66	
Chrysene		< 0.1	MCERTS	< 0.1	0.26	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.36	0.52	
Benzo(k)fluoranthene		< 0.1	MCERTS	0.12	0.16	
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.25	0.36	
Indeno(1,2,3-cd)pyrene	0 0	< 0.1	MCERTS	< 0.1	0.48	
Dibenz(a,h)anthracene		< 0.1	MCERTS	< 0.1	< 0.1	
Benzo(ghi)perylene		< 0.1	MCERTS	< 0.1	0.30	
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	2.1	4.5	





Soil Analysis Certificate	- TPH CWG Bande	d					
DETS Report No: 21-02523			Date Sampled	26/02/21	26/02/21		
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemo	ore Lane		TP / BH No	N5	N6		
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied	None Supplied		
Order No: GJ049	0.01	D.	Depth (m)	None Supplied	None Supplied		
Reporting Date: 08/03/2	021	Di	ETS Sample No	528824	528825		
Determine end	11-14	DL					
Determinand			Accreditation	0.04	0.01		
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01		
Aliphatic >C6 - C8		< 0.05	NONE	< 0.05	< 0.05		
Aliphatic >C8 - C10	0 0	< 2	MCERTS	< 2	< 2		
Aliphatic >C10 - C12	mg/kg		MCERTS	< 2	22		
Aliphatic >C12 - C16	mg/kg		MCERTS	< 3	106		
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	142		
Aliphatic >C21 - C34	mg/kg		MCERTS	< 10	325		
Aliphatic (C5 - C34)	mg/kg		NONE	< 21	595		
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01		
Aromatic >C7 - C8	5 5	< 0.05	NONE	< 0.05	< 0.05		
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2		
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	3		
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	34		
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	84		
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	< 10	244		
Aromatic (C5 - C35)	mg/kg	< 21	NONE	< 21	365		
Total >C5 - C35	mg/kg	< 42	NONE	< 42	961		





Soil Analysis Certificate -	- BTEX / MTBE						
DETS Report No: 21-02523	DETS Report No: 21-02523			26/02/21	26/02/21		
G & J Geoenvironmental Co	onsultants Ltd		Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemore Lane			TP / BH No	N5	N6		
Project / Job Ref: GJ049		/	Additional Refs	None Supplied	None Supplied		
Order No: GJ049			Depth (m)	None Supplied	None Supplied		
Reporting Date: 08/03/20	21	DETS Sample No		528824	528825		
Determinand	Unit	RL	Accreditation				
Benzene	ug/kg	< 2	MCERTS	< 2	< 2		
Toluene	ug/kg	< 5	MCERTS	< 5	< 5		
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2		
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2		
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2		
MTBE	ug/kg	< 5	MCERTS	< 5	< 5		





Soil Analysis Certificate	- Volatile Organic (Compo	unds (VOC)			
DETS Report No: 21-0252			Date Sampled	26/02/21		
G & J Geoenvironmental Consultants Ltd		Time Sampled		None Supplied		
Site Reference: Middlemore Lane		TP / BH No		N6		
Project / Job Ref: GJ049		A	dditional Refs	None Supplied		
Order No: GJ049			Depth (m)	None Supplied		
Reporting Date: 08/03/2	.021	DE	TS Sample No	528825		
Determinand	Unit	RL	Accreditation			
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5		
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5		
Chloromethane	ug/kg	< 10	MCERTS	< 10		
Chloroethane	ug/kg	< 5	MCERTS	< 5		
Bromomethane	ug/kg	< 10	MCERTS	< 10		
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5		
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5		
MTBE	ug/kg	< 5	MCERTS	< 5		
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5		
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5		
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5		
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5		
Chloroform	ug/kg	< 5	MCERTS	< 5		
Bromochloromethane	ug/kg	< 5	MCERTS	< 5		
1,1,1-Trichloroethane	ug/kg	< 5	MCERTS	< 5		
1,1-Dichloropropene	ug/kg	< 10	MCERTS	< 10		
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5		
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5		
Benzene	ug/kg	< 2	MCERTS	< 2		
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5		
Trichloroethene	ug/kg	< 5	MCERTS	< 5		
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5		
Dibromomethane	ug/kg	< 5	MCERTS	< 5		
TAME	ug/kg	< 5	MCERTS	< 5		
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5		
Toluene	ug/kg	< 5	MCERTS	< 5		
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5		
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10		
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5		
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5		
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5		_
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5		
Chlorobenzene	ug/kg	< 5	MCERTS	< 5		-
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	I	
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	 	
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	 	
o-Xylene	ug/kg	< 2	MCERTS	< 2	 	
Styrene	ug/kg	< 5 < 10	MCERTS MCERTS	< 5 < 10		+
Bromoform	ug/kg ug/kg	< 10	MCERTS	< 10		+
Isopropylbenzene 1,1,2,2-Tetrachloroethane	ug/kg ug/kg	< 5	MCERTS	< 5		1
1,2,3-Trichloropropane	ug/kg ug/kg	< 5	MCERTS	< 5		+
n-Propylbenzene	ug/kg ug/kg	< 5	MCERTS	< 5		1
Bromobenzene	ug/kg	< 5	MCERTS	< 5	<u> </u>	 1
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	<u> </u>	 1
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	12	<u> </u>	 1
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	<u> </u>	 1
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5		1
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	13	<u> </u>	 1
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5	<u> </u>	 1
p-Isopropyltoluene	ug/kg	< 5	MCERTS	8	<u> </u>	 1
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5		1
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5		1
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5		1
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5		1
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10		1
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5		1
	ag/ kg	- 0		, 0		





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-02523	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: GJ049	
Reporting Date: 08/03/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
528824	N5	None Supplied	None Supplied	8	Light brown sandy clay with stones
528825	N6	None Supplied	None Supplied	8	Light brown sandy clay with stones

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample ^{I/S} Unsuitable Sample ^{I/S}





Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 21-02523	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: GJ049	
Reporting Date: 08/03/2021	

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX		E001
Soil	D		Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR		Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR D		Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane	E015 E011
Soil Soil	AR		Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D		Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil	D	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil	D	TOC (Total Organic Carbon)	Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Turnace	E019
Soil	D	Magnesium - Water Soluble		E025
Soil	D	Metals		E002
Soil	AR	Mineral Oil (C10 - C40)	cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil Soil	D	Nitrate - Water Soluble (2:1) Organic Matter	Determination of nitrate by extraction with water & analysed by ion chromatography Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E009 E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of DAH compounds by extraction in acctance and beyone followed by CC MS with the	E005
Soil	AR	PCB - 7 Congeners		E008
Soil	D		Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR		Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR		Determination of phenols by distillation followed by colorimetry	E021
Soil	D		Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR D		Determination of sulphide by distillation followed by colorimetry	E018
Soil Soil	AR	Suppor - Total SVOC	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by	E024 E006
Soil	AR	Thiocyanate (as SCN)	GC-MS Determination of thiocyanate by extraction in caustic soda followed by acidification followed by	E017
Soil	D	Toluene Extractable Matter (TEM)	addition of ferric nitrate followed by colorimetry Gravimetrically determined through extraction with toluene	E011
Soil	D	Toluene Extractable Matter (TEM) Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with	E011 E010
		TPH CWG (ali: C5- C6, C6-C8, C8-C10,	iron (II) sulphate	
Soil	AR	C10-C12, C12-C16, C16-C21, C21-C34,	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)		E004
Soil	AR		Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR		Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried AR As Received





DETS Report No: 21-02831

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	08/03/2021
Sample Scheduled Date:	08/03/2021
Report Issue Number:	1
Reporting Date:	15/03/2021

Authorised by:

Dave Ashworth

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

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Soil Analysis Certificate

DETS Ltd Unit 1, Rose Lane Industrial Estate Rose Lane Lenham Heath Maidstone Kent ME17 2JN Tel : 01622 850410



Son Analysis certificate								
DETS Report No: 21-02831			Date Sampled	04/03/21	04/03/21	04/03/21	04/03/21	04/03/21
G & J Geoenvironmental Consultants Lt	d		Time Sampled	None Supplied				
Site Reference: Middlemore Lane			TP / BH No	K5	L5	J6	К6	L6
Project / Job Ref: GJ049		,	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied			None Supplied	None Supplied
Reporting Date: 15/03/2021		D	ETS Sample No	530082	530083	530084	530085	530086
Determinand	Unit	RL	Accreditation					
Asbestos Screen ^(S)	N/a	N/a	<u> </u>	Not Detected				
Hq	pH Units	N/a	MCERTS	7.8	7.9	7.6	8.6	7.9
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Total Sulphate as SO₄	ma/ka	< 200		1916	570	2178	2396	1382
Total Sulphate as SO4	%	< 0.02	MCERTS	0.19	0.06	0.22	0.24	0.14
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter	%	< 0.1	MCERTS	0.6	0.2	1.6	0.8	0.2
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	0.4	0.1	0.9	0.5	0.1
Arsenic (As)	mg/kg	< 2	MCERTS	6	3	7	7	5
W/S Boron	mg/kg	< 1	NONE	2	< 1	1.1	1.1	< 1
Cadmium (Cd)	mg/kg	< 0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	18	4	13	11	7
Copper (Cu)	mg/kg	< 4	MCERTS	157	12	164	167	26
Lead (Pb)	mg/kg	< 3	MCERTS	21	7	27	27	12
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	13	4	10	14	8
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	MCERTS	295	22	296	226	41
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	10.8	< 2	< 2	< 2
EPH (C10 - C40)	mg/kg	< 6	MCERTS	229	< 6	374	12	65





Soil Analysis Certificate								
DETS Report No: 21-02831			Date Sampled	04/03/21	04/03/21	04/03/21	04/03/21	04/03/21
G & J Geoenvironmental Consultar	ats I to		Time Sampled	None Supplied				
Site Reference: Middlemore Lane	ILS ELU		TP / BH No	K11	I 15	M15	L16	M16
Site Reference: Middlemore Lane		IP / DH NU		KII	LID	C I IVI	LIO	IVI I O
Project / Job Ref: GJ049		Additional Refs		None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 15/03/2021		D	ETS Sample No	530087	530088	530089	530090	530091
Determinand	Unit	RL						
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected				
pH	pH Units	N/a	MCERTS	7.4	7.7	7.8	7.7	7.4
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	1730	951	417	637	248
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.17	0.10	0.04	0.06	0.02
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter	%	< 0.1	MCERTS	2.6	0.7	0.4	0.1	0.2
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	1.5	0.4	0.2	< 0.1	0.1
Arsenic (As)	mg/kg	< 2	MCERTS	7	5	3	5	3
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	NONE	< 0.2	0.4	< 0.2	< 0.2	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	9	10	8	8	7
Copper (Cu)	mg/kg	< 4	MCERTS	48	1140	263	329	90
Lead (Pb)	mg/kg	< 3	MCERTS	28	71	34	36	18
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	16	12	8	9	7
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	MCERTS	103	868	152	163	103
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
EPH (C10 - C40)	mg/kg	< 6	MCERTS	110	599	651	18	347



Soil Analysis Certificate

DETS Ltd Unit 1, Rose Lane Industrial Estate Rose Lane Lenham Heath Maidstone Kent ME17 2JN Tel : 01622 850410



Son / that you set threate								
DETS Report No: 21-02831			Date Sampled	04/03/21	04/03/21	04/03/21	04/03/21	
G & J Geoenvironmental Consultants Lt	d		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemore Lane			TP / BH No	H7	17	H8	18	
Project / Job Ref: GJ049		/	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 15/03/2021		D	ETS Sample No	530092	530093	530094	530095	
Determinand	Unit	RI	Accreditation					
Asbestos Screen ^(S)	N/a	N/a	IS017025	Not Detected	Not Detected	Not Detected	Not Detected	
Hq	pH Units	N/a	MCERTS	8.5	7.1	7.9	7.3	
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	
Total Sulphate as SO₄	mg/kg	< 200	MCERTS	1729	3824	4308	6306	
Total Sulphate as SO₄	%	< 0.02	MCERTS	0.17	0.38	0.43	0.63	
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	
Organic Matter	%	< 0.1	MCERTS	3.6	2.8	2.3	5	
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	2.1	1.6	1.3	2.9	
Arsenic (As)	mg/kg	< 2	MCERTS	8	8	23	14	
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	1.2	1	
Cadmium (Cd)	mg/kg	< 0.2	NONE	0.2	0.2	8.2	0.4	
Chromium (Cr)	mg/kg	< 2	MCERTS	11	11	20	12	
Copper (Cu)	mg/kg	< 4	MCERTS	66	173	2590	140	
Lead (Pb)	mg/kg	< 3	MCERTS	34	44	221	56	
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	
Nickel (Ni)	mg/kg	< 3	MCERTS	22	20	25	24	
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	
Zinc (Zn)	mg/kg	< 3	MCERTS	183	215	2880	237	
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	
EPH (C10 - C40)	mg/kg	< 6	MCERTS	61	84	45	56	





Soil Analysis Certificate	- Speciated PAHs							
DETS Report No: 21-0283	31		Date Sampled	04/03/21	04/03/21	04/03/21	04/03/21	04/03/21
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Middlemo	ore Lane		TP / BH No	К5	L5	J6	К6	L6
Destant (Jak Daf, C 1040			Additional Refs			N 0 1 1		
Project / Job Ref: GJ049 Order No: None Supplied		F	Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 15/03/2		DI	ETS Sample No	None Supplied 530082	None Supplied 530083	None Supplied 530084	None Supplied 530085	None Supplied
Reporting Date. 1570372	:021	D	ETS Sample NU	530082	530083	530084	530085	530086
Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene			MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6





Soil Analysis Certificate	- Speciated PAHs							
DETS Report No: 21-0283	31		Date Sampled	04/03/21	04/03/21	04/03/21	04/03/21	04/03/21
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	K11	L15	M15	L16	M16
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 15/03/2	021	DI	ETS Sample No	530087	530088	530089	530090	530091
Determinand	Unit	DI	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	0.39	0.25	< 0.1	0.40
Acenaphthylene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.34
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	0.46	0.49	< 0.1	0.44
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.17
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.15
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.29
Benzo(k)fluoranthene	0 0	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.13
Indeno(1,2,3-cd)pyrene	0 0	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.28
Dibenz(a,h)anthracene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	2.2





Soil Analysis Certificate	- Speciated PAHs							
DETS Report No: 21-0283			Date Sampled	04/03/21	04/03/21	04/03/21	04/03/21	
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane	TP / BH No		H7	17	H8	18	
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 15/03/2	porting Date: 15/03/2021		ETS Sample No	530092	530093	530094	530095	
Determinand	Unit	RI	Accreditation					
Naphthalene			MCERTS	0.1	0.10	0.1	0.05	
	5 5			< 0.1	0.19	< 0.1	0.25	
Acenaphthylene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Acenaphthene	mg/kg		MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Fluorene	mg/kg		MCERTS	0.11	< 0.1	< 0.1	< 0.1	
Phenanthrene	3.3		MCERTS	0.69	0.38	0.33	0.59	
Anthracene	mg/kg	< 0.1	MCERTS	0.17	0.14	0.15	0.15	
Fluoranthene	mg/kg		MCERTS	0.99	0.24	0.40	0.45	
Pyrene	5 5		MCERTS	0.76	0.20	0.34	0.32	
Benzo(a)anthracene	5 5		MCERTS	0.23	0.12	0.22	0.17	
Chrysene			MCERTS	0.34	< 0.1	0.18	0.15	
Benzo(b)fluoranthene			MCERTS	0.44	0.29	0.38	0.32	
Benzo(k)fluoranthene			MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(a)pyrene			MCERTS	0.13	< 0.1	0.15	< 0.1	
Indeno(1,2,3-cd)pyrene			MCERTS	0.30	< 0.1	0.29	< 0.1	
Dibenz(a,h)anthracene			MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(ghi)perylene			MCERTS	0.17	< 0.1	0.16		
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	4.3	< 1.6	2.6	2.4	





Soil Analysis Certificate	e - TPH CWG Bande	d						
DETS Report No: 21-028	31		Date Sampled	04/03/21	04/03/21	04/03/21	04/03/21	04/03/21
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane	TP / BH No		К5	L5	J6	K6	L6
Project / Job Ref: GJ049		/	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied		None Supplied
Reporting Date: 15/03/2	2021	D	ETS Sample No	530082	530083	530084	530085	530086
		D.						
Determinand	Unit	RL	Accreditation	0.04	0.01	0.01	0.01	0.01
Aliphatic >C5 - C6	5 5	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8	5 5	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	5 5	< 2		< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12	mg/kg			< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16	5 5			< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21	mg/kg			9	< 3	6	< 3	5
Aliphatic >C21 - C34	mg/kg	< 10		120	< 10	210	< 10	32
Aliphatic (C5 - C34)	mg/kg			129	< 21	215	< 21	36
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	44	< 10	107	< 10	< 10
Aromatic (C5 - C35)	mg/kg		NONE	44	< 21	107	< 21	< 21
Total >C5 - C35	mg/kg	< 42	NONE	173	< 42	322	< 42	< 42





Soil Analysis Certificate	- TPH CWG Bande	d						
DETS Report No: 21-028	31		Date Sampled	04/03/21	04/03/21	04/03/21	04/03/21	04/03/21
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	K11	L15	M15	L16	M16
Destant (Jak Daf Clove								
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied	None Supplied	None Supplied		None Supplied
Order No: None Supplied		D.	Depth (m)	None Supplied	None Supplied	None Supplied		None Supplied
Reporting Date: 15/03/2	2021	DI	ETS Sample No	530087	530088	530089	530090	530091
Determinend	Linit	DL	Association					
Determinand Aliphatic >C5 - C6	Unit mg/kg	RL	Accreditation NONE	. 0.01	. 0.01	. 0.01	. 0.01	. 0.01
Aliphatic >C6 - C8	5 5			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
	5 5			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	0 0	< 2	MCERTS	< 2	/	8	< 2	/
Aliphatic >C10 - C12	mg/kg		MCERTS	< 2	24	27	< 2	20 71
Aliphatic >C12 - C16	5 5		MCERTS	< 3	116	132	4	
Aliphatic >C16 - C21	mg/kg		MCERTS	3	127	135	< 3	76
Aliphatic >C21 - C34	mg/kg		MCERTS	47	33	33	< 10	15
Aliphatic (C5 - C34)	mg/kg		NONE	50	308	337	< 21	188
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8				< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	0 0	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	11	8	< 2	9
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	81	76	< 2	55
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	93	77	< 3	58
Aromatic >C21 - C35	mg/kg	< 10		< 10	24	12	< 10	< 10
Aromatic (C5 - C35)	mg/kg		NONE	< 21	209	173	< 21	122
Total >C5 - C35	mg/kg	< 42	NONE	50	517	509	< 42	311





Soil Analysis Certificate - TPH CWG Banded DETS Report No: 21-02831 Date Sampled 04/03/21 04/03/21 04/03/21 G & J Geoenvironmental Consultants Ltd Time Sampled None Supplied None Supplied None Supplied Site Reference: Middlemore Lane TP / BH No H7 17 H8 18 Project / Job Ref: GJ049 Additional Refs None Supplied None Supplied None Supplied Order No: None Supplied Depth (m) None Supplied None Supplied None Supplied Reporting Date: 15/03/2021 DETS Sample No 530092 530093 530094								
DETS Report No: 21-028	31		Date Sampled	04/03/21	04/03/21	04/03/21	04/03/21	
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	H7	17	H8	18	
Project / Job Ref: G 10/19			dditional Refs	None Supplied	None Supplied	Nono Supplied	Nono Supplied	
		,						
		Df						
				000072	000070	000071	000070	
Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	3	< 2	< 2	
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	7	< 2	7	
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	11	< 3	11	
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Aromatic (C5 - C35)	mg/kg	< 21	NONE	< 21	21	< 21	< 21	
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	





Soil Analysis Certificate	- BTEX / MTBE									
DETS Report No: 21-0283	1		Date Sampled	04/03/21	04/03/21	04/03/21	04/03/21	04/03/21		
G & J Geoenvironmental Co	onsultants Ltd		Time Sampled	Time Sampled	Time Sampled	None Supplied				
Site Reference: Middlemor	eference: Middlemore Lane TP / BH N		TP / BH No	К5	L5	J6	K6	L6		
Project / Job Ref: GJ049			Additional Refs	None Supplied						
Order No: None Supplied				None Supplied						
Reporting Date: 15/03/20)21	DI	ETS Sample No	530082	530083	530084	530085	530086		
Determinand	Unit	RL	Accreditation							
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2		
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5		
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2		
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2		
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2		
MTBE	nd Unit RL Accreditation ne ug/kg < 2 MCER ne ug/kg < 5 MCER ne ug/kg < 2 MCER ne ug/kg < 2 MCER ne ug/kg < 2 MCER ne ug/kg < 2 MCER		MCERTS	< 5	< 5	< 5	< 5	< 5		





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-0283	1		Date Sampled	04/03/21	04/03/21	04/03/21	04/03/21	04/03/21
G & J Geoenvironmental C	onsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	Reference: Middlemore Lane TP /		TP / BH No	K11	L15	M15	L16	M16
Project / Job Ref: GJ049			Additional Refs	None Supplied				
Order No: None Supplied	one Supplied Depth (m			None Supplied				
Reporting Date: 15/03/20	021	DI	ETS Sample No	530087	530088	530089	530090	530091
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	4	25	< 2	16
p & m-xylene	ug/kg	< 2	MCERTS	< 2	11	87	< 2	69
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-02831			Date Sampled	04/03/21	04/03/21	04/03/21	04/03/21	
G & J Geoenvironmental C	onsultants Ltd	Time Sampled		None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemore Lane			TP / BH No	H7	17	H8	18	
Project / Job Ref: GJ049		Additional Refs		None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied		Depth (m)		None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 15/03/2021		DETS Sample No		530092	530093	530094	530095	
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	





Soil Analysis Certificate - Volatile Organic Compounds (VOC)									
DETS Report No: 21-02831		Date Sampled		04/03/21	04/03/21	04/03/21			
G & J Geoenvironmental Consultants Ltd		Time Sampled		None Supplied	None Supplied	None Supplied			
Site Reference: Middlemore Lane			TP / BH No	L6	K11	M16			
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied			
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied			
Reporting Date: 15/03/2	021	D	TS Sample No	530086	530087	530091			
Determinand	Unit	RL		F	r	r.			
Dichlorodifluoromethane Vinyl Chloride	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5	├ ─── ┟ ─		
Chloromethane	ug/kg ug/kg	< 10	MCERTS	< 10	< 5 < 10	< 5 < 10			
Chloroethane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5			
Bromomethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10			
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	 		
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	 		
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
1,1,1-Trichloroethane 1,1-Dichloropropene	ug/kg ug/kg	< 5 < 10	MCERTS MCERTS	< 5 < 10	< 5 < 10	< 5 < 10	├────╂─		
Carbon Tetrachloride	ug/kg ug/kg	< 10	MCERTS	< 10	< 10	< 10			
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	<u> </u>		
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2			
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
Trichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
TAME	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	 		
1,3-Dichloropropane Tetrachloroethene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	 		
Dibromochloromethane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5			
1,2-Dibromoethane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	<u>├</u>		
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	< 2	16			
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	69			
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2			
Styrene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10	< 10			
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	35			
1,1,2,2- Letrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	 		
1,2,3-Trichloropropane n-Propylbenzene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5	< 5 94	├ ─── ┟ ─		
Bromobenzene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5 < 5	94 < 5	<u> </u>		
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	127			
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	127			
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	60			
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5	44			
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	 		
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10	< 10			
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	< 5			





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-02831	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 15/03/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
530082	K5	None Supplied	None Supplied	9.1	Light brown sandy clay with stones
530083	L5	None Supplied	None Supplied	8.6	Light brown sandy clay
530084	J6	None Supplied	None Supplied	9.3	Brown sandy clay with stones and brick
530085	K6	None Supplied	None Supplied	9.9	Brown sandy clay with stones
530086	L6	None Supplied	None Supplied	8.2	Light brown sandy clay with stones
530087	K11	None Supplied	None Supplied	11.7	Grey loamy sand with stones
530088	L15	None Supplied	None Supplied	7.3	Light brown sandy clay with stones
530089	M15	None Supplied	None Supplied	10.2	Light brown sandy clay with stones
530090	L16	None Supplied	None Supplied	11	Light brown sandy clay with stones
530091	M16	None Supplied	None Supplied		Light brown sandy clay with stones
530092	H7	None Supplied	None Supplied	12.9	Brown loamy sand with concrete
530093	7	None Supplied	None Supplied	11.3	Grey loamy sand with brick
530094	H8	None Supplied	None Supplied	7.9	Brown loamy sand with stones and brick
530095	18	None Supplied	None Supplied	12.4	Grey sandy clay with brick

Moisture content is part of procedure E003 & is not an accredited test

Insufficient Sample ^{1/S} Unsuitable Sample ^{U/S}





oil Analysis Certificate - Methodology & Miscellaneous Information
ETS Report No: 21-02831
& J Geoenvironmental Consultants Ltd
ite Reference: Middlemore Lane
roject / Job Ref: GJ049
rder No: None Supplied
eporting Date: 15/03/2021

Soli D Borner - Webr Sold&b Determination of User 20.1 Met water exercise disputing for the water exercise of the USE of the Solution of USE of US	Matrix	Analysed On	Determinand	Brief Method Description	Method No
Solit AR OTES Determination of DFE by headpaper CAMS E00 Solit D Calitoria bermination of indexis is solit hava are neglicacytochronic hyper (PLP) (IS: E00) E00 Solit AR Chronic Metter Solitoria Endexision in the solitor of provide indexision in the solitory and the solitory hyper (PLP) (IS: E00) E00 Solit AR Cyrania: - Intervaliant in the solitory	Soil		Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil D Calcon between the calcon between the calcon is and any an end advector planear by Coll Colls E003 Soil D Chronium - Heavasen Delevation of calcon by calculation and water and advector planear by calculation advecadvector planeadvector planear by calculation advector by calcula		AR			E001
Soli D Chartie-Water Solation (2.1) Determination of chindle by variation with water is anylyned by including manuality acidification, addition (2010) Figure 3000 Soli A8 Chartier, Water Solation (2.1) Determination of boostwich treatment in solary stantism in solary stantism in solary stantism in solary stantism in solary stantism. Figure 3000 Soli A8 Capadia Capadia Figure 3000 Figure 3000 Soli A8 Capadia Capadia Figure 3000 Figure 30000					E002
Soli Are Entromain measurement Landback and the second	Soil	D	Chloride - Water Soluble (2:1)		E009
Sail AB Cynable - Complex Beterminitation of complex cynable by distillation followed by colorinetry EDDI Sail AB Cynable - Tree and by distillation followed by colorinetry EDDI Sail AB Cynable - Tree and by distillation followed by colorinetry EDDI Sail AB Cynable - Tree and by distillation followed by colorinetry EDDI Sail AB Edde Range Querchas Tree and by distillation followed by colorinetry EDDI Sail AB Edde Range Querchas Tree and by distillation followed by colorinetry EDDI Sail AB Flactrical Conductivity Determination of electrical conductivity by addition of water followed by electrometric measurement EDDI Sail AB Flactrical Conductivity Determination of electrical conductivity by addition of water followed by electrometric measurement EDDI Sail AB Flactrical Conductivity Determination of Electrical conductivity by addition of water followed by electrometric measurement EDDI Sail AB Flactrical Conductivity Determination of Electrical conductivity by addition of water followed by electrometric measurement EDDI Sail	Soil	AR	Chromium - Hexavalent		E016
Soil AR Conside 1-registermination of the capacity by distillation followed by colorimatry EDI Soil D Cyclobeans L-tractable Matter (LIM) Gravinetical voltation of basic points by distillation followed by colorimatry EDI Soil AR Electrical Conductivity Determination of electrical conductivity by addition of statused colors by 0.2-Fin EDI Soil AR Electrical Conductivity Determination of electrical conductivity by addition of statused colors by 0.2-Fin EDI Soil AR Electrical Conductivity Determination of electrical conductivity by addition of statused colors by 0.2-Fin EDI Soil AR Electrical Conductivity Determination of electrical conductivity by addition of statused colors by 0.2-Fin EDI Soil AR Electrical Conductivity Determination of addition-elecance extractable hydrocatrons by 0.2-Fin EDI Soil AR CPH LOAS (6.0.5) EDI CO EDI EDI Soil AR CPH LOAS (6.0.5) EDI CO EDI EDI Soil AR CPH LOAS (6.0.5) EDI CO EDI EDI EDI Soil AR CPH LOAS (6.0.5) EDI CO EDI <td>Soil</td> <td>AR</td> <td>Cvanide - Complex</td> <td></td> <td>E015</td>	Soil	AR	Cvanide - Complex		E015
Soli AR Cyclobiases brancable Matter (CM) consistency determined thread extraction with receptonane to start atter data calcular support extraction with receptonane constraints data calcular support extraction with receptonane start atter data calcular support extraction for the start atterextre data calcular supportend extraction for the start			Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil D Continuence Latractable Matter (CEM) Ensembler and participation with continuence (CEM) Ensembler and participation of the contraction by the control to by control to the CEM Ensemble and the contractive the participation of the CEM Ensemble and the contractive the participation of the CEM Ensemble and the control of the CEM Ensemble and the CEM Ensemble and the control of the CEM Ensemble and the CEM Ensemble and the control of the CEM Ensemble and the CEM Ensemble and the control of the CEM Ensemble and the CEM Ensemble	Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Sol AR Electrical conductivity of detrimination of electrical conductivity by addition of subtrafed calcium subphate followed by electronertic measurement E222 Sol AR Electrical Conductivity Overmination of electrical conductivity by addition of swart followed by electronertic measurement E023 Sol AR Electrical Conductivity Overmination of electrical conductivity by addition of swart followed by electronertic measurement E023 Sol AR EPH FLIG - C40 babor minimition of electronerbineries electrical in electronerbiners by GC FLID for C8 to C40. C4 to C8 by E004 Sol D FPH FLIG - C400 babor minimition of electronerbiner electronerbiners electrical in electronerbiner electronerbinerbinerbinerbinerbinerbinerbinerbi	Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Sol AR Electrical conductivity of detrimination of electrical conductivity by addition of subtrafed calcium subphate followed by electronertic measurement E222 Sol AR Electrical Conductivity Overmination of electrical conductivity by addition of swart followed by electronertic measurement E023 Sol AR Electrical Conductivity Overmination of electrical conductivity by addition of swart followed by electronertic measurement E023 Sol AR EPH FLIG - C40 babor minimition of electronerbineries electrical in electronerbiners by GC FLID for C8 to C40. C4 to C8 by E004 Sol D FPH FLIG - C400 babor minimition of electronerbiner electronerbiners electrical in electronerbiner electronerbinerbinerbinerbinerbinerbinerbinerbi	Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Sail D Elemental Supers Determination of elemental supers System totaction functional by CAMS ED02 Sail AR PEH Enducl ID Elementation of acotombonane estinctable hydrocarbons by GC FID ED03 Sail AR PEH Enducl ID Elementation of acotombonane estinctable hydrocarbons by GC FID ED04 Sail D PEH Enducl ID Elementation of acotombonane estinctable hydrocarbons by GC FID ED04 Sail D PEH Enducl ID Elementation of acotombonane estinctable hydrocarbons by GC FID for Clip Cd to C40. C40. C51 to C51 to C40. C51 to C40. C51 to C40. C51 to C40. C51 to C51 to C40. C51 to C51 to C51 to C51 to C40. C51 to	Soil	AR		Determination of electrical conductivity by addition of saturated calcium sulphate followed by	E022
Sol AR EPH (C10 – C40) Determination of acotome/heane extractable hydrocarbons by GC-F10 ED04 Sol AR EPH TEXAS (GC-68, GS-10, C10-C12, C12) Determination of acotome/heane extractable hydrocarbons by GC-F10 for C3 to C40. C6 to C8 by C12-C12, C16, C12, C12, C12, C12, C12, C12, C12, C12					E023
Sell AR EPH FroAu: 1D Determination of acctome/hearne extractable hydrocarbons by GC-FID ED04 Soli AR EPH TEXAS (6-C, 62, C-C): C1-C12. Determination of acctome/hearne extractable hydrocarbons by GC-FID for CB to CA: 0. Co A: 0. Co B by C12-C16, C14-C21, C21-C4D, headspace GC-MS E004 Soli D Fraction Cranic Carbon (TOC) Determination of ToC by combustion analyser. E003 Soli D Organic Matter SOMD Determination of ToC by combustion analyser. E003 Soli D TOC (Total Organic Carbon) Determination of ToC by combustion analyser. E003 Soli D TOC (Total Organic Carbon) Determination of fraction analyser. E003 Soli D FOC (Fraction Organic Carbon) Determination of month or sol by gravimetrically with the sample being ignited in a muffle E004 Soli D Loss on Ignition # 4500 E004 E004 Soli AR Mineral Di (C-D) - Carbo Determination of water soluble magnesium by extraction with water followed by ICP-OES E002 Soli AR Mineral Di (C-D) - Carbo Determination of water soluble magnesium by extraction with water followed by ICP-OES E002 Soli AR Mineral Di (C-	Soil				E020
Soli AR EPH TEXAS (6:-08, Ce-010, C10-C12) Determination of acetome/neuroe strattable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by E004 Soli D Fluoride. Water Soluble Determination of TCE ty combustion analyser. E003 Soli D Fraction Organic Carbon (FCO) Determination of TCE ty combustion analyser. E003 Soli D Fraction Organic Carbon (FCO) Determination of TCE ty combustion analyser. E003 Soli AR Exchangeable Ammonium Determination of ToCE ty combustion analyser. E003 Soli D Fraction Organic Carbon Determination of organic carbon by oxidiling with potassium dichromate followed by ICP-OES E005 Soli D Loss on Ignition @ 4500 E005 E005 Soli D Manealule E004 E005 E005 Soli D Manealule E004 E004 E004 E004 Soli D Manealule (C10-C40) Edemination of water soluble magnesium by actraction with water followed by ICP-OES E005 Soli D Mineral UI (C10-C40) Edemination of pains water soluble magnesium by actraction with aceton analyseser E004	Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soli Ark C12-C16, C12-C12, C21-C30 Peddagage CCMS Peddagage CMS Soli D Fraction Organic Carbon (FOC) Determination of ToC by combustion analyser. FOO Soli D ToC (Total Organic Carbon (FOC) Determination of ToC by combustion analyser. FOO Soli D TOC (Total Organic Carbon ToTo) Determination of ToC by combustion analyser. FOO Soli D TOC (Total Organic Carbon ToTo) Determination of fraction of organic carbon by odiding with potassium dichromate followed by FOO Soli D FOC (Fraction Organic Carbon toto) Determination of rection of organic carbon by odiding with potassium dichromate followed by FOO Soli D Magnesium - Water Souble Determination of netwale souble magnesium by extraction with water followed by (CP-OES) FOO Soli AR Mineral OII (C10 - c40) Determination of head-Souchee eastractable hydrocarbons by C2-FIS FOO Soli AR Metare Outermination of head-Souchee eastractable hydrocarbons by C2-FIS FOO Soli D Magnesium - Water Souble C2D Determination of head-Souchee eastractable hydrocarbons by C2-FIS FOO	Soil	AR			E004
Sol D Floride-Utilization Floride-Utilization <td>Soil</td> <td>٨D</td> <td></td> <td></td> <td>E004</td>	Soil	٨D			E004
Soli D Fraction Organic Carbon (FoC) Determination of TCC by combustion analyser. E602 Soli D Organic Matter (SOM) Determination of TCC by combustion analyser. E022 Soli AR Exchangeable Ammonium Determination of ammonium by discrete analyser. E023 Soli D FOC (Fraction Organic Carbon) Determination of Traction of organic carbon by oxidising with polassium dichromate followed by E005 Soli D Loss on Ignition @ 4500 Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle E005 Soli D Magnesium - Water Soluble Determination of hexane/accorboe extractable hydrocarbons by GC-FID fractionating with SPE E003 Soli AR Mineral OII (C10 - C40 Determination of organic matter by oxidising with polassium dichromate followed by ICP-OES E003 Soli AR Mineral OII (C10 - C40 Determination of nanalyser. E003 Soli AR Mineral OII (C10 - C40 Determination of organic matter by oxidising with polassium dichromate followed by ICP-OES E003 Soli AR PAH - Speciated (EPA 16) Determination of organic matter by oxidising with polassium dichromate followed by ICO-MS			C12-C16, C16-C21, C21-C40)	headspace GC-MS	
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Soli D Organic Matter (SOM) Determination of TOC by combustion analyser. E022 Soli AR Exchangeable Ammonium Determination of anonyser. E023 Soli D FOC (Fraction Organic Carboo) Determination of anonyser. E023 Soli D FOC (Fraction Organic Carboo) Determination of anonyser. E025 Soli D Loss on Ignition @ 4500 Entermination of Insci holy gravimetrically with the sample being Ignited in a muffle E015 Soli D Magnesium. Magnesium. E016 E016 Soli AR Mineral OII (C10 - C40) E016 E016 E016 Soli AR Mineral OII (C10 - C40) E016 E017 E016 Soli AR Mineral OII (C10 - C40) E016 E016 E016 E016 Soli AR Mineral OII (C10 - C40) E016 E016 E017 E016 Soli AR PA1 - Speciated (EFA1) E016 E016 E017 E016 E016 E016 E016 E016 E016 E016	Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil AR Exchangeable Ammonium Determination of armonium by discrete analyser. ED25 Soil D FOC (Fraction Organic Carbon) Determination of fraction of organic carbon by oxidising with potassium dichromate followed by ED01 Soil D Loss on Ignition @ 4500 Determination of insci by gravimetrically with the sample being Ignited in a muffle ED01 Soil D Magnesium - Water Soluble Determination of water soluble magnesium by extraction with water followed by ICP-CES ED02 Soil AR Mineral OII (C10 - C40) Determination of maker soluble Determined or avater soluble magnesium by extraction with water followed by ICP-CES ED02 Soil AR Mineral OII (C10 - C40) Determination of maker soluble magnesium by extraction with water followed by ICP-CES ED03 Soil D Nitrate - Water Soluble (2.1) Determination of practic matter by oxidising with potassium dichromate followed by ICP-CES ED03 Soil AR PAH - Speciated (EPA 10) Determination of PAH compounds by extraction with water followed by ICP-CES ED03 Soil AR PAH - Speciated (EPA 10) Determination of PAH compounds by extraction with water followed by C-MS ED03 Soil AR	Soil	D	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil D FOC (Fraction Organic Carbon) Determination of fraction of organic carbon by oxidising with potassium dichromate followed by E010 Soil D Loss on Ignition #4 stoc Determination of loss on ignition is soil by gravimetrically with the sample being ignited in a muffle image. E010 Soil D Magnesium - Water Soluble Determination of metals by gaze-regis digistion followed by ICP-OES E020 Soil AR Mineral Oil (C10 - C40) Determination of negative regis digistion followed by ICP-OES E020 Soil AR Moisture content, disture content, dist	Soil				E027
Soli D FOU (Fraction Organic Carbon) Intraction with inon (11) subplate Control EDIT Soli D Loss on lightition @ 4500C Determination of loss on lightition in soliby gravimetrically with the sample being lighted in a muffle (arrade) EDIT Soli D Magnesium - Water Soluble Determination of metals by aqua-regia dispesion followed by ICP-OES EDOS Soli AR Mineral OII (C10 - C40) Determination of metals by aqua-regia dispesion followed by ICP-OES EDOS Soli AR Molature Content Molature Content Molature Content EDIT Soli AR Molature Content Molature Content Determination of regaric matter by oxidising with potassium dichromate followed by ICP-OES EDOS Soli D Organic Matter Determination of organic matter by oxidising with potassium dichromate followed by ICP-OES EDOS Soli AR PAH - Speciated (EPA 16) Determination of PAH compounds by extraction in acetene and hexane followed by CC-MS EDOS Soli AR Periodeum Eher Extract (PEE Grammetrical to editormined transdards EDOS Soli AR Penonols - Total monohyarici Determination of suphate by	Soil	AR	Exchangeable Ammonium		E029
Soil D Loss of rightion if value Loss Soil D Magnesium - Water Soluble Determination of metater soluble magnesium by extraction with water followed by ICP-OES E002 Soil D Magnesium - Water Soluble Determination of metater soluble magnesium by extraction with water followed by ICP-OES E002 Soil AR Mineral OII (C10 - C40) Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE E004 Soil AR Molsture Content Molsture content: determined gravimetrically E003 Soil D Nitrate - Water Soluble (21) Determination of organic matter by oxidising with potassium dichromater followed by thration with the set or surroadter and internal standards E001 Soil AR PAH - Speciated (EPA 16) Determination of PAH compounds by extraction with vater soluble device MS C-MS with the set or surroadter and internal standards E005 Soil AR PAH - Speciated (EPA 16) Determination of PAH by extraction with vater soluble device by CC-MS E006 Soil AR PHenole. Total (monohydric) Determination of phenols by distillation followed by electrometic measurement E003 Soil AR Phenole. Total (monohydric) Determination o	Soil	D	FOC (Fraction Organic Carbon)	titration with iron (II) sulphate	E010
Soil D Metas Determination of metals by aqua-regia digestion followed by CP-DES E002 Soil AR Mineral Oil (C10 - C40) Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE E004 Soil AR Moisture Content Moisture content: determined gravimetrically E005 Soil D Nitrate-Water Soluble (2:1) Determination of nitrate by extraction with water & analysed by ion chromatography E005 Soil AR PAH - Speciated (EPA 16) Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards E005 Soil AR PEA - Speciated (EPA 16) Determination of PCB by extraction with acetone and hexane followed by GC-MS with the Use of surrogate and internal standards E005 Soil AR PEA - Congeners Determination of PCB by extraction with vactaon with partoleum ether E001 Soil AR Phenols - Total (montydric) Determination of subpate by extraction with water & analysed by ion chromatography E005 Soil D Phosphate - Water Soluble (2:1) Determination of subpate by extraction with water & analysed by ion chromatography E005	Soil	D	Loss on Ignition @ 450oC		E019
Soil AR Mineral Oil (C10 - C40) Cartridge Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE E004 Soil AR Moisture Content Moisture content, determined gravimetrically E003 Soil D Nitrate - Water Soluble (2:1) Determination of right matter by oxidising with potassium dichromate followed by titration with tran (11) subhate E003 Soil AR PAH - Speciated (EPA 16) Determination of PAB torpopunds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards E003 Soil AR PCB - 7 Congenes E001 Soil AR Penches. Total (monohydic) Determination of PDB yadition of water followed by clerchmetic measurement E001 Soil D Sulphate (as SO4) - Total (monohydic) Determination of total subpate by extraction with water & analysed by ion chromatography E003 Soil D Sulphate (as SO4) - Water Soluble (2:1) Determination of total subpate by extraction with addr	Soil	D	Magnesium - Water Soluble		E025
Soil AR Ministra Control of artridge ED04 Soil AR Molisture content: determination of intrate by extraction with water & analysed by ion chromatography ED03 Soil D Organic Matte Determination of organic matter by oxidising with potassium dichromate followed by litration with the ror (II) subhate ED04 Soil AR PAH - Speciated (EPA 16) Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards. ED04 Soil AR PAH - Speciated (EPA 16) Determination of PAH compounds by extraction with acetone and hexane followed by GC-MS ED06 Soil AR PCB - 7 Congeners Determination of PAH compounds by extraction with acetone and hexane followed by GC-MS ED07 Soil AR Phenols - Total (monohydric) Determination of phenols by distillation followed by colorimetry ED01 Soil AR Phenols - Total (monohydric) Determination of total subpate by extraction with water & analysed by ion chromatography ED05 Soil D Sulphate (as SO4) - Water Soluble (2:1) Determination of total subpate by extraction with water & analysed by ion chromatography ED07 Soil D Sulphate (as SO4) - Water Soluble (2:1) Determination of total subphate by extraction with water & analysed by	Soil	D	Metals		E002
Soil D Nitrate - Water Soluble (2:1) Determination of nitrate by extraction with water & analysed by ion chromatography E000 Soil D Organic Matter Determination of organic matter by oxidising with potassium dichromate followed by titration with the tass of the same same same same same same same sam	Soil	AR	Mineral Oil (C10 - C40)	cartridge	E004
Soil D Organic Matter Organic Matter Portion Determination of organic matter by oxidising with potassium dichromate followed by titration with ron (III) subhate Entropy betermination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards. Entropy betermination of PAH compounds by extraction with acetone and hexane followed by GC-MS with the use of surrogate and internal standards. Entropy betermination of PAH compounds by extraction with acetone and hexane followed by GC-MS Economic transmitter (ECON) Soil AR PCB-7 Congeners Determination of PAH by extraction with acetone and hexane followed by GC-MS Economic (ECON) Soil D Petroleum Ether Extract (PEE) Gravimetrically determined through extraction with petroleum ether Economic (ECON) Soil AR Phenols - Total (monohydric) Determination of phosphate by extraction with water & analysed by ion chromatography ECOS Soil D Sulphate (as SO4) - Water Soluble (2:1) Determination of sulphate by extraction with water & analysed by ion chromatography ECOS Soil AR Sulphate (as SO4) - Water Soluble (2:1) Determination of sulphate by extraction with water & analysed by ion chromatography ECOS Soil AR Sulphate (as SO4) - Water Soluble (2:1) Determination of sulphate by extraction with water follow	Soil	AR	Moisture Content		E003
SoliDOriginit witterIton (11) subhateControlEDITSoliARPAH - Speciated (EPA 16)Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standardsEDOTSoliDPetroleum there Extract, CPEC GravinerizingDetermination of PCB by extraction with acetone and hexane followed by GC-MSEDOTSoliARPhenols - Total (monohydr)Determination of PCB by extraction with acetone and hexane followed by GC-MSEDOTSoliARPhenols - Total (monohydr)Determination of phenols by distillation followed by celcrometric measurementEDOTSoliDPhosphate - Water Soluble (2:1)Determination of phenols by extraction with acet exanlysed by ion chromatographyEDOTSoliDSulphate (as SO4) - TotalDetermination of ophanet by extraction with acet exanlysed by ion chromatographyEDOTSoliDSulphate (as SO4) - Water Soluble (2:1)Determination of subplate by extraction with acet-regia followed by ICP-OESEDOTSoliARSulphideSulphide by extraction with acet-regia followed by ICP-OESEDOTSoliARSulphide by extraction of sulphide by extraction with acet-regia followed by ICP-OESEDOTSoliARThiocyanate (as SCN)Determination of total sulphate by extraction with acet-regia followed by ICP-OESEDOTSoliARThiocyanate (as SCN)Determination of subplate by extraction with acet-regia followed by ICP-OESEDOTSoliARThiocyanate (as SCN)Determination	Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil AR PAR - Speciated (PA 16) use of surrogate and internal standards E00e Soil AR PCB - 7 Congeners Determination of PCB by extraction with acetone and hexane followed by GC-MS E00e Soil D Petroleum Ether Extract (PED Gravimetrically determined through extraction with petroleum ether E011 Soil AR Phenols - Total (monohydric) Determination of phenols by distillation followed by colorimetry E023 Soil D Phenols - Total (monohydric) Determination of phenols by distillation of water followed by ion chromatography E009 Soil D Sulphate (as SO4) - Total Determination of sulphate by extraction with water & analysed by ion chromatography E009 Soil D Sulphate (as SO4) - Water Soluble (2:1) Determination of sulphate by extraction with water followed by inchromatography E009 Soil D Sulphate (as SO4) - Water Soluble (2:1) Determination of sulphate by extraction with water followed by inchromatography E009 Soil AR Sulphate (as SO4) - Water Soluble (2:1) Determination of sulphate by extraction with water followed by inchromatography E009 Soil AR Sulphar - Total Determination of sulphate by extraction with water followed by inchromatography E004 Soil AR Sulphar	Soil	D	Organic Matter	iron (II) sulphate	E010
SoilDPetroleum Ether Extract (PEE) Gravimetrically determined through extraction with petroleum etherE011SoilARphDetermination of pH by addition of water followed by electrometric measurementE007SoilARPhenols - Total (monohydric)Determination of phenols by distillation followed by electrometryE007SoilDSulphate - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyE005SoilDSulphate (as SO4) - Vata Determination of sulphate by extraction with water & analysed by ion chromatographyE005SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyE005SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyE005SoilARSulphate (as SO4) - Water Soluble (2:1)Determination of valer soluble sulphate by extraction with water & analysed by ion chromatographyE005SoilARSulphate (as SO4) - Water Soluble (2:1)Determination of total sulphate by extraction with aqua-regit followed by ICP-OESE024SoilARSulphate (as SO4) - Total Determination of total sulphate by extraction with aqua-regit followed by ICP-OESE024SoilARThiocyanate (as SCN) determination of total sulphate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetryE017SoilDTotal organic Carbon (TOC)Determination of organic matt	Soil	AR	PAH - Speciated (EPA 16)		E005
SoilARDetermination of pH by addition of water followed by electrometric measurementE007SoilDPhenols - Total (monohydric)Determination of phenols by distillation followed by colorimetryE021SoilDPhosphate - Water Soluble (2:1)Determination of phosphate by extraction with water & analysed by ion chromatographyE005SoilDSulphate (as SO4) - TotalDetermination of total sulphate by extraction with 10% HCI followed by ICP-OESE013SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with vater & analysed by ion chromatographyE005SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyE005SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water followed by ICP-OESE014SoilARSulphate (as SO4) - TotalDetermination of sulphur by extraction with aqua-regia followed by ICP-OESE024SoilARSulphate (as SCN)Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by eCC-MSE006SoilARThiocyanate (as SCN)Determination of thiocyanate by extraction with folueneE017SoilDTotal Organic Carbon (TOC)Determination of thiocyanate by extraction with folueneE017SoilDTotal Organic Carbon (TOC)Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, c12-C16, C16-C21, C21-C35	Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
SoilARPhenols - Total (monohydric)Determination of phenols by distillation followed by colorimetryE021SoilDPhosphate - Water Soluble (2:1)Determination of phenols by extraction with 10% HCI followed by 1CP-OESE003SoilDSulphate (as SO4) - Total Determination of sulphate by extraction with 10% HCI followed by 1CP-OESE013SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with 10% HCI followed by 1CP-OESE014SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyE005SoilARSulphate (as SO4) - Vater Soluble (2:1)Determination of sulphate by extraction with water & analysed by 1CP-OESE014SoilARSulphute - TotalDetermination of sulphate by extraction with notice organic compounds by extraction in acetone and hexane followed by CP-OESE024SoilARThiocyanate (as SCN)Determination of sulphute by extraction in caustic soda followed by acidification followed by COCE017SoilARThiocyanate (as SCN)Determination of organic compounds by extraction with tolueneE011SoilDTotal Organic Carbon (TOC)Determination of partice matter by oxidising with potassium dichromate followed by titration with row of article organic carbon by GC-FID fractionating with SPEE004SoilARThe CWG (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPEE004SoilAR <td>Soil</td> <td>D</td> <td>Petroleum Ether Extract (PEE)</td> <td>Gravimetrically determined through extraction with petroleum ether</td> <td>E011</td>	Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
SoilDPhosphate - Water Soluble (2:1) Sulphate (as SO4) - Total Determination of phosphate by extraction with water & analysed by ion chromatographyE009SoilDSulphate (as SO4) - Total Determination of sulphate by extraction with under & analysed by ion chromatographyE009SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyE009SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyE001SoilARSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyE001SoilARSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyE001SoilARSulphate (as SO4) - Water Soluble (2:1)Determination of water soluble sulphate by extraction with water & analysed by ion chromatographyE001SoilARSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with aqua-regia followed by ICP-OESE014SoilARThiocyanate (as SCN)Determination of total sulphate by extraction in caustic soda followed by acidification followed by acidification followed by acidification followed by acidification followed by acidification form intrate followed by colorimetryE017SoilDTotal organic Carbon (TOC) Total Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (11) sulphateE	Soil	AR	pĤ	Determination of pH by addition of water followed by electrometric measurement	E007
SoilDSulphate (as SO4) - TotalDetermination of total sulphate by extraction with 10% HCl followed by ICP-OESE013SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyE005SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of water solubles culphate by extraction with water followed by ICP-OESE014SoilARSulphate (as SO4) - TotalDetermination of total sulphur by extraction with aqua-regia followed by ICP-OESE024SoilDSulphur - TotalDetermination of total sulphur by extraction with aqua-regia followed by ICP-OESE024SoilARSVCCDetermination of total sulphur by extraction in acetone and hexane followed byE006SoilARSVCCDetermination of thicxyanate by extraction in acustic soda followed by acidification followed byE007SoilARThiocyanate (as SCN)Determination of organic matter by extraction with tolueneE011SoilDTotal Organic Carbon (TOC)Gravimetrically determined through extraction with tolueneE011SoilDTotal Organic Carbon (TOC)Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPEE004SoilARTPH CWG (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPEE004SoilARTPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, cartridge for C8 to C35. C5 to	Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyE009SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of water soluble sulphate by extraction with water followed by ICP-OESE014SoilARSulphur - TotalDetermination of sulphur by extraction with agua-regia followed by ICP-OESE004SoilDSulphur - TotalDetermination of total sulphur by extraction with agua-regia followed by ICP-OESE004SoilARSVCCDetermination of thiocyanate by extraction in acetone and hexane followed by addition of ferric nitrate followed by colorimetryE017SoilARThiocyanate (as SCV)Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetryE017SoilDTotal Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphateE017SoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, c12-C16, C16-C21, C21-C35Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, c12-C16, C16-C21, C21-C35Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, c12-C16, C16-C21, C21-C35, C35-C44E004 <td>Soil</td> <td>D</td> <td>Phosphate - Water Soluble (2:1)</td> <td>Determination of phosphate by extraction with water & analysed by ion chromatography</td> <td>E009</td>	Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of water soluble sulphate by extraction with water followed by ICP-OESE014SoilARSulphideDetermination of sulphide by distillation followed by colorimetryE018SoilDSulphur - TotalDetermination of total sulphur by extraction with aqua-regia followed by ICP-OESE024SoilARSvocDetermination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MSE006SoilARThiocyanate (as SCN)Determination of foricyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetryE017SoilDTotuene Extractable Matter (TEM)Gravimetrically determined through extraction with tolueneE011SoilDTotal Organic Carbon (TOC)Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE arc: C5-C7, C7-C8, C8-C10, C10-C12, 	Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCI followed by ICP-OES	E013
SoilARSulphideDetermination of sulphide by distillation followed by colorimetryE018SoilDSulphur - TotalDetermination of total sulphur by extraction with aqua-regia followed by ICP-OESE024SoilARStoreDetermination of seni-volatile organic compounds by extraction in acetone and hexane followed by addition of ferric nitrate followed by colorimetryE016SoilARThiocyanate (as SCN) Toluene Extractable Matter (TEM)Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetryE017SoilDToluene Extractable Matter (TEM)Gravimetrically determined through extraction with tolueneE011SoilDTotal Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphateE017SoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C36, C12-C16, C16-C21, C21-C36, C10-C12, C12-C16, C16-C37, C3-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C36, C3-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C36, C3-C44, c12-C16, C16-C21, C21-C36, C3-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C36, C3-C44, c12-	Soil	D			E009
SoilDSulphur - TotalDetermination of total sulphur by extraction with agua-regia followed by ICP-OESE024SoilARSVCCDetermination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MSE006SoilARThiocyanate (as SCN)Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetryE017SoilDToluene Extractable Matter (TEM)Gravimetrically determined through extraction with tolueneE011SoilDTotal Organic Carbon (TCC)Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphateE010SoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE arc: C5-C7, C7-C8, C8-C10, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hex					E014
SoilARSVOCDetermination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MSE006SoilARThiocyanate (as SCN)Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry addition of ferric nitrate followed by colorimetryE017SoilDToluene Extractable Matter (TEM) Gravimetrically determined through extraction with tolueneE011SoilDTotal Organic Carbon (TOC) C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35,Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MSE004SoilARTPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44,Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE artridge for C8 to C44. C5 to C8 by headspace GC-MSE004SoilARTPH					E018
SoilARConstructionConstructio	Soil	D	Sulphur - Total		E024
SoilARThiodyaliate (as SCIV) addition of ferric nitrate followed by colorimetryEUT/SoilDToluene Extractable Matter (TEM)Gravimetrically determined through extraction with tolueneE011SoilDTotal Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphateE010SoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE arridge for C8 to C35. C5 to C8 by headspace GC-MSE004SoilARTPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of volatile organic compounds by headspace GC-MSE004SoilARVOCsDetermination of volatile organic comp	Soil	AR	SVOC		E006
SoilDTotal Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphateE010SoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE C12-C16, C16-C21, C21-C35, C12-C16, C16-C21, C21-C35, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE E004E004SoilARTPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44,Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE E004E004SoilARTOPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44,Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44,E004SoilARTOPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44,Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE LOM (ali: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44,E004SoilARTOPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44,Determination of volatile organic compounds by heads	Soil			addition of ferric nitrate followed by colorimetry	E017
SoilDTotal Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphateE010SoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE C12-C16, C16-C21, C21-C35, C12-C16, C	Soil	D	Toluene Extractable Matter (TEM)		E011
Soil AR TPH LQM (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C14, C16-C21, C21-C34, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35 Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE (C10-C12, C12-C16, C16-C21, C21-C35) E004 Soil AR TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C23, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, arc: C5-C7, C7-C8, C8-C10, C10-C1	Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with	E010
Soil AR C10-C12, C12-C16, C16-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, cartridge for C8 to C44. C5 to C8 by headspace GC-MS E004 Soil AR VOCs Determination of volatile organic compounds by headspace GC-MS E001	Soil	AR	C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12,	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
	Soil	AR	C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12,	cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
	Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001

D Dried AR As Received





DETS Report No: 21-03357

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	17/03/2021
Sample Scheduled Date:	17/03/2021
Report Issue Number:	1
Reporting Date:	23/03/2021

Authorised by:

Dave Ashworth

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. 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 except in full, without the prior written approval of the laboratory.





Soil Analysis Certificate						
DETS Report No: 21-03357	Date Sampled	12/03/21	12/03/21	12/03/21	12/03/21	12/03/21
G & J Geoenvironmental Consultants Ltd	Time Sampled	None Supplied				
Site Reference: Middlemore Lane	TP / BH No	H9	19	Jð	G10	H10
Project / Job Ref: GJ049	Additional Refs	None Supplied				
Order No: None Supplied	Depth (m)	None Supplied				
Reporting Date: 23/03/2021	DETS Sample No	532054	532055	532056	532057	532058

Determinand	Unit	RL	Accreditation					
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected	Detected	Not Detected	Not Detected	Not Detected
					Chrysotile			
					present in			
Sample Matrix ^(S)	Material Type	N/a	NONE		microscopic loose			
					fibrous asbestos			
					debris			
Asbestos Type ^(S)	PLM Result	N/a	ISO17025		Chrysotile			
pH	pH Units	N/a	MCERTS	7.2	7.7	10.0	8.0	7.7
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	1527	3017	1048	2587	3133
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.15	0.30	0.10	0.26	0.31
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter	%	< 0.1	MCERTS	6.5	3.7	3.1	3.2	5.8
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	3.8	2.2	1.8	1.9	3.4
Arsenic (As)	mg/kg	< 2	MCERTS	9	8	9	9	14
W/S Boron	mg/kg	< 1	NONE	< 1	1.2	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	NONE	0.3	2	3.6	0.7	0.8
Chromium (Cr)	mg/kg	< 2	MCERTS	15	12	13	14	12
Copper (Cu)	mg/kg	< 4	MCERTS	59	380	209	125	573
Lead (Pb)	mg/kg	< 3	MCERTS	34	61	38	48	193
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	30	25	16	21	30
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	MCERTS	179	1100	962	370	996
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
EPH (C10 - C40)	mg/kg	< 6	MCERTS	130	212	147	445	1200





Soil Analysis Certificate					
DETS Report No: 21-03357	Date Sampled	12/03/21	12/03/21		
G & J Geoenvironmental Consultants Ltd	Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemore Lane	TP / BH No	110	J10		
Project / Job Ref: GJ049	Additional Refs	None Supplied	None Supplied		
Order No: None Supplied	Depth (m)	None Supplied	None Supplied		
Reporting Date: 23/03/2021	DETS Sample No	532059	532060		

Determinand	Unit	RL	Accreditation				
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected	Not Detected		
Sample Matrix ^(S)	Material Type	N/a	NONE				
Asbestos Type (S)	PLM Result	N/a	ISO17025				
рН	pH Units	N/a	MCERTS	7.7	7.0		
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2		
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	2508	389		
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.25	0.04		
Sulphide	mg/kg	< 5	NONE	< 5	< 5		
Organic Matter	%	< 0.1	MCERTS	4.7	1.4		
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	2.7	0.8		
Arsenic (As)	mg/kg	< 2	MCERTS	8	6		
W/S Boron	mg/kg	< 1	NONE	1.1	< 1		
Cadmium (Cd)	mg/kg	< 0.2	NONE	0.4	0.7		
Chromium (Cr)	mg/kg	< 2	MCERTS	12	11		
Copper (Cu)	mg/kg	< 4	MCERTS	52	81		
Lead (Pb)	mg/kg	< 3	MCERTS	30	23		
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1		
Nickel (Ni)	mg/kg	< 3	MCERTS	24	7		
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3		
Zinc (Zn)	mg/kg	< 3	MCERTS	168	532		
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2		
EPH (C10 - C40)	mg/kg	< 6	MCERTS	89	16		





Soil Analysis Certificate - Speciated PAHs								
DETS Report No: 21-0335			Date Sampled	12/03/21	12/03/21	12/03/21	12/03/21	12/03/21
G & J Geoenvironmental (& J Geoenvironmental Consultants Ltd Time			None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Middlemo	ore Lane		TP / BH No	H9	19	J9	G10	H10
Project / Job Ref: GJ049		/	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 23/03/2	2021	D	ETS Sample No	532054	532055	532056	532057	532058
Determinand	Unit	RI	Accreditation					
Naphthalene		< 0.1	MCFRTS	0.20	< 0.1	. 0.1	< 0.1	0.22
Acenaphthylene	mg/kg	< 0.1	MCERTS	0.30	< 0.1	< 0.1	< 0.1	0.32
Acenaphthene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1 < 0.1
	5 5	< 0.1	MCERTS	< 0.1	< 0.1			
Fluorene Phenanthrene	mg/kg	< 0.1	MCERTS			< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	< 0.1	MCERTS	0.47	0.28	0.16	0.29	0.99 < 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
Pyrene	mg/kg mg/kg	< 0.1	MCERTS	0.15 0.17	0.33	0.19 0.18	0.25	0.53
Benzo(a)anthracene	0 0	< 0.1	MCERTS	< 0.17	< 0.1	< 0.1	< 0.1	0.53
	mg/kg	< 0.1	MCERTS	0.13	< 0.1	< 0.1	0.14	0.22
Chrysene Benzo(b)fluoranthene	mg/kg mg/kg	< 0.1	MCERTS	< 0.1	0.15	< 0.1	< 0.1	0.37
Benzo(k)fluoranthene	5 5	< 0.1	MCERTS	< 0.1		< 0.1		
Benzo(k)nuoi antinene Benzo(a)pyrene		< 0.1	MCERTS	< 0.1	< 0.1 0.12	< 0.1	< 0.1 < 0.1	0.16 < 0.1
Indeno(1,2,3-cd)pyrene		< 0.1	MCERTS	< 0.1	< 0.12	< 0.1	< 0.1	
Dibenz(a,h)anthracene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		< 0.1
Benzo(ghi)perylene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1 < 0.1	< 0.1 < 0.1
		< 1.6		< 0.1	< 0.1 < 1.6	< 1.6	< 1.6	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.0	IVICERTS	< 1.0	< 1.0	< 1.0	< 1.0	3.0





Soil Analysis Certificate	Soil Analysis Certificate - Speciated PAHs							
DETS Report No: 21-0335	57		Date Sampled	12/03/21	12/03/21			
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied			
Site Reference: Middlemo	ore Lane		TP / BH No	110	J10			
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied			
Order No: None Supplied			Depth (m)	None Supplied	None Supplied			
Reporting Date: 23/03/2	2021	D	ETS Sample No	532059	532060			
		DI						
Determinand			Accreditation	0.40	o. 4			
Naphthalene	mg/kg	< 0.1	MCERTS	0.18	< 0.1			
Acenaphthylene	0 0	< 0.1	MCERTS	< 0.1	< 0.1			
Acenaphthene	5 5	< 0.1	MCERTS	< 0.1	< 0.1			
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Phenanthrene	mg/kg	< 0.1	MCERTS	0.38	< 0.1			
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Fluoranthene	mg/kg	< 0.1	MCERTS	0.21	< 0.1			
Pyrene		< 0.1	MCERTS	0.18	< 0.1			
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Chrysene	mg/kg	< 0.1	MCERTS	0.15	< 0.1			
Benzo(b)fluoranthene		< 0.1	MCERTS	< 0.1	< 0.1			
Benzo(k)fluoranthene	5 5	< 0.1	MCERTS	< 0.1	< 0.1			
Benzo(a)pyrene		< 0.1	MCERTS	< 0.1	< 0.1			
Indeno(1,2,3-cd)pyrene		< 0.1	MCERTS	< 0.1	< 0.1			
Dibenz(a,h)anthracene	5 5	< 0.1	MCERTS	< 0.1	< 0.1			
Benzo(ghi)perylene		< 0.1	MCERTS	< 0.1	< 0.1			
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6			





Soil Analysis Certificate	Soil Analysis Certificate - TPH CWG Banded								
DETS Report No: 21-033			Date Sampled	12/03/21	12/03/21	12/03/21	12/03/21	12/03/21	
G & J Geoenvironmental C	Consultants Ltd Time Sample		Time Sampled	None Supplied					
Site Reference: Middlemo	ore Lane		TP / BH No	H9	19	Jð	G10	H10	
Destant (Jak Daf, C 1040									
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied	None Supplied	None Supplied		None Supplied	
Order No: None Supplied		D.	Depth (m)	None Supplied	None Supplied	None Supplied		None Supplied	
Reporting Date: 23/03/2	2021	DI	ETS Sample No	532054	532055	532056	532057	532058	
Determinand	Unit	RI	Accreditation						
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Aliphatic >C6 - C8				< 0.05	< 0.01	< 0.01	0.27	< 0.05	
Aliphatic >C8 - C10	5 5	< 0.05	MCERTS	< 0.05		< 0.05			
Aliphatic >C10 - C12	5 5		MCERTS	< 2	< 2 < 2	< 2	< 2	< 2	
Aliphatic >C10 - C12	mg/kg mg/kg		MCERTS	< 2	< 2	< 2	< 2	4	
Aliphatic >C12 - C16 Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	26	
Aliphatic >C10 - C21 Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 3	34	214	20	
Aliphatic (C5 - C34)	mg/kg mg/kg		NONE	< 21	62		214	818	
Anomatic (CS - C34) Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Aromatic >C3 - C7 Aromatic >C7 - C8	mg/kg mg/kg			< 0.05	< 0.05	< 0.01	< 0.01	< 0.05	
Aromatic >C8 - C10			MCERTS	< 2	< 2	< 2	< 2	< 2	
Aromatic >C10 - C12	mg/kg			3	< 2	< 2	< 2	< 2	
Aromatic >C12 - C16	5 5		MCERTS	11	2	< 2	4	9	
Aromatic >C16 - C21	mg/kg		MCERTS	14	7	< 3	8	24	
Aromatic >C21 - C35		< 10		< 10	44	< 10	60	193	
Aromatic (C5 - C35)	mg/kg	< 21	NONE	28	54	< 21	72	226	
Total >C5 - C35	mg/kg	< 42	NONE	< 42	115	< 42	296	1044	





Soil Analysis Certificate - TPH (CWG Bande	d					
DETS Report No: 21-03357			Date Sampled	12/03/21	12/03/21		
G & J Geoenvironmental Consulta	ironmental Consultants Ltd Time Sampled		Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemore Lane	9		TP / BH No	110	J10		
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied	None Supplied		
Order No: None Supplied			Depth (m)	None Supplied	None Supplied		
Reporting Date: 23/03/2021		D	TS Sample No	532059	532060		
Determinand	Unit		Accreditation			1	
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01		
Aliphatic >C6 - C8	0 0	< 0.05	NONE	< 0.05	< 0.05		
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2		
Aliphatic >C10 - C12	mg/kg		MCERTS	< 2	< 2		
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3		
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3		
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 10		
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	< 21	< 21		
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01		
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05		
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2		
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2		
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	6	< 2		
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	9	< 3		
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	< 10	< 10		
Aromatic (C5 - C35)	mg/kg	< 21	NONE	< 21	< 21		
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42		





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-0335	57		Date Sampled	12/03/21	12/03/21	12/03/21	12/03/21	12/03/21
G & J Geoenvironmental C	onsultants Ltd	Time Sampled		None Supplied				
Site Reference: Middlemo	re Lane	TP / BH No		H9	19	J9	G10	H1C
Project / Job Ref: GJ049		Additional Refs		None Supplied				
Order No: None Supplied		Depth (m)		None Supplied				
Reporting Date: 23/03/20	Reporting Date: 23/03/2021		ETS Sample No	532054	532055	532056	532057	532058
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate - BTEX / MTE	3E						
DETS Report No: 21-03357			Date Sampled	12/03/21	12/03/21		
G & J Geoenvironmental Consultants Ltd	td Time Sampled		None Supplied	None Supplied			
Site Reference: Middlemore Lane	TP / BH No		110	J10			
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied		
Order No: None Supplied		Depth (m)		None Supplied	None Supplied		
Reporting Date: 23/03/2021		DETS Sample No		532059	532060		
Determinand	Unit	RL	Accreditation				
Benzene	ug/kg	< 2	MCERTS	< 2	< 2		
Toluene	ug/kg	< 5	MCERTS	< 5	< 5		
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2		
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2		
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2		
MTBE	ug/kg	< 5	MCERTS	< 5	< 5		





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-03357	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 23/03/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
532054	H9	None Supplied	None Supplied	13.7	Black loamy sand with brick
532055	19	None Supplied	None Supplied	13.9	Black loamy sand with brick and concrete
532056	J9	None Supplied	None Supplied	10.5	Brown sandy clay with stones
532057	G10	None Supplied	None Supplied	14.9	Brown loamy sand with stones and brick
532058	H10	None Supplied	None Supplied	12.7	Black sandy clay
532059	110	None Supplied	None Supplied	13.1	Brown sandy clay
532060	J10	None Supplied	None Supplied	14.3	Light brown sandy clay

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample $^{\rm U/S}$ Unsuitable Sample $^{\rm U/S}$





Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 21-03357	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 23/03/2021	

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR		Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations		E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex		E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil		EPH TEXAS (C6-C8, C8-C10, C10-C12,	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	E004
Soil	AR	C12-C16, C16-C21, C21-C40)		E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil	D	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	titration with iron (11) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble		E025
Soil	D	Metals		E002
Soil	AR	Mineral Oil (C10 - C40)	cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil Soil	D	Nitrate - Water Soluble (2:1) Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with	E009 E010
Soil	AR	PAH - Speciated (EPA 16)	Iron (II) supnate Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the	E005
		· ·	use of surrogate and internal standards	
Soil	AR	PCB - 7 Congeners		E008
Soil	D		Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR		Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR		Determination of phenols by distillation followed by colorimetry	E021
Soil	D		Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of total sulphate by extraction with 10% HCI followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Suipnate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR		Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Suipnur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)		E004
Soil	AR	TPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)		E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR		Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001
	Dried			

D Dried AR As Received



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY

DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-03631

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	22/03/2021
Sample Scheduled Date:	22/03/2021
Report Issue Number:	1
Reporting Date:	29/03/2021

Authorised by:

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

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Soil Analysis Certificate							
DETS Report No: 21-03631		Date Sampled	18/03/21	18/03/21	18/03/21		
G & J Geoenvironmental Consultants Ltd			Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemore Lane			TP / BH No	G9	К9	L9	
Project / Job Ref: GJ049		/	Additional Refs	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	
Reporting Date: 29/03/2021		D	ETS Sample No	533008	533009	533010	
Determe in en el	11-14	DI					
Determinand	Unit N/a	RL N/a	Accreditation ISO17025	Not Detected	Not Detected	Not Detected	r
Asbestos Screen ^(S) pH	pH Units	N/a	MCERTS	NOL Detected 8.0	Not Detected 9.3	Not Detected 8.4	
Total Cyanide	mg/kg	= 10/a < 2	NONE	< 2	9.3	< 2	
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	1385	910	865	
Total Sulphate as SO ₄	//////////////////////////////////////	< 0.02	MCERTS	0.14	0.09	0.09	
Sulphide	mg/kg	< 0.02	NONE	18	< 5	< 5	
Organic Matter	%	< 0.1	MCERTS	4.3	0.4	0.9	
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	2.5	0.2	0.5	
Arsenic (As)	mg/kg	< 2	MCERTS	9	6	6	
W/S Boron	mg/kg	< 1	NONE	1.2	< 1	< 1	
Cadmium (Cd)	mg/kg	< 0.2	NONE	0.6	0.4	< 0.2	
Chromium (Cr)	mg/kg	< 2	MCERTS	13	11	14	
Copper (Cu)	mg/kg	< 4	MCERTS	221	248	204	
Lead (Pb)	mg/kg	< 3	MCERTS	112	43	22	
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	
Nickel (Ni)	mg/kg	< 3	MCERTS	16	9	8	
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	
Zinc (Zn)	mg/kg	< 3	MCERTS	434	792	263	
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	
EPH (C10 - C40)	mg/kg	< 6	MCERTS	468	45	408	1





Soil Analysis Certificate							
DETS Report No: 21-03631			Date Sampled	18/03/21	18/03/21	18/03/21	
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	G9	К9	L9	
Project / Job Ref: GJ049 Order No: None Supplied		/	Additional Refs	None Supplied	None Supplied	None Supplied	
Reporting Date: 29/03/2			Depth (m) ETS Sample No	None Supplied	None Supplied	None Supplied	
Reporting Date: 2970372	2021	D	ETS Sample No	533008	533009	533010	ļ I
Determinand	Unit	RI	Accreditation				
Naphthalene		< 0.1	MCERTS	0.12	< 0.1	< 0.1	
Acenaphthylene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Phenanthrene	mg/kg	< 0.1	MCERTS	0.44	< 0.1	< 0.1	
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Fluoranthene	mg/kg	< 0.1	MCERTS	0.40	< 0.1	< 0.1	
Pyrene	mg/kg	< 0.1	MCERTS	0.38	< 0.1	0.26	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.14	< 0.1	< 0.1	
Chrysene		< 0.1	MCERTS	0.18	< 0.1	< 0.1	
Benzo(b)fluoranthene		< 0.1	MCERTS	0.19	< 0.1	< 0.1	
Benzo(k)fluoranthene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(a)pyrene		< 0.1	MCERTS	0.12	< 0.1	< 0.1	
Indeno(1,2,3-cd)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Dibenz(a,h)anthracene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(ghi)perylene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	2	< 1.6	< 1.6	





Soil Analysis Certificate	- TPH CWG Bande	d					
			Date Sampled	18/03/21	18/03/21	18/03/21	
G & J Geoenvironmental Consultants Ltd			Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	G9	К9	L9	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	
Reporting Date: 29/03/2	2021	D	ETS Sample No	533008	533009	533010	
Determinand			Accreditation				
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01	< 0.01	
Aliphatic >C6 - C8	0 0	< 0.05	NONE	< 0.05	< 0.05	< 0.05	
Aliphatic >C8 - C10	5 5	< 2	MCERTS	6	< 2	< 2	
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	9	< 2	8	
Aliphatic >C12 - C16	5 5		MCERTS	29	< 3	59	
Aliphatic >C16 - C21	mg/kg		MCERTS	50	< 3	65	
Aliphatic >C21 - C34		-	MCERTS	84	< 10	44	
Aliphatic (C5 - C34)	mg/kg		NONE	178	< 21	175	
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	11	< 2	10	
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	33	< 3	22	
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	38	< 10	< 10	
Aromatic (C5 - C35)	mg/kg	< 21	NONE	82	< 21	32	
Total >C5 - C35	mg/kg	< 42	NONE	260	< 42	208	





Soil Analysis Certificate - BTEX / M	ЛТВЕ						
DETS Report No: 21-03631			Date Sampled	18/03/21	18/03/21	18/03/21	
G & J Geoenvironmental Consultants	Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemore Lane		TP / BH No		G9	К9	L9	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	
Reporting Date: 29/03/2021		DETS Sample No		533008	533009	533010	
Determinand	Unit	RL	Accreditation				
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	





DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
533008	G9	None Supplied	None Supplied	9.8	Black loamy sand with brick
533009	К9	None Supplied	None Supplied	10	Light brown sandy clay with stones
533010	L9	None Supplied	None Supplied	10.2	Light brown sandy clay with stones

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample^{US}

Unsuitable Sample ^{U/S}





Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 21-03631	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 29/03/2021	

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR		Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations		E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex		E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil		EPH TEXAS (C6-C8, C8-C10, C10-C12,	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	E004
Soil	AR	C12-C16, C16-C21, C21-C40)		E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil	D	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble		E025
Soil	D	Metals		E002
Soil	AR	Mineral Oil (C10 - C40)	cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil Soil	D	Nitrate - Water Soluble (2:1) Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with	E009 E010
Soil	AR	PAH - Speciated (EPA 16)	Iron (II) supnate Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the	E005
		· ·	use of surrogate and internal standards	
Soil	AR	PCB - 7 Congeners		E008
Soil	D		Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR		Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR		Determination of phenols by distillation followed by colorimetry	E021
Soil	D		Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of total sulphate by extraction with 10% HCI followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Suipnate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR		Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Suipnur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)		E004
Soil	AR	TPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)		E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR		Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001
	Dried			

D Dried AR As Received



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY

DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-03857

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	24/03/2021
Sample Scheduled Date:	25/03/2021
Report Issue Number:	1
Reporting Date:	01/04/2021

Authorised by:

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

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Soil Analysis Certificate						
DETS Report No: 21-03857	Date Sampled	23/03/21	27/01/21	27/01/21	27/01/21	27/01/21
G & J Geoenvironmental Consultants Ltd	Time Sampled	None Supplied				
Site Reference: Middlemore Lane	TP / BH No	N7	N8	N9	N10	N11
Project / Job Ref: GJ049	Additional Refs	None Supplied				
Order No: None Supplied	Depth (m)	None Supplied				
Reporting Date: 01/04/2021	DETS Sample No	533846	533847	533848	533849	533850

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected				
Sample Matrix ^(S)	Material Type	N/a	NONE					
Asbestos Type (S)	PLM Result	N/a	ISO17025					
pH	pH Units	N/a	MCERTS	8.1	7.9	7.6	7.5	7.2
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	427	1332	276	< 200	< 200
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.04	0.13	0.03	< 0.02	< 0.02
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter	%	< 0.1	MCERTS	< 0.1	0.9	1.1	< 0.1	< 0.1
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	< 0.1	0.5	0.6	< 0.1	< 0.1
Arsenic (As)	mg/kg	< 2	MCERTS	8	8	5	7	4
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	NONE	< 0.2	0.7	< 0.2	< 0.2	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	14	14	12	11	ç
Copper (Cu)	mg/kg	< 4	MCERTS	40	1360	123	17	13
Lead (Pb)	mg/kg	< 3	MCERTS	17	98	18	10	ç
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	17	14	10	5	-
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	MCERTS	68	1120	112	26	29
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
EPH (C10 - C40)	mg/kg	< 6	MCERTS	< 6	< 6	14	< 6	< 6





Soil Analysis Certificate						
DETS Report No: 21-03857	Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	27/01/21
G & J Geoenvironmental Consultants Ltd	Time Sampled	None Supplied				
Site Reference: Middlemore Lane	TP / BH No	M5	M6	M7	M8	M9
Project / Job Ref: GJ049	Additional Refs	None Supplied				
Order No: None Supplied	Depth (m)	None Supplied				
Reporting Date: 01/04/2021	DETS Sample No	533851	533852	533853	533854	533855

Determinand	Unit	RL	Accreditation					
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected				
Sample Matrix ^(S)	Material Type	N/a	NONE					
Asbestos Type ^(S)	PLM Result	N/a	ISO17025					
pH	pH Units	N/a	MCERTS	8.0	7.5	6.0	7.6	8.0
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	220	1183	3658	4601	1344
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.02	0.12	0.37	0.46	0.13
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter	%	< 0.1	MCERTS	0.2	< 0.1	4.6	2.4	0.9
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	0.1	< 0.1	2.7	1.4	0.5
Arsenic (As)	mg/kg	< 2	MCERTS	3	12	8	11	ς
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	1.1
Cadmium (Cd)	mg/kg	< 0.2	NONE	< 0.2	0.2	0.3	1	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	4	20	18	16	25
Copper (Cu)	mg/kg	< 4	MCERTS	111	62	370	3510	188
Lead (Pb)	mg/kg	< 3	MCERTS	17	25	56	340	107
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	6	25	37	25	27
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	MCERTS	143	119	378	2930	313
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
EPH (C10 - C40)	mg/kg	< 6	MCERTS	28	< 6	37	134	325





Soil Analysis Certificate						
DETS Report No: 21-03857	Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	27/01/21
G & J Geoenvironmental Consultants Ltd	Time Sampled	None Supplied				
Site Reference: Middlemore Lane	TP / BH No	M10	M11	M12	M13	M14
Project / Job Ref: GJ049	Additional Refs	None Supplied				
Order No: None Supplied	Depth (m)	None Supplied				
Reporting Date: 01/04/2021	DETS Sample No	533856	533857	533858	533859	533860

Determinand	Unit	RL	Accreditation					
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected				
Sample Matrix ^(S)	Material Type	N/a	NONE					
Asbestos Type (S)	PLM Result	N/a	ISO17025					
рН	pH Units	N/a	MCERTS	7.0	7.3	7.3	7.5	7.6
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	555	< 200	2161	856	222
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.06	< 0.02	0.22	0.09	0.02
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter	%	< 0.1	MCERTS	0.5	0.2	1.1	0.3	< 0.1
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	0.3	0.1	0.7	0.1	< 0.1
Arsenic (As)	mg/kg	< 2	MCERTS	6	< 2	5	3	2
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	12	10	11	6	6
Copper (Cu)	mg/kg	< 4	MCERTS	21	12	33	33	12
Lead (Pb)	mg/kg	< 3	MCERTS	13	7	76	26	8
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	4	5	10	7	6
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	MCERTS	124	15	70	60	29
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
EPH (C10 - C40)	mg/kg	< 6	MCERTS	< 6	< 6	320	481	81





Soil Analysis Certificate						
DETS Report No: 21-03857	Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	
G & J Geoenvironmental Consultants Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemore Lane	TP / BH No	G5	G6	G7	G8	
Project / Job Ref: GJ049	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied	Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 01/04/2021	DETS Sample No	533861	533862	533863	533864	

Determinand	Unit	RL	Accreditation					_
Asbestos Screen (S)	N/a	N/a	ISO17025	Detected	Not Detected	Not Detected	Not Detected	
Sample Matrix ^(S)	Material Type	N/a	NONE	Chrysotile present in microscopic Cement debris				
Asbestos Type (S)	PLM Result	N/a	ISO17025	Chrysotile				
рH	pH Units	N/a	MCERTS	7.8	9.5	6.8	7.1	
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	
Total Sulphate as SO4	mg/kg	< 200	MCERTS	1203	1849	1339	636	
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.12	0.18	0.13	0.06	
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	
Organic Matter	%	< 0.1	MCERTS	1.5	4.1	3.1	1.7	
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	0.9	2.4	1.8	1	
Arsenic (As)	mg/kg	< 2	MCERTS	26	9	7	6	
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	
Cadmium (Cd)	mg/kg	< 0.2	NONE	46	2.8	1.3	0.4	
Chromium (Cr)	mg/kg	< 2	MCERTS	58	14	12	11	
Copper (Cu)	mg/kg	< 4	MCERTS	19600	860	616	66	
Lead (Pb)	mg/kg	< 3	MCERTS	1790	105	68	21	
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	
Nickel (Ni)	mg/kg	< 3	MCERTS	101	26	19	14	
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	
Zinc (Zn)	mg/kg	< 3	MCERTS	22300	1580	1020	161	
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	
EPH (C10 - C40)	mg/kg	< 6	MCERTS	112	63	89	15	





Soil Analysis Certificate	Soil Analysis Certificate - Speciated PAHs													
DETS Report No: 21-0385	57		Date Sampled	23/03/21	27/01/21	27/01/21	27/01/21	27/01/21						
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied										
Site Reference: Middlemo	ore Lane		TP / BH No	N7	N8	N9	N10	N11						
Destant (Jak Daf, C 1040						N 0 1 1								
Project / Job Ref: GJ049 Order No: None Supplied		F	Additional Refs Depth (m)	None Supplied										
Reporting Date: 01/04/2		DI	ETS Sample No	None Supplied 533846	None Supplied 533847	None Supplied 533848	None Supplied 533849	None Supplied 533850						
Reporting Date. 0170472	.021	DI	LTS Sample NO	033040	00047	000040	000049	00000						
Determinand	Unit	RL	Accreditation											
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.13	< 0.1	< 0.1						
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.29	< 0.1	< 0.1						
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.28	< 0.1	< 0.1						
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.13	< 0.1	< 0.1						
Chrysene		< 0.1	MCERTS	< 0.1	< 0.1	0.13	< 0.1	< 0.1						
Benzo(b)fluoranthene		< 0.1	MCERTS	< 0.1	< 0.1	0.15	< 0.1	< 0.1						
Benzo(k)fluoranthene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Benzo(a)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	0.11	< 0.1	< 0.1						
Indeno(1,2,3-cd)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Dibenz(a,h)anthracene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Benzo(ghi)perylene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6						





Soil Analysis Certificate	- Speciated PAHs							Soil Analysis Certificate - Speciated PAHs													
DETS Report No: 21-0385	57		Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	27/01/21													
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied																	
Site Reference: Middlemo	ore Lane		TP / BH No	M5	M6	M7	M8	M9													
Project / Job Ref: GJ049		/	Additional Refs	None Supplied	None Supplied	None Supplied		None Supplied													
Order No: None Supplied		D	Depth (m)	None Supplied	None Supplied	None Supplied		None Supplied													
Reporting Date: 01/04/2	2021	D	ETS Sample No	533851	533852	533853	533854	533855													
Determinand	Unit	RI	Accreditation																		
Naphthalene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1													
Acenaphthylene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1													
Acenaphthene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1													
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1													
Phenanthrene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	0.18	0.55													
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.13													
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	0.31	1.02													
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	0.26	0.99													
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.47													
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	0.13	0.41													
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	0.15	0.66													
Benzo(k)fluoranthene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.20													
Benzo(a)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.51													
Indeno(1,2,3-cd)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.29													
Dibenz(a,h)anthracene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1													
Benzo(ghi)perylene		< 0.1		< 0.1	< 0.1	< 0.1	< 0.1	0.26													
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	5.5													





Soil Analysis Certificate	Soil Analysis Certificate - Speciated PAHs													
DETS Report No: 21-0385			Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	27/01/21						
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied										
Site Reference: Middlemo	ore Lane		TP / BH No	M10	M11	M12	M13	M14						
Project / Job Ref: GJ049		1	Additional Refs	None Supplied										
Order No: None Supplied Reporting Date: 01/04/2		DI	Depth (m)	None Supplied										
Reporting Date: 0170472	:021	DI	ETS Sample No	533856	533857	533858	533859	533860						
Determinand	Unit	RL	Accreditation											
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Acenaphthylene	0 0	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Chrysene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Benzo(b)fluoranthene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Benzo(k)fluoranthene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Benzo(a)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Indeno(1,2,3-cd)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Dibenz(a,h)anthracene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Benzo(ghi)perylene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1						
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6						





Soil Analysis Certificate	- Speciated PAHs							
DETS Report No: 21-0385	57		Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	
G & J Geoenvironmental C	Consultants Ltd	Time Sampled		None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	G5	G6	G7	G8	
Project / Job Ref: GJ049		/	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied		D	Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 01/04/2	2021	D	ETS Sample No	533861	533862	533863	533864	
Determinand	Unit	RI	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Acenaphthylene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	0.26	< 0.1	< 0.1	
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	0.28	< 0.1	< 0.1	
Pyrene	0 0	< 0.1	MCERTS	< 0.1	0.24	< 0.1	< 0.1	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Chrysene	0 0	< 0.1	MCERTS	< 0.1	0.15	< 0.1	< 0.1	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	





Soil Analysis Certificate	- TPH CWG Bande	d						
DETS Report No: 21-038	57		Date Sampled	23/03/21	27/01/21	27/01/21	27/01/21	27/01/21
G & J Geoenvironmental (Consultants Ltd	Time Sampled		None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	N7	N8	N9	N10	N11
Draigat (Job Dafi C 1040			Additional Data					
Project / Job Ref: GJ049 Order No: None Supplied			Additional Refs	None Supplied	None Supplied	None Supplied		None Supplied
Reporting Date: 01/04/2		D	Depth (m) ETS Sample No	None Supplied	None Supplied	None Supplied		None Supplied
Reporting Date: 0170472	2021	D	ETS Sample No	533846	533847	533848	533849	533850
Determinand	Unit	RI	Accreditation					
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8	5 5			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	5 5		MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34)	mg/kg		NONE	< 21	< 21	< 21	< 21	< 21
Aromatic >C5 - C7	0 0	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8	3.3			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	5 5		MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg		MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16	5.5		MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21	mg/kg		MCERTS	< 3	< 3	< 3	< 3	< 3
Aromatic >C21 - C35				< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35)	mg/kg		NONE	< 21	< 21	< 21	< 21	< 21
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	< 42





Soil Analysis Certificate	- TPH CWG Bande	d						
DETS Report No: 21-038	57		Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	27/01/21
G & J Geoenvironmental C	Consultants Ltd	Time Sampled		None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	M5	M6	M7	M8	M9
Destant (Jak Daf, Cl040								
Project / Job Ref: GJ049		/	Additional Refs	None Supplied	None Supplied	None Supplied		None Supplied
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied		None Supplied
Reporting Date: 01/04/2	2021	D	ETS Sample No	533851	533852	533853	533854	533855
Determinand	Unit	RI	Accreditation					
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8	5 5	-		< 0.05	< 0.01	< 0.01	< 0.01	< 0.05
Aliphatic >C8 - C10	5 5	< 0.05						
Aliphatic >C10 - C12	0 0		MCERTS	< 2 < 2	< 2 < 2	< 2	< 2	< 2
Aliphatic >C10 - C12	mg/kg mg/kg			< 2	< 3	< 2	< 2	< 2
Aliphatic >C12 - C18	mg/kg	-	MCERTS		< 3	< 3	< 3	< 3
Aliphatic >C10 - C21 Aliphatic >C21 - C34	mg/kg			< 3	< 10	< 10	< 10	< 3
Aliphatic (C5 - C34)	mg/kg mg/kg		NONE	< 21	< 10	< 10	< 10	66
Anomatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8				< 0.05	< 0.05	< 0.01	< 0.01	< 0.05
Aromatic >C8 - C10		< 0.05	MCERTS	< 0.05	< 0.03	< 0.05	< 0.03	< 2
Aromatic >C10 - C12	mg/kg			< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12 Aromatic >C12 - C16	mg/kg mg/kg			< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C10 Aromatic >C16 - C21	mg/kg			< 3	< 3	< 3	< 3	< 2
Aromatic >C10 - C21 Aromatic >C21 - C35		< 10		< 10	< 10	< 10	26	81
Aromatic (C5 - C35)	mg/kg	-	NONE	< 21	< 21	< 21	26	87
Total >C5 - C35		_		< 42	< 42	< 42	< 42	153
10tal >00 - 035	ifly/kg	< 42	INUNE	< 42	< 42	< 42	< 42	153





Soil Analysis Certificate	e - TPH CWG Bande	d						
DETS Report No: 21-038			Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	27/01/21
G & J Geoenvironmental (Consultants Ltd	Time Sampled		None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	M10	M11	M12	M13	M14
Declaret (Job Def. C 1040								
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied	None Supplied	None Supplied		None Supplied
Order No: None Supplied		DI	Depth (m)	None Supplied	None Supplied	None Supplied		None Supplied
Reporting Date: 01/04/2	2021	DI	ETS Sample No	533856	533857	533858	533859	533860
Determinand	Unit	RI	Accreditation					
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8			NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	5 5	< 2	MCERTS	< 2	< 2	5	7	< 2
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	26	84	< 2
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	91	172	21
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	36	22	27
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 10	75	89	< 10
Aliphatic (C5 - C34)	mg/kg		NONE	< 21	< 21	232	374	48
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8	3 3	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	5.5		MCERTS	< 2	< 2	7	8	< 2
Aromatic >C10 - C12	mg/kg			< 2	< 2	11	21	< 2
Aromatic >C12 - C16	mg/kg		MCERTS	< 2	< 2	30	72	3
Aromatic >C16 - C21	mg/kg		MCERTS	< 3	< 3	21	7	11
Aromatic >C21 - C35				< 10	< 10	13	23	< 10
Aromatic (C5 - C35)			NONE	< 21	< 21	83	132	< 21
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42	316	506	62





Soil Analysis Certificate	- TPH CWG Bande	d						
DETS Report No: 21-038			Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	
G & J Geoenvironmental C	Consultants Ltd	Time Sampled		None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	G5	G6	G7	G8	
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied		D.	Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 01/04/2	021	D	ETS Sample No	533861	533862	533863	533864	
		D.						
Determinand			Accreditation	0.01	0.01	0.04	0.01	
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Aliphatic >C6 - C8		< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	
Aliphatic >C8 - C10	5 5	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aliphatic >C10 - C12	mg/kg		MCERTS	< 2	< 2	< 2	< 2	
Aliphatic >C12 - C16	mg/kg		MCERTS	< 3	< 3	6	< 3	
Aliphatic >C16 - C21	mg/kg		MCERTS	< 3	< 3	25	< 3	
Aliphatic >C21 - C34	mg/kg		MCERTS	25	< 10	< 10	< 10	
Aliphatic (C5 - C34)	mg/kg		NONE	25	< 21	31	< 21	
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	< 2	3	< 2	
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	20	< 3	
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Aromatic (C5 - C35)	mg/kg	< 21	NONE	< 21	< 21	23	< 21	
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42	54	< 42	





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-0385	7	Date Sampled		23/03/21	27/01/21	27/01/21	27/01/21	27/01/21
G & J Geoenvironmental Co	onsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemor	re Lane		TP / BH No	N7	N8	N9	N10	N11
Project / Job Ref: GJ049		/	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 01/04/20)21	DETS Sample No		533846	533847	533848	533849	533850
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-0385	7	Date Sampled		27/01/21	27/01/21	27/01/21	27/01/21	27/01/21
G & J Geoenvironmental C	onsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemore	re Lane	TP / BH No		M5	M6	M7	M8	M9
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 01/04/20	021	DETS Sample No		533851	533852	533853	533854	533855
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-0385	7	Date Sampled		27/01/21	27/01/21	27/01/21	27/01/21	27/01/21
G & J Geoenvironmental C	onsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	re Lane		TP / BH No	M10	M11	M12	M13	M14
Project / Job Ref: GJ049		/	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 01/04/20	021	DETS Sample No		533856	533857	533858	533859	533860
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate - E	BTEX / MTBE							
DETS Report No: 21-03857			Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	
G & J Geoenvironmental Con	sultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemore	Lane	TP / BH No		G5	G6	G7	G8	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 01/04/202	1	DETS Sample No		533861	533862	533863	533864	
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	





DETS Report No: 21-0385	- Volatile Organic (57		Date Sampled	27/01/21	27/01/21	27/01/21	27/01/21	
G & J Geoenvironmental (Time Sampled	None Supplied				
Site Reference: Middlemo			TP / BH No	None Supplied M9	None Supplied M13	None Supplied M14	None Supplied G8	
				1719	111 3	IVI 1 4	G8	
Project / Job Ref: GJ049		A	dditional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 01/04/2	021	DE	TS Sample No	533855	533859	533860	533864	
Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Chloromethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromomethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Trichlorofluoromethane 1,1-Dichloroethene	ug/kg	< 5	MCERTS MCERTS	< 5	< 5	< 5	< 5	
MTBE	ug/kg ug/kg	< 5	MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	< 5	
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
cis-1,2-Dichloroethene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1,1-Trichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1-Dichloropropene	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Trichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
TAME	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5	6	< 5	< 5	
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2-Dibromoethane	ug/kg	< 5	MCERTS MCERTS	< 5	< 5	< 5	< 5	
Chlorobenzene 1,1,1,2-Tetrachloroethane	ug/kg	< 5 < 5	MCERTS	< 5	< 5	< 5	< 5	
Ethyl Benzene	ug/kg ug/kg	< 2	MCERTS	< 5 < 2	< 5 < 2	< 5 < 2	< 2	
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Styrene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
n-Propylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	<u> </u>
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	



Soil Analysis Certificate	- PCB (7 Congener	rs)					
DETS Report No: 21-0385	57		Date Sampled	27/01/21	27/01/21	27/01/21	
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	N11	M5	M14	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	
Reporting Date: 01/04/2	021	DE	TS Sample No	533850	533851	533860	
Determinand	Unit	RL	Accreditation				
PCB Congener 28	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	
PCB Congener 52	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	
PCB Congener 101	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	
PCB Congener 118	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	
PCB Congener 138	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	
PCB Congener 153	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	
PCB Congener 180	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	
Total PCB (7 Congeners)	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-03857	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 01/04/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
533846	N7	None Supplied	None Supplied	11	Red sandy clay with stones
\$ 533847	N8	None Supplied	None Supplied	7.8	Light brown sandy clay with stones
\$ 533848	N9	None Supplied	None Supplied	6.2	Light brown sandy clay with stones
\$ 533849	N10	None Supplied	None Supplied		Light brown sandy clay
\$ 533850	N11	None Supplied	None Supplied	7.1	Light brown sandy clay with stones
\$ 533851	M5	None Supplied	None Supplied		Red sandy clay with stones
\$ 533852	M6	None Supplied	None Supplied	10	Light brown sandy clay with stones
\$ 533853	M7	None Supplied	None Supplied		Grey sandy clay
\$ 533854	M8	None Supplied	None Supplied		Brown sandy clay with brick and concrete
\$ 533855	M9	None Supplied	None Supplied		Light brown sandy clay with stones
\$ 533856	M10	None Supplied	None Supplied		Light brown sandy clay
\$ 533857	M11	None Supplied	None Supplied	9.6	Light grey sandy clay
\$ 533858	M12	None Supplied	None Supplied		Brown sandy clay with stones
\$ 533859	M13	None Supplied	None Supplied		Light brown sandy clay with stones
\$ 533860	M14	None Supplied	None Supplied		Light brown sandy clay with stones
\$ 533861	G5	None Supplied	None Supplied	10.5	Brown sandy gravel with brick and concrete
\$ 533862	G6	None Supplied	None Supplied		Grey sandy clay with stones
\$ 533863	G7	None Supplied	None Supplied	13.7	Grey sandy clay
\$ 533864	G8	None Supplied	None Supplied	11.7	Brown sandy clay with stones

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample $^{\rm VS}$ Unsuitable Sample $^{\rm VS}$

\$ samples exceeded recommended holding times





pil Analysis Certificate - Methodology & Miscellaneous Information
ETS Report No: 21-03857
& J Geoenvironmental Consultants Ltd
te Reference: Middlemore Lane
oject / Job Ref: GJ049
rder No: None Supplied
eporting Date: 01/04/2021

Sol D Boords - Weble Soluble Determination of layers valuate provide to set the 21 hot value match information of 11 kp therapitation of 12 kp therapitation of 12 kp therapitation of the value and value and value of valuate valuation by underlayed by utilized b	Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soli D Catego Description of categors in all by acage-rapid acquaint failwards by CPGSS (F) Soli D Division Mark Studie (2) Description of charles by actinction with asits <i>L</i> advanced by an charmed part of the categors in the categors with a site advanced by an charmed part of the categors in the categors and the categ	Soil		Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Sail D Charase. Water Souldae C.1.0 Determination of chickine water A souly of by informatography actification. Addition of the control is displayed intermination of prevalent in soil by extraction in water the my actification. Addition of the control is displayed intermination of prevalent in soil by extraction in water the my actification. Addition of the control is displayed intermination of chickine day control in the con	Soil	AR			E001
Soil AR Chromium - Hoxonian Determination of hexavelation through up contribution. Soil AR Controlling Soil Arrow Control Soil Control Soil Contreton arrow Contreton arrow Cont	Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil Ale Currinnian - nearware L C C C Soil AR Cognide - Free Determination of these cynale by detaillation followed by colorimetry E0 Soil AR Cognide - Free Determination of these cynale by detaillation followed by colorimetry E0 Soil AR Cognide - Free Determination of these cynale by detaillation followed by colorimetry E0 Soil AR Dess flag cynale (-Free Determination of these cynale by detaillation of sour all details and source of the cynale cynale (-Free Details - Free Determination of these cynale by details of these followed by electronetic measurement E0 Soil AR Electrical Conductivity Determination of electrical conductivity by addition of sour all details and source of these cynales (-Free Determination of electrical conductivity by addition of sour all details and source of these cynales (-Free Determination of electrical conductivity by addition of sour all details and source of these cynales (-Free Determination of electrical conductivity by addition of source of the Critical Conductivity Bit Details and Source Occurs (-Free Determination of electrical conductivity by addition of source of the Critical Conductivity Bit Details and Source Occurs (-Free Details and Source Occu	Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil AR Coverise - the Determination of the cyclic billion followed by colorinely EE Soil AR Cyclicheane Extractable Matter (EAE) Gradination of tool cyclic billion followed by colorinely EC Soil AR Externation of tool cyclic billion followed by colorinely EC Soil AR Externation of teochol cyclic billion followed by colorinely EC Soil AR Externation of teochol cyclic billion followed by colorinely EC Soil AR Externation of teochol cyclic billion followed by colorinely EC Soil AR Externation of teochol cyclic billion followed by CS-MS EC Soil AR Externation of actonhybrain by sole static cyclic followed by CS-MS EC Soil AR EPH IEXE (CA-CR, CB-CH, CT-CT) Externation of actonhybrain cyclic billion followed by CS-MS EC Soil AR EPH IEXE (CA-CR, CB-CH, CT-CT) Externation of actonhybrain cyclic billion by CS-HD EC Soil D Fraction Organic Carbon (CC) EC EXternation billion cyclic billion cyclic billion cyclic billion cyclic billion cyclic billion cyclic	Soil	AR	Chromium - Hexavalent		E016
Soli AR Copende - Total Ditermination of that cyanide by distillation failware by colorbane FEE Soli Copedbaces Stratable Matter CAM, Gravingstration of the scale consultivity by addition of salurated calcum subplict followed by GE FID Col Soli AR Electrical Consultivity Determination of electrical conductivity by addition of salurated calcum subplict followed by GEAS Electrical Consultivity Determination of electrical conductivity by addition of salurated calcum subplict followed by GEAS Electrical Consultivity Determination of electrical conductivity by addition of salurated calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of salurated calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of salurated calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of salurated calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of salurated calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of salurated calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of salurated calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of Salurated Calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of Salurated Calcum subplict PS coles followed by GEAS Soli AR EPH PROAL Electrical Conductivity Determination of FiDE Calcum Subplict PS coles followed by GEAS Electrical Calcum Subplict PS coles followed Determination of FiDE Calcum Subplict					E015
Soil D Cycloneane Extractable Natifier (CEM) Gramming through extraction with cycloneane '					E015
Soil AR Diesel Bange Draganics (C10. C24) Determination of hexanical conductivity by addition of saturation calculativity by addition of saturativity calculativity by addition of saturativity calculativity by addition of saturativity by addition of saturativity by addition of saturativity calculativity by addition of saturativity calculativity by addition of saturativity calculativity c					E015
Soil AR Electrical Conductive Determination of electrical conductivity by addition of saturated calclum subhate followed by electrometric measurement Electrical Conductivity Soil AR Electrical Conductivity Determination of electrical conductivity by addition of water followed by electrometric measurement Electrical Conductivity Soil AR Electrical Conductivity Determination of electrical conductivity by addition of water followed by electrometric measurement Electrical Conductivity Soil AR EMPTICID-Cole CD, Cole CD, Cole CD, Determination of autorom/beause extractiability followed by electrometric measurement Electrical Conductivity Soil D Function-Water Soluble Electrical Conductivity by addition of water followed by EC+10 for C8 to C40. C6 to C8 to C8 to C9 to C10. C10. C10. C10. C10. C10. Electrical Conduction analyser Electrical Conductivity C10. C10. C10. C10. C10. C10. C10. C10.					E011
Soli Art Electrical Conduction y lectrometric measurement Electrical Conductivity particular of the second particular of the second second second second second second second particular of the second second second second se	Soil	AR	Diesel Range Organics (C10 - C24)		E004
Soli D Elemental Subplus Determination of elemental subplue by solvent extraction followed by GC MS ED Soli AR EPH (CD - CM) Determination of elemental subplue by solvent extraction by GC-HD ED Soli AR EPH (CD - CM) Determination of elemental subplue by Solvent by CC-HD for CB to C40. C6 to C8 by ED Soli AR EPH (CD - CA) (CD - CD	Soil	AR	Electrical Conductivity		E022
Soil AR EPH (CI0 – C00) Determination of action/texame extractable hydrocarbons by CC-FID EPH Soil AR EPH (EXAS (Cd-GS, CAP-CID, CID-CID) Determination of action/texame extractable hydrocarbons by CC-FID for CB to C40. C6 to C8 by C1D (C12 C10, C10, C12, C12) Determination of action/texame extractable hydrocarbons by CC-FID for CB to C40. C6 to C8 by C1D (C12 C10, C10, C12, C12) Determination of ID (CD) extramations by CC-FID for CB to C40. C6 to C8 by C1D (C12 C12, C10, C12, C12) Determination of IDC by combustion analysed by ion chromatography DE Soil D Flortfield-Water Soluble Determination of IDC by combustion analysed. DE Determination of IDC by combustion analysed. DE Soil D FOC (Fraction Organic Carbon Determination of roganic Carbon by oddising with potassium dichromate followed by CE-OES DE Soil D Loss on ignition @ 450cc De Market Soluble Determination of reaction with water balaysed by ion chromatography EE Soil D Loss on ignition @ 450cc Determination of roganic Carbon by oddising with potassium dichromate followed by CE-OES EE Soil AR Mineral OII (C10 - C00) Market Soluble Determination of roganic Carbon by oddising with potassium dichromater followed by CE-OES EE Soil AR	Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Sail AR EPH TexAL Determination of exoton-Phesane extractable hydrocarbons by CC-ID EE Soil AR EPH TEXAL (C-AC, C2-C), CD-CD.2 Determination of exoton-Phesane extractable hydrocarbons by CC-ID for CB to CAD. CA to CB by EC EE Soil D Fraction Organic Carbon (CD) Determination of ICC to combustion analyse. EE Soil D Fraction Organic Carbon (CD) Determination of ICC to combustion analyse. EE Soil D Organic Mather (SDM) Determination of ICC to combustion analyse. EE Soil D TOC (Craction Organic Carbon (CD) Determination of ICC to combustion analyse. EE Soil D FOC (Fraction Organic Carbon (CD) Determination of ICC to combustion analyse. EE Soil D Loss on tipnlion @ 45000 Determination of reaction of organic carbon by oxidinic with water followed by ICP-OES EE Soil AR Minoral OI (C10 - C40) Media Determination of water soluble magnesium by extraction with water followed by ICP-OES EE Soil AR Minoral OI (C10 - C40) Determination of water soluble magnesium by extraction with water followed by ICP-OES EE Soil AR Minoral OI (C10	Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Sol AR EHF TEXAS (Co-CG, Car-CD, CD-CT), Determination of action-freexane extractable hydrocarbons by CC-FID for CB to C40. C6 to C8 by End Sol D Fluxtified - Water Soluble Determination of TOC by combustion analyser. EDE Sol D Fraction Craganic Camora (CCD) Determination of TOC by combustion analyser. EDE Sol D TOC Total Craganic Camora (CDD) Determination of TOC by combustion analyser. EDE Sol AR Exchangeable Ammonium Determination of TOC by combustion analyser. EDE Sol AR Exchangeable Ammonium Determination of craganic Camora Determination of Camora Determination of Camora Determination of Camora Determination of Camora	Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soli Ark C12/C16, C16-C21, C21-C00 headspace CC-MS Construction C12/C16, C16-C21, C21-C00 headspace CC-MS C12/C16 Soli D Fraction Organic Carbon (TOC) Determination of TOC by combustion analyser. C10 Soli D Organic Matter (SMD) Determination of TOC by combustion analyser. C10 Soli D TOC (Total Organic Carbon) Determination of TOC by combustion analyser. C10 Soli AR Exchangeable Ammonium Determination of annonium by distructure analyser. C10 Soli D TOC (Total Organic Carbon) Determination of anonium by distructure analyser. C10 Soli D Loss on Ignition 4P 4500. Determination or aneals by aqua-rega display interview analysed by ICP OES C10 Soli D Magnesium: Water Soluble Determination or metals by aqua-rega display for followed by ICP OES C10 Soli AR Mineral OII (C10 - C00) Determination or metals by aqua-rega display for followed by ICP OES C10 Soli AR Mineral OII (C10 - C00) Determination or the analysed by aqua-rega display followed by ICP OES C10 Soli AR Mineral OII (C10 - C00) Determination or PA 500	Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soli D Fluid is: Valid: Soluble Fluid is: Valid: Valid	Soil		EPH TEXAS (C6-C8, C8-C10, C10-C12,	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	F004
Soli D Fluctrice - Water Soluble Determination of FLO by combustion analyser. E65 Soli D Organic Matter (SOM) Determination of TOC by combustion analyser. E65 Soli D Organic Matter (SOM) Determination of TOC by combustion analyser. E65 Soli AR Exchangeable Ammonium Determination of TOC by combustion analyser. E65 Soli D FOC (Fraction Organic Carbon) Determination of Tochoon by gdiscrete analyser. E66 Soli D FOC (Fraction Organic Carbon) Determination of analyser. E66 Soli D Magnesium - Water Soluble Determination of analyser. E66 Soli D Magnesium - Water Soluble Determination of analyser. E66 Soli D Magnesium - Water Soluble Determination of analyser. E66 Soli AR Mineral Dit (Circ - 040) Determination of analyser. E66 Soli D Nitrate - Water Soluble (2-1) Determination of analyser. E66 Soli AR Phenolon: Circ Analyser. E67					E004
Soli D Organic Matter (SOM) Determination of TOC by combustion analyser. End Soli AR Exchangeable Ammonium by discrete analyser. E56 Soli D TOC (Traction Organic Cathon) Determination of Accorb by oxiding with potassium dichromate followed by the traino with inco (11) subhate. E56 Soli D Magnesium. Value Soluble Determination of traction of prainic carbon by oxiding with potassium dichromate followed by (CP-OES) E56 Soli D Magnesium. Value Soluble Determination of traction and prainic and the same/actions by CC-HD fractionating with SPE E56 Soli AR Mineral OII (C10 - C40) Determination of tractic by extraction with nater followed by (CP-OES) E56 Soli AR Mineral OII (C10 - C40) Determination of tractic by extraction with water followed by traction with the same followed by traction with water followed by traction with water followed by traction with water followed by traction with sate followed by traction with water followe	Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil D TOC (Total Organic Carbon) Determination of TOC by combustion analyser. EE Soil D FOC (Fraction Organic Carbon) Determination of fraction of organic carbon by oxidising with potassium dichromate followed by. EE Soil D Loss on Ignition @ 460oc Determination of raction of organic carbon by oxidising with potassium dichromate followed by. EE Soil D Magnesium - Water Soluble Determination of raction soil by gravimetrically with the sample being Ignited in a muffle EE Soil D Magnesium - Water Soluble Determination of reasts by acura-regin digestion followed by ICP-OES EE Soil AR Mineral Oil (C10 - C40 Determination of reasts by acura-regin digestion followed by ICP-OES EE Soil AR Molsture Content Molsture content: determined gravimetrically EE Soil D Nitrate - Water Soluble (2:1) Determination of raganic matter by acadising with potassium dichromate followed by ICP-OES EE Soil AR PAH - Speciated (EPA 16) Determination of PAH compounds by extraction with matter by acadising with potassium dichromate followed by GC-MS with the gravimetrical by actaction with acanalysed by ion chromatography EE					E027
Soil AR Exchangeable Ammonium Determination of ammonium by discrete analyser. EC Soil D FOC (Fraction Organic Carbon) Determination of fraction or organic carbon by oxidising with potassium dichomate followed by intration with icm (II) subhate EC Soil D Loss on Ignition @ 4500C Entermination of relation or organic carbon by oxidising with potassium dichomate followed by ICP-OES EC Soil D Magnesium - Water Soluble Determination of water soluble magnesium by extraction with water followed by ICP-OES EC Soil AR Mineral OII (C10 - C40) Determination of granic matter by anal-regist diseston followed by ICP-OES EC Soil AR Mineral OII (C10 - C40) Determination of granic matter by oxidising with potassium dichromate followed by ICP-OES EC Soil D Organic Matter Carbon Granic matter by oxidising with potassium dichromate followed by ICP-OES EC Soil D Organic Matter Corganic matter by oxidising with potassium dichromate followed by ICP-OES EC Soil AR PAH - Speciated (EP 1D) Determination or granic matter by oxidising with potassium dichromate followed by ICP-OES EC Soil AR					E027
Soil D FBC (Fraction Organic Carbon Determination of fraction of organic carbon by oxidising with potassium dichromate followed by EBC Soil D Loss on Ignition @ 4500 Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle EBC Soil D Magnesium-Water Soluble Determination of metals by aquarceiga digetion of water soluble magnesium-regis digetion water followed by ICP-0ES EBC Soil AR Mineral OII (C10 - C40) Determination of metals by aquarceiga digetion water & analysed by ion chromatography EBC Soil AR Moisture Content Moisture content; determined gravimetrically EBC Soil D Organic Matter Determination of reganic matter by oxidising with potassium dichromate followed by GC-MS EBC Soil AR PAH - Speciated (EPA to betermination of vater followed by extraction with acteone and hexane followed by GC-MS EBC Soil AR PAH - Speciated (EPA to betermination of vater followed by GC-MS EBC Soil AR PAH - Speciated (EPA to betermination of vater followed by GC-MS EBC Soil AR PAH - Speciated (EPA to betermination of vater followed by ICP-OES EBC <td>Soil</td> <td>D</td> <td>TOC (Total Organic Carbon)</td> <td>Determination of TOC by combustion analyser.</td> <td>E027</td>	Soil	D	TOC (Total Organic Carbon)	Determination of TOC by combustion analyser.	E027
Soli D FOC (Fraction Organic Cartoon) Intration with Iron (II) subpate Control Control Exc. Soli D Loss on Ignition @ 4500 Determination of loss on ignition is oil by gravimetrically with the sample being ignited in a muffle Exc. Soli D Magnesium - Water Soluble Determination of metals by aqua-regia digestion followed by ICP-OES Exc. Soli AR Mineral OII (C10 - 040) Determination of nexane/acetone extractable hydrocarbons by 6C-FID fractionating with SPE Exc. Soli AR Moisrae Content Moisture content: determination of nurate by extraction with water & analysed by ion chromatography EXC. Soli D Nitrate - Water Soluble (2:1) Determination of organic matter by oxidising with potassium dichromate followed by Ittration with exc. Exc. Soli AR PAH - Speciated (EPA 10) Determination of PAE compounds by extraction with water & analysed by ion chromatography Exc. Soli AR PAH - Speciated (EPA 10) Determination of PAE by extraction with water & analysed by ion chromatography Exc. Soli AR PCI0-Incomptyric1D Determination of phenos by distributed water followed by ICP-OES Exc. Soli AR Phoenosis: Total (Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soli D Excession regimination of states Excession regimination Excession re	Soil	D		Determination of fraction of organic carbon by oxidising with potassium dichromate followed by	E010
Soil D Magnesium - Water Soluble Determination of weter soluble magnesium by extraction with water followed by ICP-OES EEC Soil D Metals Determination of metals by aqua negla digestion followed by ICP-OES EEC Soil AR Mineral OII (C10 - C40) Determination of hexane/acctione extractable hydrocarbons by GC-FID fractionating with SPE EEC Soil AR Moisture Content: determination of organic matter by oxidising with potassium dichromate followed by Itration with reg EEC Soil D Nitrate - Water Soluble (2:1) Determination of PAH compounds by extraction with water & analysed by ion chromatography EEC Soil AR PAH - Speciated (EPA 16) Determination of PAH compounds by extraction with acetone and hexane followed by GC-MS EEC Soil AR PAH - Speciated (EPA 16) Ges disurcoate and internal standards. EEC Soil AR PAH - Speciate (PEE - Congeners Determination of Water soluble and through extraction with acetone and hexane followed by GC-MS EEC Soil AR Phenols - Total (monohydric) Determination of phenols by distillation followed by colorimetry EEC Soil AR Phenols - Total (monohydric) Determination of suphate by extraction wi	Soil	D	Loss on Ignition @ 450oC		E019
Soil D Metals Determination of metals by aquar-regia digestion followed by ICP-OES EE Soil AR Mineral OII (C10 - C40) Determination of hexane/actone extractable hydrocarbons by GC-FID fractionating with SPE EC Soil AR Moisture Content Moisture content: determined gravimetrically EC Soil D Nitrate - Water Soluble (21) Determination of organic matter by oxidising with potassium dichromate followed by itration with ino (11) subhate EC Soil AR PAH - Speciated (EPA 16) Determination of PAH compounds by extraction in actione and hexane followed by GC-MS EC Soil AR PAH - Speciated (EPA 16) Determination of PAH compounds by extraction with neatene followed by GC-MS EC Soil AR PHenoley Total (2007) Determination of PAH compounds by extraction with water & analysed by ion chromatography EC Soil AR PHenoley Total (2007) Determination of PAH compounds by extraction with water & analysed by ion chromatography EC Soil AR Phenols - Total (monbydrc) Determination of pH by addition of water followed by eccromatic memory EC Soil D Physiphate - water Solub	Soil	D	Magnesium - Water Soluble		E025
Soil AR Mineral Oil (C10 - C40) Determination of hoxane/acetone extractable hydrocarbons by GC-FID fractionating with SPE extraction with water & analysed by ion chromatography Edit Soil AR Moisture Content Moisture content: determined gravimetrically Edit Soil D Nitrate - Water Soluble (2: 1) Determination of organic matter by oxidising with potassium dichromate followed by titration with informate followed by GC-MS with the gravimetrically Edit Soil AR PAH - Speciated (EPA 16) Determination of PAB vartaction with acetone and hexane followed by GC-MS with the gravimetrically determined informate followed by eGC-MS Edit Soil AR PAH - Speciated (EPA 16) Determination of PAB vartaction with acetone and hexane followed by GC-MS Edit Soil AR PAB - Total (monobydric) Determination of they addition of water followed by electrometric measurement EDit Soil AR Phosphate (as SO4) - Total Determination of total subphate by extraction with water & analysed by ion chromatography EDit Soil D Subphate (as SO4) - Total Determination of total subphate by extraction with water & analysed by ion chromatography EDit Soil D Sulphate (as SO4) - Water Soluble (2					E002
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SoilDTotal Organic Carbon (TOC) iron (II) sulphateiron (II) sulphateECSoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE c12-C16, C16-C21, C21-C35,ECSoilARTPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35,Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MSECSoilARTPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C23, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MSECSoilARVOCs Determination of volatile organic compounds by headspace GC-MSEC	2011	IJ	I OIUENE EXTRACTABLE MATTER (TEM)		E011
SoilARC10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MSECSoilARTPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, cartridge for C8 to C44. C5 to C8 by headspace GC-MSECSoilARVOCsDetermination of volatile organic compounds by headspace GC-MSEC	Soil	D	Total Organic Carbon (TOC)		E010
Soil AR C10-C12, C12-C16, C16-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, cartridge for C8 to C44. C5 to C8 by headspace GC-MS EC Soil AR VOCs Determination of volatile organic compounds by headspace GC-MS EC	Soil	AR	C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12,	cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
			C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil AR VPH (C6-C8 & C8-C10) Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID FC					E001
	Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

AR As Received



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY



DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-04100

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	29/03/2021
Sample Scheduled Date:	30/03/2021
Report Issue Number:	1
Reporting Date:	08/04/2021

Authorised by:

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. 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 except in full, without the prior written approval of the laboratory.





Soil Analysis Certificate						
DETS Report No: 21-04100	Date Sampled	25/03/21	25/03/21	25/03/21	25/03/21	25/03/21
G & J Geoenvironmental Consultants Ltd	Time Sampled	None Supplied				
Site Reference: Middlemore Lane	TP / BH No	E7	F7	F8	F9	K10
Project / Job Ref: GJ049	Additional Refs	None Supplied				
Order No: None Supplied	Depth (m)	None Supplied				
Reporting Date: 08/04/2021	DETS Sample No	534847	534848	534849	534850	534851

Determinand	Unit	RL	Accreditation					
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Detected	Detected	Detected	Not Detected	Not Detected
Sample Matrix ^(S)	Material Type	N/a	NONE	Chrysotile present in Microscopic Cement debris & Bundles	Bundle of Chrysotile fibres	Bundles of Chrysotile fibres		
Asbestos Type (S)	PLM Result	N/a	ISO17025	Chrysotile	Chrysotile	Chrysotile		
рН	pH Units	N/a	MCERTS	7.9	7.6	9.7	9.8	7.8
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	3304	1814	1652	2441	3703
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.33	0.18	0.17	0.24	0.37
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter	%	< 0.1	MCERTS	4.1	2	2.3	2.5	5.7
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	2.4	1.2	1.4	1.4	3.3
Arsenic (As)	mg/kg	< 2	MCERTS	33	18	12	21	10
W/S Boron	mg/kg	< 1	NONE	< 1	1	< 1	1.4	< 1
Cadmium (Cd)	mg/kg	< 0.2	NONE	135	10	2.3	10.4	1
Chromium (Cr)	mg/kg	< 2	MCERTS	1030	222	35	193	21
Copper (Cu)	mg/kg	< 4	MCERTS	26100	4360	1300	10800	564
Lead (Pb)	mg/kg	< 3	MCERTS	2960	660	536	668	68
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	767	216	39	183	22
Selenium (Se)	mg/kg	< 2	MCERTS	2.6	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	MCERTS	32200	5220	1850	11200	1350
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
EPH (C10 - C40)	mg/kg	< 6	MCERTS	1270	277	14	278	5710

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion Subcontracted analysis (S)





Soil Analysis Certificate					
DETS Report No: 21-04100	Date Sampled	25/03/21	25/03/21		
G & J Geoenvironmental Consultants Ltd	Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemore Lane	TP / BH No	L10	L11		
Project / Job Ref: GJ049	Additional Refs	None Supplied	None Supplied		
Order No: None Supplied	Depth (m)	None Supplied	None Supplied		
Reporting Date: 08/04/2021	DETS Sample No	534852	534853		

Determinand	Unit	RL	Accreditation				
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Not Detected		
Sample Matrix ^(S)	Material Type	N/a	NONE				
Asbestos Type (S)	PLM Result	N/a	ISO17025				
рН	pH Units	N/a	MCERTS	8.8	7.8		
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2		
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	814	706		
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.08	0.07		
Sulphide	mg/kg	< 5	NONE	< 5	< 5		
Organic Matter	%	< 0.1	MCERTS	0.8	3.9		
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	0.5	2.3		
Arsenic (As)	mg/kg	< 2	MCERTS	7	9		
W/S Boron	mg/kg	< 1	NONE	< 1	1.1		
Cadmium (Cd)	mg/kg	< 0.2	NONE	0.5	< 0.2		
Chromium (Cr)	mg/kg	< 2	MCERTS	12	26		
Copper (Cu)	mg/kg	< 4	MCERTS	128	70		
Lead (Pb)	mg/kg	< 3	MCERTS	24	25		
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1		
Nickel (Ni)	mg/kg	< 3	MCERTS	11	53		
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3		
Zinc (Zn)	mg/kg	< 3	MCERTS	306	157		
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2		
EPH (C10 - C40)	mg/kg	< 6	MCERTS	45	48	 	

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion Subcontracted analysis (S)





Soil Analysis Certificate	- Speciated PAHs							
DETS Report No: 21-0410			Date Sampled	25/03/21	25/03/21	25/03/21	25/03/21	25/03/21
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Middlemo	ore Lane		TP / BH No	E7	F7	F8	F9	K10
Destant (Jak Daf, C 1040			Additional Refs			N 0 1 1		
Project / Job Ref: GJ049 Order No: None Supplied		F	Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 08/04/2		DI	ETS Sample No	None Supplied 534847	None Supplied 534848	None Supplied 534849	None Supplied 534850	None Supplied
Reporting Date. 08/04/2	:021	D	ETS Sample NO	534847	534848	534849	534850	534851
Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	0.12	0.15
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	0.15	0.16
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	0.16	0.14
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene		< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6





Soil Analysis Certificate	- Speciated PAHs						
DETS Report No: 21-0410	00		Date Sampled	25/03/21	25/03/21		
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemo	ore Lane		TP / BH No	L10	L11		
Declaret (Job Def. C 1040			alaliti a sa L D a fa				
Project / Job Ref: GJ049 Order No: None Supplied		ŀ	Additional Refs Depth (m)	None Supplied	None Supplied		
Reporting Date: 08/04/2		DI	ETS Sample No	None Supplied 534852	None Supplied 534853		
Reporting Date: 08/04/2	:UZ I	Di	I S Sample NO	534852	534853		
Determinand	Unit	RL	Accreditation				
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1		
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1		
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1		
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1		
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	0.13		
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1		
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1		
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1		
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1		
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1		
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1		
Benzo(k)fluoranthene	5 5	< 0.1	MCERTS	< 0.1	< 0.1		
Benzo(a)pyrene	0 0	< 0.1	MCERTS	< 0.1	< 0.1		
Indeno(1,2,3-cd)pyrene	0 0	< 0.1	MCERTS	< 0.1	< 0.1		
Dibenz(a,h)anthracene		< 0.1	MCERTS	< 0.1	< 0.1		
Benzo(qhi)perylene			MCERTS	< 0.1	< 0.1		
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6		





Soil Analysis Certificate	e - TPH CWG Bande	d						
DETS Report No: 21-041	00		Date Sampled	25/03/21	25/03/21	25/03/21	25/03/21	25/03/21
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	E7	F7	F8	F9	K10
Project / Job Ref: GJ049			Additional Refs					
Order No: None Supplied		/		None Supplied	None Supplied	None Supplied		None Supplied
		D	Depth (m)	None Supplied	None Supplied	None Supplied		None Supplied
Reporting Date: 08/04/2	2021	D	ETS Sample No	534847	534848	534849	534850	534851
Determinand	Unit	RI	Accreditation					
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8	5 5		NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	11	< 3	< 3	< 3	8
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	59	5	< 3	17	135
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	353	89	< 10	80	3307
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	423	94	< 21	97	3450
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	0 0	< 2		< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg			< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	2
Aromatic >C16 - C21	mg/kg	< 3		9	< 3	< 3	10	35
Aromatic >C21 - C35				113	45	< 10	249	476
Aromatic (C5 - C35)	mg/kg		NONE	122	45	< 21	259	514
Total >C5 - C35	mg/kg	< 42	NONE	544	139	< 42	356	3964





Soil Analysis Certificate	- TPH CWG Bande	d					
DETS Report No: 21-041	00		Date Sampled	25/03/21	25/03/21		
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemo	ore Lane		TP / BH No	L10	L11		
Project / Job Ref: GJ049		Å	Additional Refs	None Supplied	None Supplied		
Order No: None Supplied			Depth (m)	None Supplied	None Supplied		
Reporting Date: 08/04/2	2021	DI	ETS Sample No	534852	534853		
Determinand			Accreditation			 	
Aliphatic >C5 - C6	5 5	< 0.01	NONE	< 0.01	< 0.01		
Aliphatic >C6 - C8	5 5	< 0.05		< 0.05	< 0.05		
Aliphatic >C8 - C10	5 5		MCERTS	< 2	< 2		
Aliphatic >C10 - C12			MCERTS	< 2	< 2		
Aliphatic >C12 - C16	00		MCERTS	< 3	< 3		
Aliphatic >C16 - C21	mg/kg		MCERTS	< 3	< 3		
Aliphatic >C21 - C34			MCERTS	< 10	< 10		
Aliphatic (C5 - C34)	mg/kg		NONE	< 21	< 21		
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01		
Aromatic >C7 - C8		< 0.05	NONE	< 0.05	< 0.05		
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2		
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2		
Aromatic >C12 - C16	5 5		MCERTS	< 2	< 2		
Aromatic >C16 - C21	mg/kg		MCERTS	< 3	< 3		
Aromatic >C21 - C35	mg/kg	mg/kg < 10 MCERTS		< 10	< 10		
Aromatic (C5 - C35)	mg/kg	< 21	NONE	< 21	< 21		
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42		





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-0410	0		Date Sampled	25/03/21	25/03/21	25/03/21	25/03/21	25/03/21
G & J Geoenvironmental C	onsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	re Lane		TP / BH No	E7	F7	F8	F9	K10
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 08/04/20	021	DETS Sample No		534847	534848	534849	534850	534851
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	31	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	49	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate - BTEX / MTB	E						
DETS Report No: 21-04100			Date Sampled	25/03/21	25/03/21		
G & J Geoenvironmental Consultants Ltd			Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemore Lane			TP / BH No	L10	L11		
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied		
Order No: None Supplied			Depth (m)	None Supplied	None Supplied		
Reporting Date: 08/04/2021		DETS Sample No		534852	534853		
Determinand	Unit	RL	Accreditation				
Benzene	ug/kg	< 2	MCERTS	< 2	< 2		
Toluene	ug/kg	< 5	MCERTS	< 5	< 5		
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2		
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2		
o-xylene	ug/kg	< 2 MCERTS		< 2	< 2		
MTBE	ug/kg	< 5	MCERTS	< 5	< 5		





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-04100	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 08/04/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
534847	E7	None Supplied	None Supplied	9.6	Black loamy sand with brick and concrete
534848	F7	None Supplied	None Supplied	10.1	Brown sandy gravel with brick and concrete
534849	F8	None Supplied	None Supplied	12.1	Brown sandy gravel with brick and concrete
534850	F9	None Supplied	None Supplied	10.5	Brown sandy gravel with stones and concrete
534851	K10	None Supplied	None Supplied	6.7	Brown sandy gravel with brick and concrete
534852	L10	None Supplied	None Supplied	10	Light brown sandy gravel with stones and concrete
534853	L11	None Supplied	None Supplied	14.4	Grey loamy sand with stones

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample $^{\rm US}$ Unsuitable Sample $^{\rm US}$





Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 21-04100	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 08/04/2021	

Sol D Boords - Weble Soluble Determination of layers valuate provide to set the 21 hot value match information of 11 kp therapitation of 12 kp therapitation of 12 kp therapitation of the value and value and value of valuate valuation by underlayed by utilized b	Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soli D Catego Description of categors in all by acage-rapid acquaint failwards by CPGSS (F) Soli D Division Mark Studie (2) Description of charles by actinction with asits <i>L</i> advanced by an charmed part of the categors in the categors with a site advanced by an charmed part of the categors in the categors and the categ	Soil		Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Sail D Charase. Water Souldae C.1.0 Determination of chickine water A souly of by informatography actification. Addition of the control is displayed intermination of prevalent in soil by extraction in water the my actification. Addition of the control is displayed intermination of prevalent in soil by extraction in water the my actification. Addition of the control is displayed intermination of chickine day control in the con	Soil	AR			E001
Soil AR Chromium - Hoxonian Determination of hexavelation through up contribution. Soil AR Controlling Soil Arrow Control Soil Control Soil Contreton arrow Contreton arrow Cont	Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil Ale Currinnian - nearware L C C C Soil AR Cognide - Free Determination of these cynalls by detaillation followed by colorimetry E0 Soil AR Cognide - Free Determination of these cynalls by detaillation followed by colorimetry E0 Soil AR Cognide - Free Determination of these cynalls by detaillation followed by colorimetry E0 Soil AR Dess flag cynalls (Enc. Conductivity) Detail conductivity by addition of sour all conductivity by addition of sour all conductivity of the conductivity by addition of sour all conductivity of the conductivity by addition of sour all conductivity of the conductivity of the conductivity by addition of sour all conductivity of the condu	Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil AR Coverise - the Determination of the cyclic billion followed by colorinely EE Soil AR Cyclicheane Extractable Matter (EAE) Gradination of tool cyclic billion followed by colorinely EC Soil AR Externation of tool cyclic billion followed by colorinely EC Soil AR Externation of teochol cyclic billion followed by colorinely EC Soil AR Externation of teochol cyclic billion followed by colorinely EC Soil AR Externation of teochol cyclic billion followed by colorinely EC Soil AR Externation of teochol cyclic billion followed by CS-MS EC Soil AR Externation of actonhybrain by sole static cyclic followed by CS-MS EC Soil AR EPH IEXE (CA-CR, CA-CR, CA	Soil	AR	Chromium - Hexavalent		E016
Soli AR Copende - Total Ditermination of that cyanide by distillation failware by colorbane FEE Soli Copedbaces Stratable Matter CAM, Gravingstration of the scale consultivity by addition of salurated calcum subplict followed by GE FID Col Soli AR Electrical Consultivity Determination of electrical conductivity by addition of salurated calcum subplict followed by GEAS Electrical Consultivity Determination of electrical conductivity by addition of salurated calcum subplict followed by GEAS Electrical Consultivity Determination of electrical conductivity by addition of salurated calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of salurated calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of salurated calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of salurated calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of salurated calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of salurated calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of salurated calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of Salurated Calcum subplict PS coles followed by GEAS Electrical Conductivity Determination of Salurated Calcum subplict PS coles followed by GEAS Soli AR EPH PROAL Electrical Conductivity Determination of FiDE Calcum Subplict PS coles followed by GEAS Electrical Calcum Subplict PS coles followed Determination of FiDE Calcum Subplict					E015
Soil D Cycloneane Extractable Natifier (CEM) Gramming through extraction with cycloneane '					E015
Soil AR Diesel Bange Draganics (C10. C24) Determination of hexanical conductivity by addition of saturation calculativity by addition of saturativity calculativity by addition of saturativity calculativity by addition of saturativity by addition of saturativity by addition of saturativity calculativity by addition of saturativity calculativity by addition of saturativity calculativity c					E015
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Soil AR EPH (CI0 – C00) Determination of action/texame extractable hydrocarbons by CC-FID EPH Soil AR EPH (EXAS (Cd-GS, CAP-CID, CID-CID) Determination of action/texame extractable hydrocarbons by CC-FID for CB to C40. C6 to C8 by C1D (C12 C10, C10, C12, C12) Determination of action/texame extractable hydrocarbons by CC-FID for CB to C40. C6 to C8 by C1D (C12 C10, C10, C12, C12) Determination of ID (CD) extramations by CC-FID for CB to C40. C6 to C8 by C1D (C12 C10, C10, C12, C12) Determination of IDC by combustion analysed by ion chromatography DE Soil D Flortfield-Water Soluble Determination of IDC by combustion analysed. DE Determination of IDC by combustion analysed. DE Soil D FOC (Fraction Organic Carbon Determination of roganic Carbon by oddising with potassium dichromate followed by CE-OES DE Soil D Loss on ignition @ 450cc De Market Soluble Determination of reaction with water biolowed by CE-OES DE Soil D Market Soluble Determination of roganic Carbon by combustion analyser. DE DE Soil D Loss on ignition @ 450cc Determination of rotacin carbon by oddising with potassium dichromate followed by CE-OES DE Soil AR Mitneral Oil (C10 - Cd) Wates Soluble De	Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Sail AR EPH TexAL Determination of exoton-Phesane extractable hydrocarbons by CC-ID EE Soil AR EPH TEXAL (C-AC, C2-C), CD-CD.2 Determination of exoton-Phesane extractable hydrocarbons by CC-ID for CB to CAD. CA to CB by C12-C16, C16-C21, C21-C4D (Determination of ICC by combustion analyse. EE Soil D Fraction Organic Carbon (CDD) Determination of ICC by combustion analyse. EE Soil D Organic Matter (SDM) Determination of ICC by combustion analyse. EE Soil D TOC (Traction Organic Carbon (CDD) Determination of ICC by combustion analyse. EE Soil D FOC (Fraction Organic Carbon (CDD) Determination of ICC by combustion analyse. EE Soil D FOC (Fraction Organic Carbon (CDD) Determination of anonitic carbon by oxidiny with potassium dichromate followed by (EP-OES) EE Soil D Loss on tipnlion eV 45000 Determination of materia by aquia-rega dipestion followed by (EP-OES) EE Soil AR Minoral OI (C10 - 040) Media Determination of materia by aquia-rega dipestion followed by (EP-OES) EE Soil AR Minoral OI (C10 - 040) Media by admination of materia by aquia-rega dipestion followed by (EP-OES) EE </td <td>Soil</td> <td>D</td> <td>Elemental Sulphur</td> <td>Determination of elemental sulphur by solvent extraction followed by GC-MS</td> <td>E020</td>	Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Sol AR EHF TEXAS (Co-CG, Car-CD, CD-CT), Determination of action-freexane extractable hydrocarbons by CC-FID for CB to C40. C6 to C8 by End Sol D Fluxtified - Water Soluble Determination of TOC by combustion analyser. EDE Sol D Fraction Craganic Camora (CCD) Determination of TOC by combustion analyser. EDE Sol D TOC Total Craganic Camora (CDD) Determination of TOC by combustion analyser. EDE Sol AR Exchangeable Ammonium Determination of TOC by combustion analyser. EDE Sol AR Exchangeable Ammonium Determination of craganic Camora Determination of Camora Determination of Camora Determination of Camora Determination of Camora	Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soli Ark C12/C16, C16-C21, C21-C00 headspace CC-MS Construction C12/C16, C16-C21, C21-C00 headspace CC-MS C12/C16 Soli D Fraction Organic Carbon (TOC) Determination of TOC by combustion analyser. C10 Soli D Organic Matter (SMD) Determination of TOC by combustion analyser. C10 Soli D TOC (Total Organic Carbon) Determination of TOC by combustion analyser. C10 Soli AR Exchangeable Ammonium Determination of annonium by distructure analyser. C10 Soli D TOC (Total Organic Carbon) Determination of anonium by distructure analyser. C10 Soli D Loss on Ignition 4P 4500. Determination or aneals by aqua-rega display interview analysed by ICP OES C10 Soli D Magnesium: Water Soluble Determination or metals by aqua-rega display for followed by ICP OES C10 Soli AR Mineral OII (C10 - C00) Determination or metals by aqua-rega display for followed by ICP OES C10 Soli AR Mineral OII (C10 - C00) Determination or the analysed by aqua-rega display followed by ICP OES C10 Soli AR Mineral OII (C10 - C00) Determination or PA 500	Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soli D Fluid is: Valid: Soluble Fluid is: Valid: Valid	Soil		EPH TEXAS (C6-C8, C8-C10, C10-C12,	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	F004
Soli D Fluctrice - Water Soluble Determination of FLO by combustion analyser. E65 Soli D Organic Matter (SOM) Determination of TOC by combustion analyser. E65 Soli D Organic Matter (SOM) Determination of TOC by combustion analyser. E65 Soli AR Exchangeable Ammonium Determination of TOC by combustion analyser. E65 Soli D FOC (Fraction Organic Carbon) Determination of Tochoon by gdiscrete analyser. E66 Soli D FOC (Fraction Organic Carbon) Determination of analyser. E66 Soli D Magnesium - Water Soluble Determination of analyser. E66 Soli D Magnesium - Water Soluble Determination of analyser. E66 Soli D Magnesium - Water Soluble Determination of analyser. E66 Soli AR Mineral Dit (Circ - 040) Determination of analyser. E66 Soli D Nitrate - Water Soluble (2-1) Determination of analyser. E66 Soli AR Phenolon: Circ Analyser. E67					E004
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Soli D FOC (Fraction Organic Cartoon) Intration with Iron (II) subpate Control Control Exc. Soli D Loss on Ignition @ 4500 Determination of loss on ignition is oil by gravimetrically with the sample being ignited in a muffle Exc. Soli D Magnesium - Water Soluble Determination of metals by aqua-regia digestion followed by ICP-OES Exc. Soli AR Mineral OII (C10 - 040) Determination of nexane/acetone extractable hydrocarbons by 6C-FID fractionating with SPE Exc. Soli AR Moisrare Content Moisture content: determination of nurate by extraction with water & analysed by ion chromatography EXC. Soli D Nitrate - Water Soluble (2:1) Determination of organic matter by oxidising with potassium dichromate followed by Ittration with exc. Exc. Soli AR PAH - Speciated (EPA 10) Determination of PAE compounds by extraction with water & analysed by ion chromatography Exc. Soli AR PAH - Speciated (EPA 10) Determination of PAE by extraction with water & analysed by ion chromatography Exc. Soli AR PErformation of PAE by extraction with water & analysed by ion chromatography Exc. Soli AR Phoenos: Total (monohyd	Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soli D Excession regimination of states Excession regimination Excession re	Soil	D		Determination of fraction of organic carbon by oxidising with potassium dichromate followed by	E010
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Soil AR Mineral Oil (C10 - C40) Determination of hoxane/acetone extractable hydrocarbons by GC-FID fractionating with SPE extraction with water & analysed by ion chromatography Edit Soil AR Moisture Content Moisture content: determined gravimetrically Edit Soil D Nitrate - Water Soluble (2: 1) Determination of organic matter by oxidising with potassium dichromate followed by titration with informate followed by GC-MS with the gravimetrically Edit Soil AR PAH - Speciated (EPA 16) Determination of PAB vartaction with acetone and hexane followed by GC-MS with the gravimetrically determined informate followed by eGC-MS Edit Soil AR PAH - Speciated (EPA 16) Determination of PAB vartaction with acetone and hexane followed by GC-MS Edit Soil AR PAB - Total (monohydric) Determination of they addition of water followed by electrometric measurement EDit Soil AR Phosphate (as SO4) - Total Determination of total subphate by extraction with water & analysed by ion chromatography EDit Soil D Subphate (as SO4) - Total Determination of total subphate by extraction with water & analysed by ion chromatography EDit Soil D Sulphate (as SO4) - Water Soluble (2					E002
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SoilARpH Determination of pH by addition of water followed by electrometric measurementEECSoilARPhenols - Total (monohydric)Determination of phosphate by extraction with water <i>x</i> analysed by ion chromatographyEECSoilDSulphate (as SO4) - Total Determination of fold sulphate by extraction with water <i>x</i> analysed by ion chromatographyEECSoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water <i>x</i> analysed by ion chromatographyEECSoilDSulphate (as SO4) - Water Soluble (2:1)Determination of water soluble sulphate by extraction with water <i>x</i> analysed by ion chromatographyEECSoilDSulphate (as SO4) - Water Soluble (2:1)Determination of water soluble sulphate by extraction with water <i>x</i> analysed by ion chromatographyEECSoilARSulphate (as SO4) - Water Soluble (2:1)Determination of water soluble sulphate by extraction with water <i>x</i> analysed by ion chromatographyEECSoilARSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water <i>x</i> analysed by ion chromatographyEECSoilARSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water <i>x</i> analysed by ion chromatographyEECSoilARSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with aqua-regia followed by ICP-OESEECSoilARThiocyanate (as SCN)Determination of thoicyanate by extraction in acustic soda followed by acidification followed by GC-MSECSoilDTota					E000
SoilARPhenols - Total (monohydric)Determination of phenols by distillation followed by colorimetryECSoilDPhosphate - Water Soluble (2:1)Determination of potaphate by extraction with Water & analysed by ion chromatographyECSoilDSulphate (as SO4) - Total Determination of total sulphate by extraction with Water & analysed by ion chromatographyECSoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with Water & analysed by ion chromatographyECSoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyECSoilARSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyECSoilARSulphate (as SO4) - Total Determination of sulphate by extraction with water & analysed by ion chromatographyECSoilARSulphate (as SO4) - Total Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by CP-OESECSoilARThiocyanate (as SCN)Determination of thiocyanate by extraction in caustic soda followed by acidification followed by CGECSoilDTotal Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration with ron (11) sulphateECSoilDTotal Organic Carbon (TOC)Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPEECSoilARTPH CWG (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C1					E007
SoilDPhosphate - Water Soluble (2:1)Determination of phosphate by extraction with water & analysed by ion chromatographyECSoilDSulphate (as SO4) - TotalDetermination of sulphate by extraction with 10% HCI followed by ICP-OESECSoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyECSoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyECSoilARSulphur - TotalDetermination of sulphate by extraction with water followed by ICP-OESECSoilARSulphur - TotalDetermination of total sulphur by extraction with aga-regia followed by ICP-OESECSoilARSulphur - TotalDetermination of semi-volatile organic compounds by extraction in acetone and hexane followed by cC-MSECSoilARThiocyanate (as SCN)Determination of foric nitrate followed by colorimetryECSoilDToluene Extractable Matter (TEM)Gravimetrically determined through extraction with tolueneECSoilDTotal Organic Carbon (TOC)Determination of nexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, c12-C16, C16-C21, C21-C35, C35-C44,					E021
SoilDSulphate (as SO4) - TotalDetermination of total sulphate by extraction with valer & analysed by ICP-OESECCSoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ICP-OESECCSoilARSulphate (as SO4) - Water Soluble (2:1)Determination of water soluble sulphate by extraction with water followed by ICP-OESECCSoilARSulphate (as SO4) - Water Soluble (2:1)Determination of sulphide by distillation followed by extraction with aqua-regia followed by ICP-OESECCSoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphur by extraction with aqua-regia followed by ICP-OESECCSoilARSulphur - TotalDetermination of sulphur by extraction in acetone and hexane followed by C-MSECCSoilARThiocyanate (as SCN)Determination of total sulphur by extraction in acutic soda followed by acidification followed by addition of ferric nitrate followed by colorimetryECCSoilDToluene Extractable Matter (TEM)Gravimetrically determined through extraction with tolueneECCSoilDTotal Organic Carbon (TOC)Determination of neganic matter by oxidising with potassium dichromate followed by titration with ron (11) sulphateECCSoilARTPH CWG (ali: C5- C6, C6- C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, C12-C16, C16-C21, C21-C34, C12-C16, C16-C21, C21-C34, C12-C16, C16-C21, C21-C34, C12-C16, C16-C21, C21-C34, C12-C16, C16-C21, C21-C35, C35-C44,Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE arric C5					E009
SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographyECSoilDSulphate (as SO4) - Water Soluble (2:1)Determination of water soluble sulphate by extraction with water followed by ICP-OESECSoilARSulphur - TotalDetermination of sulphur by extraction with aqua-reqia followed by ICP-OESECSoilARSulphur - TotalDetermination of total sulphur by extraction with aqua-reqia followed by ICP-OESECSoilARSvocDetermination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MSECSoilARThiocyanate (as SCN)Determination of foric nitrate followed by colorimetryECSoilDToluene Extractable Matter (TEM)Gravimetrically determined through extraction with tolueneECSoilDTotal Organic Carbon (TCC)Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (11) sulphateECSoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C12-C16, C16-C21, C21-C35, C12-C16, C16-C21, C21-C35, C12-C16, C16-C21, C21-C35, C12-C16, C16-C21, C21-C35, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, C12-C16, C16-C21, C2			Sulphate (as SOA) Total	Determination of phosphate by extraction with water & dildivised by ICD OES	E009 E013
SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of water soluble sulphate by extraction with water followed by ICP-OESECSoilARSulphideDetermination of sulphide by distillation followed by colorimetryECSoilDSulphur - TotalDetermination of total sulphur by extraction with aqua-regia followed by ICP-OESECSoilARSvocDetermination of total sulphur by extraction with aqua-regia followed by ICP-OESECSoilARSvocDetermination of total sulphur by extraction in acetone and hexane followed by GC-MSECSoilARThiocyanate (as SCN) Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetryECSoilDToluene Extractable Matter (TEM) 					E013 E009
SoilARSulphideDetermination of sulphide by distillation followed by colorimetryECSoilDSulphur - TotalDetermination of total sulphur by extraction with aqua-regia followed by ICP-OESECSoilARSVOCDetermination of seni-volatile organic compounds by extraction in acetone and hexane followed by addition of ferric nitrate followed by colorimetryECSoilARThiocyanate (as SCN)Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetryECSoilDToluene Extractable Matter (TEM)Gravimetrically determined through extraction with tolueneECSoilDTotal Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphateECSoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, 					E009 E014
SoilDSulphur - TotalDetermination of total sulphur by extraction with aqua-regia followed by ICP-OESECSoilARSVOCDetermination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MSDetermination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MSECSoilARThiocyanate (as SCN)Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetryECSoilDToluene Extractable Matter (TEM)Gravimetrically determined through extraction with tolueneECSoilDTotal Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration with 					E014
SoilARSVOCDetermination of semi-volatile organic compounds by extraction in acetone and hexane followed by gC-MSECSoilARThiocyanate (as SCN)Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry addition of ferric nitrate followed by colorimetryECSoilDToluene Extractable Matter (TEM) Fravimetrically determined through extraction with tolueneECSoilDTotal Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphateECSoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, C12-C16, C16-C21, C21-C35,Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MSECSoilARTPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, cartridge for C8 to C44. C5 to C8 by headspace GC-MSECSoilARTPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C1					E024
SoilARThiocyanate (as SCN)Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetryECSoilDToluene Extractable Matter (TEM)Gravimetrically determined through extraction with tolueneECSoilDTotal Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration withECSoilDTotal Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration withECSoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MSECSoilARTPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44,Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MSECSoilARVOCsDetermination of volatile organic compounds by headspace GC-MSEC				Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by	E006
Soil D Toluene Extractable Matter (TEM) Gravimetrically determined through extraction with toluene EC Soil D Total Organic Carbon (TOC) Determination of organic matter by oxidising with potassium dichromate followed by titration with in (II) sulphate EC Soil D Total Organic Carbon (TOC) Determination of organic matter by oxidising with potassium dichromate followed by titration with in (II) sulphate EC Soil AR TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35) EC Soil AR TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of volatile organic compounds by headspace GC-MS EC Soil AR VOCs Determination of volatile organic compounds by headspace GC-MS EC	Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by	E017
SoilDTotal Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphateECSoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MSECSoilARTPH LOM (ali: C5-C6, C6-C8, C8-C10, C12-C16, C16-C21, C21-C35)Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MSECSoilARTPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44,Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MSECSoilARVOCsDetermination of volatile organic compounds by headspace GC-MSEC			, , ,		
SoilDTotal Organic Carbon (TOC) iron (II) sulphateiron (II) sulphateECSoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE c12-C16, C16-C21, C21-C35,ECSoilARTPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35,Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MSECSoilARTPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C23, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MSECSoilARVOCs Determination of volatile organic compounds by headspace GC-MSEC	2011	IJ	I OIUENE EXTRACTABLE MATTER (TEM)		E011
SoilARC10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MSECSoilARTPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, cartridge for C8 to C44. C5 to C8 by headspace GC-MSECSoilARVOCsDetermination of volatile organic compounds by headspace GC-MSEC	Soil	D	Total Organic Carbon (TOC)		E010
Soil AR C10-C12, C12-C16, C16-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, cartridge for C8 to C44. C5 to C8 by headspace GC-MS EC Soil AR VOCs Determination of volatile organic compounds by headspace GC-MS EC	Soil	AR	C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12,	cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
			C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil AR VPH (C6-C8 & C8-C10) Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID FC					E001
	Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

AR As Received



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-04116

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	30/03/2021
Sample Scheduled Date:	30/03/2021
Report Issue Number:	1
Reporting Date:	08/04/2021

Authorised by:

Dave Ashworth

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

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Soil Analysis Certificate

DETS Ltd Unit 1, Rose Lane Industrial Estate Rose Lane Lenham Heath Maidstone Kent ME17 2JN Tel : 01622 850410



Son Analysis certificate								
DETS Report No: 21-04116			Date Sampled	26/03/21	26/03/21	26/03/21	26/03/21	
G & J Geoenvironmental Consultants	Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemore Lane			TP / BH No	K3	K4	L3	L4	
Project / Job Ref: GJ049		/	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied		None Supplied	None Supplied	
Reporting Date: 08/04/2021		D	ETS Sample No	534932	534933	534934	534935	
Determinand	Unit	RL	Accreditation					
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected	Not Detected	
Hq	pH Units	N/a	MCERTS	7.4	6.9	7.9	6.9	
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	
Total Sulphate as SO₄	mg/kg	< 200	MCERTS	277	700	1281	279	
Total Sulphate as SO₄	%	< 0.02	MCERTS	0.03	0.07	0.13	0.03	
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	
Organic Matter	%	< 0.1	MCERTS	0.6	1.6	1.3	0.4	
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	0.3	0.9	0.7	0.2	
Arsenic (As)	mg/kg	< 2	MCERTS	8	15	74	7	
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	
Cadmium (Cd)	mg/kg	< 0.2	NONE	0.5	0.8	2.5	< 0.2	
Chromium (Cr)	mg/kg	< 2	MCERTS	10	19	26	8	
Copper (Cu)	mg/kg	< 4	MCERTS	107	378	550	168	
Lead (Pb)	mg/kg	< 3	MCERTS	25	66	185	33	
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	
Nickel (Ni)	mg/kg	< 3	MCERTS	11	17	40	7	
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	
Zinc (Zn)	mg/kg	< 3	MCERTS	142	370	615	109	
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	
EPH (C10 - C40)	mg/kg	< 6	MCERTS	1740	25	30	59	

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion Subcontracted analysis (S)





Soil Analysis Certificate	- Speciated PAHs							
DETS Report No: 21-0411	16		Date Sampled	26/03/21	26/03/21	26/03/21	26/03/21	
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	К3	К4	L3	L4	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 08/04/2	021	D	TS Sample No	534932	534933	534934	534935	
Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	1.24	< 0.1	< 0.1	< 0.1	
Acenaphthylene	mg/kg	< 0.1	MCERTS	0.13	< 0.1	< 0.1	< 0.1	
Acenaphthene	mg/kg	< 0.1	MCERTS	3.55	< 0.1	< 0.1	< 0.1	
Fluorene	mg/kg	< 0.1	MCERTS	3.13	< 0.1	< 0.1	< 0.1	
Phenanthrene	mg/kg	< 0.1	MCERTS	51.40	< 0.1	0.26	0.52	
Anthracene	mg/kg	< 0.1	MCERTS	13.30	< 0.1	< 0.1	0.24	
Fluoranthene	mg/kg	< 0.1	MCERTS	51.40	0.22	0.58	2.63	
Pyrene	mg/kg	< 0.1	MCERTS	42.40	0.21	0.52	2.28	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	15.80	0.12	0.21	0.93	
Chrysene	mg/kg	< 0.1	MCERTS	13.90	0.16	0.22	0.83	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	13.20	0.38	0.47	1.12	
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	6.18	0.18	0.20	0.34	
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	10.70	0.28	0.42	0.83	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	5.96	0.21	0.34	0.47	
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	1.08	< 0.1	< 0.1	< 0.1	
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	4.56	0.19	0.36	0.38	
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	238	2	3.6	10.6	





Soil Analysis Certificate	- TPH CWG Bande	d						
DETS Report No: 21-041			Date Sampled	26/03/21	26/03/21	26/03/21	26/03/21	
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	K3	K4	L3	L4	
Destate (Jak Def. C 1040		,						
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 08/04/2	2021	D	TS Sample No	534932	534933	534934	534935	
Determinand			Accreditation					
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Aliphatic >C6 - C8		< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	18	< 3	< 3	< 3	
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	128	< 3	< 3	< 3	
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	146	< 10	< 10	< 10	
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	292	< 21	< 21	< 21	
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	37	< 2	< 2	< 2	
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	361	< 3	< 3	11	
Aromatic >C21 - C35	Aromatic >C21 - C35 mg/kg		MCERTS	433	< 10	< 10	15	
Aromatic (C5 - C35)	mg/kg	< 21	NONE	831	< 21	< 21	26	
Total >C5 - C35	mg/kg	< 42	NONE	1123	< 42	< 42	< 42	





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-04116			Date Sampled	26/03/21	26/03/21	26/03/21	26/03/21	
G & J Geoenvironmental C	onsultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	re Lane	TP / BH No		K3	К4	L3	L4	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 08/04/20	021	DETS Sample No		534932	534933	534934	534935	
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	





Soil Analysis Certificate		Compo				
DETS Report No: 21-04116		Date Sampled		26/03/21		
G & J Geoenvironmental Consultants Ltd		Time Sampled		None Supplied		
Site Reference: Middlemo	ore Lane		TP / BH No	K4		
Project / Job Ref: GJ049		Additional Refs		None Supplied		
Order No: None Supplied			Depth (m)	None Supplied		
Reporting Date: 08/04/2	2021	DE	TS Sample No	534933		
Determinand	Unit	RL	Accreditation			
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5		
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5		
Chloromethane	ug/kg	< 10	MCERTS MCERTS	< 10		
Chloroethane Bromomethane	ug/kg ug/kg	< 5 < 10	MCERTS	< 5 < 10		
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5		
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5		
MTBE	ug/kg	< 5	MCERTS	< 5		
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5		
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5		
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5		
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5		
Chloroform	ug/kg	< 5	MCERTS	< 5		
Bromochloromethane 1,1,1-Trichloroethane	ug/kg	< 5 < 5	MCERTS MCERTS	< 5		
1,1-Dichloropropene	ug/kg ug/kg	< 10	MCERTS	< 5 < 10		
Carbon Tetrachloride	ug/kg ug/kg	< 5	MCERTS	< 5		
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5		
Benzene	ug/kg	< 2	MCERTS	< 2		
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5		
Trichloroethene	ug/kg	< 5	MCERTS	< 5		
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5		
Dibromomethane	ug/kg	< 5	MCERTS	< 5		
TAME	ug/kg	< 5	MCERTS	< 5		
cis-1,3-Dichloropropene Toluene	ug/kg	< 5	MCERTS MCERTS	< 5		
trans-1,3-Dichloropropene	ug/kg ug/ka	< 5 < 5	MCERTS	< 5		
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10		
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5		
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5		
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5		
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5		
Chlorobenzene	ug/kg	< 5	MCERTS	< 5		
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5		
Ethyl Benzene	ug/kg ug/ka	< 2	MCERTS MCERTS	< 2		
m,p-Xylene o-Xylene	ug/kg ug/kg	< 2	MCERTS	< 2		
Styrene	ug/kg ug/kg	< 2	MCERTS	< 5		
Bromoform	ug/kg	< 10	MCERTS	< 10		
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5		
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5		
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5		ļ
n-Propylbenzene	ug/kg	< 5	MCERTS	< 5		┨────┤
Bromobenzene	ug/kg	< 5	MCERTS	< 5		
2-Chlorotoluene 1,3,5-Trimethylbenzene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5		╂────┤
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5		
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5		1
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5		
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5		
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5		
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5		
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5		
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5		
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5		
,2-Dibromo-3-chloropropane Hexachlorobutadiene	ug/kg ug/kg	< 10 < 5	MCERTS MCERTS	< 10		╂────┤
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Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-04116	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 08/04/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
534932	K3	None Supplied	None Supplied	8.6	Brown sandy clay with stones and concrete
534933	K4	None Supplied	None Supplied	10.5	Brown loamy sand with stones and concrete
534934	L3	None Supplied	None Supplied	9	Brown sandy gravel with stones and brick
534935	L4	None Supplied	None Supplied	7.9	Brown sandy gravel with stones and brick

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample ^{I/S} Unsuitable Sample ^{I/S}





Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 21-04116	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 08/04/2021	

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR		Determination of BTEX by headspace GC-MS	E001
Soil	D		Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E001
Soil	D		Determination of cations in soil by aqua-regia digestion followed by fcP-0ES Determination of chloride by extraction with water & analysed by ion chromatography	E002
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of	E016
			1,5 diphenylcarbazide followed by colorimetry	
Soil	AR		Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D		Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
			Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	
Soil	AR	C12-C16, C16-C21, C21-C40)		E004
Soil	D		Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of TOC by combustion analyser.	E009
Soil	D		Determination of TOC by combustion analyser.	E027 E027
			Determination of TOC by combustion analyser.	
Soil	D		Determination of 100 by combustion analyser. Determination of ammonium by discrete analyser.	E027
Soil	AR	Exchangeable Ammonium		E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D		Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (11) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Condeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D		Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR		Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR		Determination of phenols by distillation followed by colorimetry	E021
Soil	D		Determination of phosphate by extraction with water & analysed by ion chromatography	E021
Soil	D		Determination of phosphate by extraction with water & analysed by for chloratography Determination of total sulphate by extraction with 10% HCI followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of water soluble sulphate by extraction with water & analysed by for chroniatography Determination of water soluble sulphate by extraction with water followed by ICP-OES	E009 E014
Soil	AR		Determination of sulphide by distillation followed by colorimetry	E014 E018
Soil	D		Determination of sulphide by distillation followed by colorimetry Determination of total sulphur by extraction with agua-regia followed by ICP-OES	E018 E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by	E024
Soil	AR	Thiocyanate (as SCN)	GC-MS Determination of thiocyanate by extraction in caustic soda followed by acidification followed by	E017
			addition of ferric nitrate followed by colorimetry	
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR		Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR		Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR		Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001
	Dried			

D Dried AR As Received



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY

DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-04203

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	31/03/2021
Sample Scheduled Date:	31/03/2021
Report Issue Number:	1
Reporting Date:	09/04/2021

Authorised by:

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. 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 except in full, without the prior written approval of the laboratory.





Soil Analysis Certificate						
DETS Report No: 21-04203	Date Sampled	30/03/21	30/03/21	30/03/21	30/03/21	30/03/21
G & J Geoenvironmental Consultants Ltd	Time Sampled	None Supplied				
Site Reference: Middlemore Lane	TP / BH No	K7	K8	L7	L8	N14
Project / Job Ref: GJ049	Additional Refs	None Supplied				
Order No: None Supplied	Depth (m)	None Supplied				
Reporting Date: 09/04/2021	DETS Sample No	535194	535195	535196	535197	535198

Determinand	Unit	RL	Accreditation					
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected				
Sample Matrix ^(S)	Material Type	N/a	NONE					
Asbestos Type ^(S)	PLM Result	N/a	ISO17025					
рН	pH Units	N/a	MCERTS	6.2	5.2	4.9	7.7	8.4
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	725	3939	4435	12260	2528
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.07	0.39	0.44	1.23	0.25
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter	%	< 0.1	MCERTS	3.2	5.6	6	4.3	2.8
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	1.8	3.2	3.5	2.5	1.6
Arsenic (As)	mg/kg	< 2	MCERTS	4	14	10	18	12
W/S Boron	mg/kg	< 1	NONE	< 1	1.2	1.7	< 1	1.2
Cadmium (Cd)	mg/kg	< 0.2	NONE	< 0.2	0.3	0.5	1.4	1.1
Chromium (Cr)	mg/kg	< 2	MCERTS	14	16	13	19	37
Copper (Cu)	mg/kg	< 4	MCERTS	10	76	73	7350	5480
Lead (Pb)	mg/kg	< 3	MCERTS	7	49	43	476	335
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	9	37	27	47	35
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	MCERTS	19	170	234	4720	4440
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
EPH (C10 - C40)	mg/kg	< 6	MCERTS	< 6	78	134	155	472

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion Subcontracted analysis (S)





Soli Analysis Certificate					
DETS Report No: 21-04203	Date Sampled	30/03/21	30/03/21		
G & J Geoenvironmental Consultants Ltd	Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemore Lane	TP / BH No	N15	N16		
Project / Job Ref: GJ049	Additional Refs	None Supplied	None Supplied		
Order No: None Supplied	Depth (m)	None Supplied	None Supplied		
Reporting Date: 09/04/2021	DETS Sample No	535199	535200		

Determinand	Unit	RL	Accreditation				
Asbestos Screen ^(S)	N/a	N/a		Detected	Not Detected		
				Chrysotile			
Sample Matrix ^(S)	Material Type	N/a	NONE	present as fibre			
				bundles			
Asbestos Type ^(S)	PLM Result	N/a	ISO17025	Chrysotile			
рН	pH Units	N/a	MCERTS	8.0	7.6		
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2		
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	2919	223		
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.29	0.02		
Sulphide	mg/kg	< 5	NONE	< 5	< 5		
Organic Matter	%	< 0.1	MCERTS	5.4	4		
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	3.1	2.3		
Arsenic (As)	mg/kg	< 2	MCERTS	14	4		
W/S Boron	mg/kg	< 1	NONE	1.4	< 1		
Cadmium (Cd)	mg/kg	< 0.2	NONE	5.6	< 0.2		
Chromium (Cr)	mg/kg	< 2	MCERTS	41	11		
Copper (Cu)	mg/kg	< 4	MCERTS	10600	173		
Lead (Pb)	mg/kg	< 3	MCERTS	750	23		
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1		
Nickel (Ni)	mg/kg	< 3	MCERTS	52	5		
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3		
Zinc (Zn)	mg/kg	< 3	MCERTS	14600	260		
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2		
EPH (C10 - C40)	mg/kg	< 6	MCERTS	1550	< 6		

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion Subcontracted analysis (S)





Soil Analysis Certificate	- Speciated PAHs							
DETS Report No: 21-0420	03		Date Sampled	30/03/21	30/03/21	30/03/21	30/03/21	30/03/21
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	К7	K8	L7	L8	N14
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 09/04/2	021	DI	ETS Sample No	535194	535195	535196	535197	535198
Determinand		RL						
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	0.14	0.26	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.11
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.14
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	0.54	0.71	0.22	1.22
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.37
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	0.21	0.22	0.11	5.04
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	0.19	0.23	< 0.1	5.09
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	3.31
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	2.79
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	0.14	< 0.1	< 0.1	4.88
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	1.50
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	4.05
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	1.96
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.48
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	1.86
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	32.8





Soil Analysis Certificate	- Speciated PAHs					
DETS Report No: 21-0420	3		Date Sampled	30/03/21	30/03/21	
G & J Geoenvironmental C	onsultants Ltd		Time Sampled	None Supplied	None Supplied	
Site Reference: Middlemo	re Lane		TP / BH No	N15	N16	
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	
Reporting Date: 09/04/20)21	D	ETS Sample No	535199	535200	
Determinand	Unit		Accreditation			
Naphthalene	mg/kg	< 0.1	MCERTS	0.14	< 0.1	
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	
Acenaphthene	mg/kg	< 0.1	MCERTS	0.40	< 0.1	
Fluorene	mg/kg	< 0.1	MCERTS	0.37	< 0.1	
Phenanthrene	mg/kg	< 0.1	MCERTS	5.37	< 0.1	
Anthracene	mg/kg	< 0.1	MCERTS	1.45	< 0.1	
Fluoranthene	mg/kg	< 0.1	MCERTS	17.10	< 0.1	
Pyrene	mg/kg	< 0.1	MCERTS	16.30	< 0.1	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	8.53	< 0.1	
Chrysene	mg/kg	< 0.1	MCERTS	7.44	< 0.1	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	9.33	< 0.1	
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	4.31	< 0.1	
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	7.45	< 0.1	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	3.69	< 0.1	
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	0.85	< 0.1	
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	3.07	< 0.1	
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	85.8	< 1.6	





Soil Analysis Certificate	- TPH CWG Bande	d						
DETS Report No: 21-042	03		Date Sampled	30/03/21	30/03/21	30/03/21	30/03/21	30/03/21
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Middlemo	ore Lane		TP / BH No	K7	K8	L7	L8	N14
Project / Job Ref: GJ049			Additional Refs					
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 09/04/2	0.01	DI	ETS Sample No	None Supplied 535194	None Supplied 535195	None Supplied 535196		None Supplied 535198
Reporting Date: 0970472	.021	DI	_13 Sample NO	030194	030140	000140	020147	000140
Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	11
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	11	26
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 10	< 10	35	137
Aliphatic (C5 - C34)	mg/kg		NONE	< 21	< 21	< 21	46	174
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8	mg/kg		NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg		MCERTS	< 2	< 2	3	< 2	< 2
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	8	15	< 2	7
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	13	20	< 3	37
Aromatic >C21 - C35		< 10	MCERTS	< 10	< 10	< 10	< 10	151
Aromatic (C5 - C35)	mg/kg		NONE	< 21	< 21	38	< 21	196
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42	< 42	46	369





Soil Analysis Certificate - T	PH CWG Bande	b					
DETS Report No: 21-04203			Date Sampled	30/03/21	30/03/21		
G & J Geoenvironmental Con	sultants Ltd		Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemore	Lane		TP / BH No	N15	N16		
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied		
Order No: None Supplied			Depth (m)	None Supplied	None Supplied		
Reporting Date: 09/04/2021		DE	TS Sample No	535199	535200		
Determinand	Unit		Accreditation				
Aliphatic >C5 - C6	mg/kg		NONE	< 0.01	< 0.01		
Aliphatic >C6 - C8	0 0	< 0.05	NONE	< 0.05	< 0.05		
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2		
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	5	< 2		
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	40	< 3		
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	120	< 3		
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	566	< 10		
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	731	< 21		
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01		
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05		
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2		
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2		
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	12	< 2		
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	98	< 3		
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	309	< 10		
Aromatic (C5 - C35)	mg/kg	< 21	NONE	419	< 21		
Total >C5 - C35	mg/kg	< 42	NONE	1150	< 42		





Soil Analysis Certificate -	BTEX / MTBE							
DETS Report No: 21-04203		Date Sampled		30/03/21	30/03/21	30/03/21	30/03/21	30/03/21
G & J Geoenvironmental Cor	nsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemore	Lane		TP / BH No	К7	К8	L7	L8	N14
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 09/04/202	1	D	ETS Sample No	535194	535195	535196	535197	535198
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	
p & m-xylene	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate - BTEX / MTE	3E						
DETS Report No: 21-04203			Date Sampled	30/03/21	30/03/21		
G & J Geoenvironmental Consultants Ltd	k		Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemore Lane			TP / BH No	N15	N16		
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied		
Order No: None Supplied			Depth (m)	None Supplied	None Supplied		
Reporting Date: 09/04/2021		DETS Sample No		535199	535200		
Determinand	Unit	RL	Accreditation				
Benzene	ug/kg	< 2	MCERTS	7	< 2		
Toluene	ug/kg	< 5	MCERTS	10	< 5		
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2		
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2		
o-xylene ug/kg		< 2	MCERTS	< 2	< 2		
MTBE	ug/kg	< 5	MCERTS	< 5	< 5		





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-04203	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 09/04/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
535194	K7	None Supplied	None Supplied	7.4	Light brown sandy gravel with stones
535195	K8	None Supplied	None Supplied	11.5	Black loamy sand with stones
535196	L7	None Supplied	None Supplied	12.1	Black loamy sand with stones
535197	L8	None Supplied	None Supplied	12.4	Brown sandy gravel with stones and concrete
535198	N14	None Supplied	None Supplied	12.8	Brown sandy clay with stones
535199	N15	None Supplied	None Supplied	9.8	Brown sandy clay with stones
535200	N16	None Supplied	None Supplied	1.8	Light grey sandy clay

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample $^{\rm US}$ Unsuitable Sample $^{\rm US}$





Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 21-04203	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 09/04/2021	

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR		Determination of BTEX by headspace GC-MS	E001
Soil	D		Determination of cations in soil by agua-regia digestion followed by ICP-OES	E002
Soil	D		Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headsnace GC-MS	E004
Soil	D		Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	AR		Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D		Determination of metals by agua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D		Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR		Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCI followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR		Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with agua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (11) sulphate	E010
Soil	AR		Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR		Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001
D	Dried			

AR As Received

Middlemore Lane, Aldridge Verification Report



C2 - Hotspot Validation Samples

Appendices

						Hotsp	pot 1							Hotspot 2				Hots	pot 3	
DETS Report No: 21-01136	Date Sampled	01/03/21	01/03/21	01/03/21	01/03/21	01/03/21	01/03/21	01/03/21	01/03/21	01/03/21	01/03/21	22/03/21	22/03/21	22/03/21	22/03/21	22/03/21	25/03/21	25/03/21	25/03/21	25/03/21
G & J Geoenvironmental Consultants Ltd	Time Sampled	None Supplied																		
Site Reference: Middlemore Lane	TP / BH No	HS1 Base 1	HS1 Base 2	HS1 NF1	HS1 NF2	HS1 SF1	HS1 SF2	HS1 EF1	HS1 EF2	HS1 WF1	HS1 WF2	HS2 - 1	HS2 - 2	HS2 - 3	HS2 - 4	HS2 - 5	HS3-1	HS3-2	HS3-3	HS3-4
Project / Job Ref: GJ049	Additional Refs	None Supplied																		
Order No: None Supplied	Depth (m)	4.00	3.90	2.60	2.80	2.60	3.20	2.00	2.00	1.80	2.20	0.10 - 1.00	0.50 - 1.50	0.10 - 1.00	1.00 - 1.50	0.10 - 1.00	0.40 - 1.00	0.10 - 1.10	1.00 - 1.70	0.10 - 1.00
Reporting Date: 05/02/2021	DETS Sample No	529071	529072	529073	529074	529075	529076	529077	529078	529079	529080	533865	533866	533867	533868	533869	534854	534855	534856	534857

Determinand		Unit	RI	Accreditation																			
Aliphatic >C5 - C6	n	ng/kg <	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8		mg/kg ⊲		NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	1.78	14	0.06	< 0.05	5.64	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10		mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12		mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16		mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21		ng/kg		MCERTS	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	3	< 3	< 3	< 3	< 3	< 3	7	< 3
Aliphatic >C21 - C34		ng/kg		MCERTS	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	22	< 10	< 10	< 10	< 10	88	56	44
Aliphatic (C5 - C34)		ng/kg <		NONE NONE	< 21 < 0.01	< 21	< 21	< 21	< 21	< 21 < 0.01	< 21 < 0.01	< 21	< 21 < 0.01	< 0.01	< 0.01	39	< 21 < 0.01	< 21 < 0.01	< 0.01	< 21 < 0.01	88	63	44
Aromatic >C5 - C7 Aromatic >C7 - C8		ng/kg <		NONE	< 0.01	< 0.05	< 0.01	< 0.05	< 0.01 < 0.05	< 0.05	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01
Aromatic >C8 - C10		ng/kg	< 0.03	MCERTS	< 0.05	< 0.05	< 0.03	< 0.03	< 0.03	< 0.05	< 0.03	< 0.03	< 0.05	< 0.05	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.05	< 0.05	< 0.05	< 0.03
Aromatic >C10 - C12		ng/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16		ng/kg na/ka	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21		ng/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	10	5	< 3
Aromatic >C21 - C35		ng/kg		MCERTS	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	94	23	< 10
Aromatic (C5 - C35)	n	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	104	28	< 21
Total >C5 - C35	n	mq/kq	< 42	NONE	< 42	< 42	< 42	< 42	< 42	< 42	< 42	< 42	< 42	< 42	< 42	< 42	< 42	< 42	< 42	< 42	192	91	44
Benzene		ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Toluene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Ethylbenzene		ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	5
p & m-xylene		ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	14
o-xylene		ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
MTBE		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Dichlorodifluoromethane		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Vinyl Chloride		ug/kg	< 0	MCERTS MCERTS	< 10	< 5	< 5	< 0	< 5	< 5	< 0	< 5	< 5	< 5	< 5	< 5	< 10	< 0	< 5	< 5	< 0	< 0	< 5
Chloromethane Chloroethane		ug/kg ug/kg	< 10	MCERTS	< 10 - 5	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10 - F	< 10	< 10
Bromomethane		ug/kg ug/kg	< 0 < 10	MCERTS	< 5	< 5	< 5	< 10	< 5	< 5 < 10	< 5	< 5	< 5 < 10	< 5	< 5	< 5	< 5	< 0	< 5	< 5	< 0	< 0	< 5
Trichlorofluoromethane		ug/kg	< 5	MCERTS	< 5	< 10	< 10	< 5	< 5	< 10	< 5	< 10	< 10	< 5	< 10	< 10	< 5	< 5	< 10	< 10 - 5	< 5	< 5	< 5
1,1-Dichloroethene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	~ 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
MTBE		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,2-Dichloroethene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethane	Į	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	146	< 5	< 5	75	< 5	< 5	< 5	< 5
2,2-Dichloropropane		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chloroform		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,1,1-Trichloroethane	1	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,1-Dichloropropene		ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Carbon Tetrachloride		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane Benzene		ug/kg ug/kg	< 5	MCERTS MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dichloropropane		ug/kg	< 5	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Trichloroethene		ug/kg	0	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	1780	13850	63	< 5	5567	< 5	11	< 5	6
Bromodichloromethane		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Dibromomethane		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
TAME		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	1	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Toluene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,1,2-Trichloroethane		ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,3-Dichloropropane		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	13
Dibromochloromethane		ug/kg	< 5	MCERTS MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane		ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorobenzene 1,1,1,2-Tetrachloroethane		ug/kg	< 0	MCERTS	< 0	< 0	< 0	< 0	< 0	< 0	< 0	< 0	< 0	< 0	< 0	< 0	< 0	< 0	< 0	209	< 0	< 0	< 0
Ethyl Benzene		ug/kg	< 3	MCERTS	< 2	< 0	< 3	< 3	< 3	< 2	< 3	< 0	< 3	< 3	< 0	< 0	< 2	< 0	< 0	< 0	< 2	< 0	< 0
m,p-Xylene		ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	14
o-Xylene		ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Styrene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform		ug/kg		MCERTS	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isopropylbenzene				MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,1,2,2-Tetrachloroethane		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2,3-Trichloropropane		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
n-Propylbenzene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromobenzene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
2-Chlorotoluene 1,3,5-Trimethylbenzene		ug/kg	< 5	MCERTS MCERTS	< 5 . r	< 5	< 5	< 5 . r	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5 . r	< 5	< 5	< 5 . r	< 5 . r	< 5
1,3,5-Trimethylbenzene 4-Chlorotoluene		ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
4-Chiorotoluene tert-Butylbenzene		ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 0	< 5	< 5
1,2,4-Trimethylbenzene		ug/kg	< 5	MCERTS	< 5	< 5 < 5	< 5	< 5	< 5	< 5 < 5	< 5	< 5 < 5	< 5	< 5	< 5	~ 5	< 5	< 5	< 5	~ 5	~ 5	< 5	< 5
sec-Butylbenzene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
p-Isopropyltoluene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,3-Dichlorobenzene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	136.0	< 5	< 5	< 5
n-Butylbenzene	,	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	I	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	147	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane		ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene		ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
PCB Congener 28		mg/kg<		NONE											< 0.008		< 0.008		< 0.008				
PCB Congener 52		mg/kg <		NONE	 			I							< 0.008		< 0.008		< 0.008		I		
PCB Congener 101		mg/kg <		NONE											< 0.008		< 0.008		< 0.008	-	└─── │		
PCB Congener 118		ng/kg <		NONE	 										< 0.008		< 0.008		< 0.008				
PCB Congener 138 PCB Congener 152		ng/kg<		NONE NONE	 										< 0.008		< 0.008		< 0.008				
PCB Congener 153 PCB Congener 180		ng/kg < ng/kg <		NONE											< 0.008		< 0.008		< 0.008				
Total PCB (7 Congeners)		ng/kg < ng/kg		NONE											< 0.008		< 0.008		< 0.008				
rotari ob (/ congeners)	1		5.9.1	NONE				I	l	1					- 0.1				. 0.1		I		

Highest	RT	GAC
0.00 14.00 0.00 0.00 0.00 7.00		5900 17000 4800 23000 82000
88.00 88.00 0.00 0.00 0.00 0.00 10.00 94		46000 110000 8100 28000 37000 28000 28000
192.00 0.00 5.00 14.00 0.00 0.00 0.00	5000	47000 1920000 1220000 2820000 1120000
0.00 0.00 0.00 0.00 0.00 0.00		77 1200 1300000
0.00 0.00 0.00 146.00		13000000 81000 850000 24000
0.00 0.00 0.00		170000
0.00		1300000
0.00		6300 970
0.00 0.00 13850.00 0.00 0.00 0.00 0.00 0.00		5900 2600 3700
0.00 0.00 13.00 0.00		190000
0.00 209.00 0.00 5.00 14.00 0.00		130000 550000
0.00 0.00 0.00 0.00 0.00		6500000 1500000 3300000
0.00 0.00 0.00 0.00 0.00 0.00		9700000 220000
0.00 0.00 0.00		99000
0.00 136.00		73000 10000000
0.00 147.00 0.00		4800000
		66000



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY

DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-02564

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	GJ049
Sample Receipt Date:	03/03/2021
Sample Scheduled Date:	03/03/2021
Report Issue Number:	1
Reporting Date:	09/03/2021

Authorised by:

Dave Ashworth

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. 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 except in full, without the prior written approval of the laboratory.





Soil Analysis Certificate	- TPH CWG Bande	d						
DETS Report No: 21-025	64		Date Sampled	01/03/21	01/03/21	01/03/21	01/03/21	01/03/21
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Middlemo	ore Lane		TP / BH No	HS1 Base 1	HS1 Base 2	HS1 NF1	HS1 NF2	HS1 SF1
Declaret (Job Def. C 1040								
Project / Job Ref: GJ049 Order No: GJ049		ŀ	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 09/03/2	0.01	DI	Depth (m) ETS Sample No	4.00	3.90 529072	2.60 529073	2.80 529074	2.60
Reporting Date. 0970372	:021	D	ETS Sample NO	529071	529072	529073	529074	529075
Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C21 - C34	mg/kg	< 10		< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34)	mg/kg		NONE	< 21	< 21	< 21	< 21	< 21
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8	mg/kg			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg			< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16	mg/kg	< 2		< 2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21	mg/kg	< 3		< 3	< 3	< 3	< 3	< 3
Aromatic >C21 - C35	<i>u_u</i>	< 10		< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35)	mg/kg		NONE	< 21	< 21	< 21	< 21	< 21
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	< 42





Soil Analysis Certificate	- TPH CWG Bande	d						
DETS Report No: 21-0256	64		Date Sampled	01/03/21	01/03/21	01/03/21	01/03/21	01/03/21
G & J Geoenvironmental C	onsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	HS1 SF2	HS1 EF1	HS1 EF2	HS1 WF1	HS1 WF2
Project / Job Ref: GJ049			Additional Refs	None Supplied				
Order No: GJ049		,	Depth (m)	3.20	2.00	2.00	1.80	2.20
Reporting Date: 09/03/20	021	DI	ETS Sample No	529076	529077	529078	529079	529080
····· ································				027070	027077	02,070	027077	02,000
Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35)	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	< 42





Soil Analysis Certificate -	BTEX / MTBE							
DETS Report No: 21-02564	S Report No: 21-02564			01/03/21	01/03/21	01/03/21	01/03/21	01/03/21
G & J Geoenvironmental Co	nsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemore	e Lane		TP / BH No	HS1 Base 1	HS1 Base 2	HS1 NF1	HS1 NF2	HS1 SF1
Project / Job Ref: GJ049		A	Additional Refs	None Supplied				
Order No: GJ049			Depth (m)	4.00	3.90	2.60	2.80	2.60
Reporting Date: 09/03/202	21	DETS Sample No		529071	529072	529073	529074	529075
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-0256	4	Date Sampled		01/03/21	01/03/21	01/03/21	01/03/21	01/03/21
G & J Geoenvironmental C	onsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemore	re Lane		TP / BH No	HS1 SF2	HS1 EF1	HS1 EF2	HS1 WF1	HS1 WF2
Project / Job Ref: GJ049		A	Additional Refs	None Supplied				
Order No: GJ049			Depth (m)	3.20	2.00	2.00	1.80	2.20
Reporting Date: 09/03/20)21	DETS Sample No		529076	529077	529078	529079	529080
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate DETS Report No: 21-0256			Date Sampled	01/03/21	01/03/21	01/03/21	01/03/21	01/03/21
G & J Geoenvironmental (Time Sampled		None Supplied				
Site Reference: Middlemo			TP / BH No	HS1 Base 1	HS1 Base 2	HS1 NF1	HS1 NF2	HS1 SF1
Project / Job Ref: GJ049 Order No: GJ049			dditional Refs Depth (m)	None Supplied 4.00	None Supplied 3.90	None Supplied 2.60	None Supplied 2.80	None Supplied 2.60
Reporting Date: 09/03/2	.021	DE	TS Sample No	529071	529072	529073	529074	529075
Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chloromethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromomethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
trans-1,2-Dichloroethene 1,1-Dichloroethane	ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	< 5 < 5	< 5
cis-1,2-Dichloroethene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,1-Trichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloropropene	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Trichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS MCERTS	< 5	< 5	< 5	< 5	< 5
Toluene	ug/kg ug/kg	< 5 < 5	MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	< 5 < 5	< 5
trans-1,3-Dichloropropene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Styrene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,2,2-Tetrachloroethane 1,2,3-Trichloropropane	ug/kg ug/ka	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	< 5 < 5	< 5
n-Propylbenzene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate	- Volatile Organic	Compo	unds (VOC)					
DETS Report No: 21-0256			Date Sampled	01/03/21	01/03/21	01/03/21	01/03/21	01/03/21
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	HS1 SF2	HS1 EF1	HS1 EF2	HS1 WF1	HS1 WF2
Project / Job Ref: GJ049 Order No: GJ049			Additional Refs Depth (m)	None Supplied 3.20	None Supplied 2.00	None Supplied 2.00	None Supplied 1.80	None Supplied 2.20
Reporting Date: 09/03/2	021	DE	TS Sample No	529076	529077	529078	529079	529080
Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chloromethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromomethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,1-Trichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloropropene	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Trichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Dibromomethane TAME	ug/kg	< 5 < 5	MCERTS MCERTS	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/kg ug/ka	< 5	MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	< 5 < 5	< 5
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Styrene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
n-Propylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene sec-Butylbenzene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	< 5 < 5	< 5
	0 0	< 5	MCERTS					
p-Isopropyltoluene 1,3-Dichlorobenzene	ug/kg ug/kg	< 5	MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	< 5 < 5	< 5
1,4-Dichlorobenzene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
n-Butylbenzene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
,2-Dibromo-3-chloropropane	ug/kg ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
i iczaci iloi obutaulel le	uy/Ky	< U	IVIGER 13	< 0	< 0	< 0	C >	< 0





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-02564	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: GJ049	
Reporting Date: 09/03/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
529071	HS1 Base 1	None Supplied	4.00	9.5	Light brown sandy clay with stones
529072	HS1 Base 2	None Supplied	3.90	9.6	Light brown sandy clay with stones
529073	HS1 NF1	None Supplied	2.60	10.6	Light brown sandy clay with stones
529074	HS1 NF2	None Supplied	2.80	13.6	Light brown sandy clay with stones
529075	HS1 SF1	None Supplied	2.60	8.9	Light brown sandy clay with stones
529076	HS1 SF2	None Supplied	3.20	10.8	Light brown sandy clay with stones
529077	HS1 EF1	None Supplied	2.00	15.1	Light brown sandy clay
529078	HS1 EF2	None Supplied	2.00	9.2	Light brown sandy clay with stones
529079	HS1 WF1	None Supplied	1.80	16.6	Light brown sandy clay
529080	HS1 WF2	None Supplied	2.20	19.5	Light brown sandy clay

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample^{1/S} Unsuitable Sample^{U/S}





Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 21-02564	
S & J Geoenvironmental Consultants Ltd	
ite Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: GJ049	-
Reporting Date: 09/03/2021	-

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by agua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12,	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	E004
Soil	D	C12-C16, C16-C21, C21-C40) Eluoride - Water Soluble	neadspace GC-MS Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of Fluonde by extraction with water & analysed by for chromatography Determination of TOC by combustion analyser.	E009 E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	AR		Determination of ammonium by discrete analyser.	E027 E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by	E010
Soil	D	Loss on Ignition @ 450oC	titration with iron (II) sulphate Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle	E019
	D	0	furnace	
Soil	D	Magnesium - Water Soluble		E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE	E002
Soil	AR AR	Mineral Oil (C10 - C40)	Cartridge Moisture content; determined gravimetrically	E004 E003
Soil Soil	D	Moisture Content	Determination of nitrate by extraction with water & analysed by ion chromatography	E003 E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with	E009
Soil	AR	PAH - Speciated (EPA 16)	iron (II) sulphate Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the	E005
			use of surrogate and internal standards	
Soil	AR	PCB - 7 Congeners		E008
Soil	D		Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR		Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR		Determination of phenols by distillation followed by colorimetry	E021
Soil	D		Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of total sulphate by extraction with 10% HCI followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009 E014
Soil Soil	D AR		Determination of water soluble sulphate by extraction with water followed by ICP-OES Determination of sulphide by distillation followed by colorimetry	E014 E018
Soil	D		Determination of sulphide by distillation followed by colorimetry Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E018 E024
Soil	AR	Suppor - Total SVOC	Determination of semi-volatile organic compounds by extraction in acetone and beyane followed by	E024 E006
Soil	AR	Thiocyanate (as SCN)	GC-MS Determination of thiocyanate by extraction in caustic soda followed by acidification followed by	E017
		· · · ·	addition of ferric nitrate followed by colorimetry	
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
0 1	AR	VOCs		E001
Soil			Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	

D Dried AR As Received



. Loughborough

Leicestershire

LE12 8PY

Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar



DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-03858

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	24/03/2021
Sample Scheduled Date:	25/03/2021
Report Issue Number:	1
Reporting Date:	31/03/2021

Authorised by:

Dave Ashworth

Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. 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 except in full, without the prior written approval of the laboratory.





Soil Analysis Certificate	Soil Analysis Certificate - TPH CWG Banded										
DETS Report No: 21-038	58		Date Sampled	22/03/21	22/03/21	22/03/21	22/03/21	22/03/21			
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied							
Site Reference: Middlemo	ore Lane		TP / BH No	HS2 - 1	HS2 - 2	HS2 - 3	HS2 - 4	HS2 - 5			
Destruct (Jak Def. C 1040											
Project / Job Ref: GJ049 Order No: None Supplied		/	Additional Refs Depth (m)	None Supplied							
Reporting Date: 31/03/2		D	ETS Sample No	0.10 - 1.00	0.50 - 1.50	0.10 - 1.00	1.00 - 1.50	0.10 - 1.00			
Reporting Date: 3170372	2021	D	ETS Sample No	533865	533866	533867	533868	533869			
Determinand	Unit	RI	Accreditation								
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01			
Aliphatic >C6 - C8	5 5	< 0.05		1.78	14	0.06	< 0.05	5.64			
Aliphatic >C8 - C10	5 5	< 2		< 2	< 2	< 2	< 2	< 2			
Aliphatic >C10 - C12	mg/kg	< 2		< 2	< 2	< 2	< 2	< 2			
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3			
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	3	< 3	< 3	< 3			
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	22	< 10	< 10	< 10			
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	< 21	39	< 21	< 21	< 21			
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01			
Aromatic >C7 - C8		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05			
Aromatic >C8 - C10	5 5	< 2		< 2	< 2	< 2	< 2	< 2			
Aromatic >C10 - C12	mg/kg			< 2	< 2	< 2	< 2	< 2			
Aromatic >C12 - C16	5 5	< 2		< 2	< 2	< 2	< 2	< 2			
Aromatic >C16 - C21	mg/kg	< 3		< 3	< 3	< 3	< 3	< 3			
Aromatic >C21 - C35		< 10		< 10	< 10	< 10	< 10	< 10			
Aromatic (C5 - C35)	mg/kg		NONE	< 21	< 21	< 21	< 21	< 21			
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	< 42			





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-0385	8		Date Sampled	22/03/21	22/03/21	22/03/21	22/03/21	22/03/21
G & J Geoenvironmental C	onsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	re Lane	TP / BH No		HS2 - 1	HS2 - 2	HS2 - 3	HS2 - 4	HS2 - 5
Project / Job Ref: GJ049		A	Additional Refs	None Supplied				
Order No: None Supplied		Depth (m)		0.10 - 1.00	0.50 - 1.50	0.10 - 1.00	1.00 - 1.50	0.10 - 1.00
Reporting Date: 31/03/2021		DETS Sample No		533865	533866	533867	533868	533869
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





DETS Report No: 21-0385	- Volatile Organic (Date Sampled	22/03/21	22/03/21	22/03/21	22/03/21	22/03/21
G & J Geoenvironmental (Time Sampled					
Site Reference: Middlemo			TP / BH No	None Supplied HS2 - 1	None Supplied HS2 - 2	None Supplied HS2 - 3	None Supplied HS2 - 4	None Supplied HS2 - 5
	bre Earle		II / DITINO	1152 1	1152 2	1132 3	1152 4	1152 5
Project / Job Ref: GJ049		A	dditional Refs	None Supplied				
Order No: None Supplied			Depth (m)	0.10 - 1.00	0.50 - 1.50	0.10 - 1.00	1.00 - 1.50	0.10 - 1.00
Reporting Date: 31/03/2	2021	De	TS Sample No	533865	533866	533867	533868	533869
Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chloromethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromomethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	146	< 5	< 5	75
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chloroform	ug/kg	< 5	MCERTS MCERTS	< 5	< 5	< 5	< 5	< 5
Bromochloromethane 1,1,1-Trichloroethane	ug/kg ug/ka	< 5 < 5	MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	< 5	< 5 < 5
1,1-Dichloropropene	ug/kg ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 5 < 10	< 10
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Trichloroethene	ug/kg	< 5	MCERTS	1780	13850	63	< 5	5567
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
TAME	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene	ug/kg	< 5 < 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane 1,2-Dibromoethane	ug/kg ug/kg	< 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	< 5 < 5	< 5
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Styrene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
n-Propylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,3,5-Trimethylbenzene 4-Chlorotoluene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5	< 5	< 5	< 5	< 5
4-Chlorotoluene tert-Butylbenzene	ug/kg ug/kg	< 5	MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	< 5 < 5	< 5
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
sec-Butylbenzene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5



Soil Analysis Certificate	- PCB (7 Congener	s)					
DETS Report No: 21-0385	58		Date Sampled	22/03/21	22/03/21	22/03/21	
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	HS2 - 1	HS2 - 3	HS2 - 5	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	0.10 - 1.00	0.10 - 1.00	0.10 - 1.00	
Reporting Date: 31/03/2	021	DE	ETS Sample No	533865	533867	533869	
Determinand			ribbroditation				
PCB Congener 28	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	
PCB Congener 52	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	
PCB Congener 101	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	
PCB Congener 118	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	
PCB Congener 138	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	
PCB Congener 153	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	
PCB Congener 180	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	
Total PCB (7 Congeners)	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-03858	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 31/03/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
533865	HS2 - 1	None Supplied	0.10 - 1.00	12	Brown sandy clay with stones
533866	HS2 - 2	None Supplied	0.50 - 1.50	11.3	Brown loamy sand with stones
533867	HS2 - 3	None Supplied	0.10 - 1.00	13.9	Brown loamy sand with stones
533868	HS2 - 4	None Supplied	1.00 - 1.50	13	Brown sandy clay with brick and concrete
533869	HS2 - 5	None Supplied	0.10 - 1.00	12.6	Brown loamy sand with brick and concrete

Moisture content is part of procedure E003 & is not an accredited test

Insufficient Sample ^{I/S} Unsuitable Sample ^{U/S}





pil Analysis Certificate - Methodology & Miscellaneous Information	
ETS Report No: 21-03858	
& J Geoenvironmental Consultants Ltd	
te Reference: Middlemore Lane	
roject / Job Ref: GJ049	
rder No: None Supplied	
eporting Date: 31/03/2021	

Soil Soil Soil Soil Soil Soil Soil Soil	On D D D AR AR AR AR AR AR AR AR AR AR AR AR AR	BTEX Cations Chloride - Water Soluble (2:1) Chromium - Hexavalent Cyanide - Complex Cyanide - Free Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40) EPH Product ID EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of chloride by extraction with water & analysed by ion chromatography Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry Determination of complex cyanide by distillation followed by colorimetry Determination of free cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	No E012 E001 E002 E009 E016 E015 E015 E011 E004 E022 E023 E020 E004 E004 E004
Soil Soil Soil Soil Soil Soil Soil Soil	D D AR AR AR AR AR AR AR AR AR AR AR D AR AR D D D D	BTEX Cations Chloride - Water Soluble (2:1) Chromium - Hexavalent Cyanide - Complex Cyanide - Free Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40) EPH Product ID EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of BTEX by headspace GC-MS Determination of cations in soil by aqua-regia digestion followed by ICP-OES Determination of chloride by extraction with water & analysed by ion chromatography Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry Determination of complex cyanide by distillation followed by colorimetry Determination of free cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of exane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of Fluoride by extraction with water & analysed by ion chromatography Determination of TIOC by combustion analyser.	E002 E009 E016 E015 E015 E015 E011 E004 E022 E023 E020 E004 E004 E004 E009
Soil Soil Soil Soil Soil Soil Soil Soil	D D AR AR AR AR AR AR AR AR AR AR AR D AR AR D D D D	Cations Chloride - Water Soluble (2:1) Chromium - Hexavalent Cyanide - Complex Cyanide - Free Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40) EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of cations in soil by aqua-regia digestion followed by ICP-OES Determination of chloride by extraction with water & analysed by ion chromatography Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry Determination of complex cyanide by distillation followed by colorimetry Determination of free cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS Determination of Fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E009 E016 E015 E015 E015 E011 E004 E022 E023 E020 E004 E004 E004 E004 E009
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR AR D AR AR AR AR AR AR AR D D D D	Chloride - Water Soluble (2:1) Chromium - Hexavalent Cyanide - Complex Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40) EPH Product ID EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of chloride by extraction with water & analysed by ion chromatography Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry Determination of complex cyanide by distillation followed by colorimetry Determination of free cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS Determination of Fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E016 E015 E015 E015 E011 E004 E022 E023 E020 E004 E004 E004 E004 E009
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR D AR AR AR AR AR AR AR D D D D D AR	Cyanide - Complex Cyanide - Free Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40) EPH Product ID EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	1.5 diphenylcarbazide followed by colorimetry Determination of complex cyanide by distillation followed by colorimetry Determination of free cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement Determination of elemental sulphur by solvent extraction followed by GC-MS Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of Fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E015 E015 E015 E011 E004 E022 E023 E020 E004 E004 E004 E004 E009
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR D AR AR AR AR AR AR D AR D D D D AR	Cyanide - Free Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40) EPH Product ID EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of complex cyanide by distillation followed by colorimetry Determination of free cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of elemental sulphur by solvent extraction followed by gelectrometric measurement Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E015 E015 E011 E004 E022 E023 E020 E004 E004 E004 E004
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR D AR AR AR AR AR AR D AR D D D D AR	Cyanide - Free Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40) EPH Product ID EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of free cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement Determination of elemental sulphur by solvent extraction followed by GC-MS Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E015 E015 E011 E004 E022 E023 E020 E004 E004 E004 E004
Soil Soil Soil Soil Soil Soil Soil Soil	D AR AR D AR AR AR D D D D AR	Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40) EPH Product ID EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement Determination of elemental sulphur by solvent extraction followed by GC-MS Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E011 E004 E022 E023 E020 E004 E004 E004 E004
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR D AR AR AR AR D D D D AR	Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40) EPH Product ID EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement Determination of elemental sulphur by solvent extraction followed by GC-MS Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E004 E022 E023 E020 E004 E004 E004 E004
Soil Soil Soil Soil Soil Soil Soil Soil	AR D AR AR AR D D D D AR	Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 – C40) EPH Product ID EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement Determination of elemental sulphur by solvent extraction followed by GC-MS Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of Fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E022 E023 E020 E004 E004 E004 E009
Soil Soil Soil Soil Soil Soil Soil Soil	AR D AR AR AR D D D D AR	Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 – C40) EPH Product ID EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement Determination of elemental sulphur by solvent extraction followed by GC-MS Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of Fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E023 E020 E004 E004 E004 E004
Soil Soil Soil Soil Soil Soil Soil Soil	D AR AR D D D D AR	Elemental Sulphur EPH (C10 – C40) EPH Product ID EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of elemental sulphur by solvent extraction followed by GC-MS Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS Determination of Fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E020 E004 E004 E004 E004
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR D D D D AR	EPH (C10 - C40) EPH Product ID EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS Determination of Fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E004 E004 E004 E009
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR D D D D AR	EPH Product ID EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS Determination of Fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E004 E004 E009
Soil Soil Soil Soil Soil Soil Soil Soil	AR D D D D AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS Determination of Fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E004 E009
Soil Soil Soil Soil Soil Soil Soil	D D D D AR	C12-C16, C16-C21, C21-C40) Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	headspace GC-MS Determination of Fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E009
Soil Soil Soil Soil Soil Soil Soil	D D D D AR	Fluoride - Water Soluble Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of Fluoride by extraction with water & analysed by ion chromatography Determination of TOC by combustion analyser.	E009
Soil Soil Soil Soil Soil Soil	D D D AR	Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of TOC by combustion analyser.	
Soil Soil Soil Soil Soil	D D AR	Fraction Organic Carbon (FOC) Organic Matter (SOM)	Determination of TOC by combustion analyser.	
Soil Soil Soil Soil	D AR	Organic Matter (SOM)		E027
Soil Soil Soil	AR	TOC (Total Organic Carbon)	Determination of TOC by combustion analyser.	E027
Soil Soil			Determination of TOC by combustion analyser.	E027
Soil	D	Exchangeable Ammonium		E029
		FOC (Fraction Organic Carbon)	titration with iron (11) sulphate	E010
	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble		E025
Soil	D	Metals		E002
Soil	AR	Mineral Oil (C10 - C40)	cartridge	E004
Soil	AR	Moisture Content		E003
Soil	D	Nitrate - Water Soluble (2:1)		E009
Soil	D	Organic Matter	Iron (II) suiphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCI followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR		Determination of sulphide by distillation followed by colorimetry	E018
Soil	D		Determination of total sulphur by extraction with agua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	addition of terric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	5 5 1	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR		Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried AR As Received



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY

DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-04101

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	29/03/2021
Sample Scheduled Date:	30/03/2021
Report Issue Number:	1
Reporting Date:	06/04/2021

Authorised by:

Dave Ashworth

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

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Soil Analysis Certificate - TPH CWG Banded								
DETS Report No: 21-041			Date Sampled	25/03/21	25/03/21	25/03/21	25/03/21	
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	HS3-1	HS3-2	HS3-3	HS3-4	
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied	None Supplied	None Supplied		
Order No: None Supplied		D.	Depth (m)	0.40 - 1.00	0.10 - 1.10	1.00 - 1.70	0.10 - 1.00	
Reporting Date: 06/04/2	021	DI	ETS Sample No	534854	534855	534856	534857	
Determinand	Unit	DL	Accreditation					
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Aliphatic >C6 - C8		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Aliphatic >C8 - C10	mg/kg	< 0.05	MCERTS		< 0.05	< 0.05	< 0.05	
Aliphatic >C10 - C12	mg/kg		MCERTS	< 2	< 2	< 2	< 2	
Aliphatic >C12 - C12	mg/kg		MCERTS	< 3	< 2	< 2	< 2	
Aliphatic >C12 - C10	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 3	56	44	
Aliphatic (C5 - C34)	mg/kg mg/kg		NONE	< 21	00 88	63	44	
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Aromatic >C7 - C8		< 0.01		< 0.05	< 0.05	< 0.01	< 0.01	
Aromatic >C8 - C10	mg/kg		MCERTS	< 2	< 2	< 2	< 2	
Aromatic >C10 - C12	mg/kg		MCERTS	< 2	< 2	< 2	< 2	
Aromatic >C12 - C16	mg/kg		MCERTS	< 2	< 2	< 2	< 2	
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	10	5	< 3	
Aromatic >C21 - C35	mg/kg	-		< 10	94	23	< 10	
Aromatic (C5 - C35)	mg/kg		NONE	< 21	104	28	< 21	
Total >C5 - C35	mg/kg	< 42	NONE	< 42	192	91	44	





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-0410	1	Date Sampled		25/03/21	25/03/21	25/03/21	25/03/21	
G & J Geoenvironmental C	onsultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemore Lane TP / BH No		HS3-1	HS3-2	HS3-3	HS3-4			
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied	None Supplied Depth (m)		0.40 - 1.00	0.10 - 1.10	1.00 - 1.70	0.10 - 1.00		
Reporting Date: 06/04/2021		DETS Sample No		534854	534855	534856	534857	
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	5	
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	14	
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	





DETS Report No: 21-0410	- Volatile Organic (01		Date Sampled	25/03/21	25/03/21	25/03/21	25/03/21	
G & J Geoenvironmental (Time Sampled	None Supplied				
Site Reference: Middlemo			TP / BH No	HS3-1	None Supplied HS3-2	None Supplied HS3-3	None Supplied HS3-4	
Site Kelelence. Midulenio	Die Lane		IF / BITNU	1155-1	1155-2	1155-5	1155-4	
Project / Job Ref: GJ049		A	dditional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	0.40 - 1.00	0.10 - 1.10	1.00 - 1.70	0.10 - 1.00	
Reporting Date: 06/04/2	.021	DE	TS Sample No	534854	534855	534856	534857	
Determinand	Unit		Accreditation					
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Chloromethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromomethane Trichlorofluoromethane	ug/kg	< 10 < 5	MCERTS MCERTS	< 10 < 5	< 10 < 5	< 10 < 5	< 10	
1,1-Dichloroethene	ug/kg ug/ka	< 5	MCERTS	< 5	< 5	< 5	< 5	
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1,1-Trichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1-Dichloropropene	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Trichloroethene	ug/kg	< 5	MCERTS	< 5	11	< 5	6	
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
TAME	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Toluene	ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	< 5 < 5	
trans-1,3-Dichloropropene 1,1,2-Trichloroethane	ug/kg ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 5 < 10	
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	13	
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Chlorobenzene	ug/kg	< 5	MCERTS	209	< 5	< 5	< 5	
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	5	
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	14	
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Styrene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
n-Propylbenzene Bromobenzene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5	< 5	
2-Chlorotoluene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5 < 5	< 5	
1,3,5-Trimethylbenzene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	<u> </u>
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	136	< 5	< 5	< 5	
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	147	< 5	< 5	< 5	
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-04101	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 06/04/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
534854	HS3-1	None Supplied	0.40 - 1.00	11.8	Brown sandy gravel with stones and concrete
534855	HS3-2	None Supplied	0.10 - 1.10	12.7	Brown sandy gravel with brick and concrete
534856	HS3-3	None Supplied	1.00 - 1.70	10.6	Brown sandy gravel with stones and concrete
534857	HS3-4	None Supplied	0.10 - 1.00	13.7	Brown sandy clay with stones and concrete

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample ^{I/S} Unsuitable Sample ^{I/S}





Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 21-04101	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 06/04/2021	

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR		Determination of BTEX by headspace GC-MS	E001
Soil	D		Determination of cations in soil by agua-regia digestion followed by ICP-OES	E002
Soil	D		Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headsnace GC-MS	E004
Soil	D		Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	AR		Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D		Determination of metals by agua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D		Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR		Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCI followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR		Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with agua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (11) sulphate	E010
Soil	AR		Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR		Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001
D	Dried			

Middlemore Lane, Aldridge Verification Report



C3 – Primary Source Validation Samples

SFG GJ049

DETS Report No: 21-01136 G & J Geoenvironmental Con Site Reference: Middlemore		Date Sample Time Sample TP / BH N	d 22/03/2 d None Supplie	21 22/03/21 ad None Supplied	22/03/21 None Supplied Source 12-3	22/03/21 None Supplied	22/03/21 None Supplied Source 2-2	22/03/21 None Supplied Source 8-1	22/03/21 None Supplied Source 8-2	22/03/21 None Supplied Source 7-1	22/03/21 None Supplied Source 7-2	30/03/21 None Supplied Source7-3	30/03/21 None Supplied Source7-4	25/03/21 None Supplied Source 3-1	25/03/21 None Supplied Source 3-2	25/03/21 None Supplied Source 11-1	25/03/21 None Supplied Source 11-2	25/03/21 None Supplied Source 4-1	25/03/21 Ione Supplied Source 4-2	25/03/21 None Supplied Source 14-1	25/03/21 None Supplied Source 14-2	25/03/21 None Supplied Source 9-1	25/03/21 None Supplied Source 9-2	30/03/21 None Supplied Source7-3	30/03/2 None Supplie Source7-	1 13/04/2 d None Supplied 4 Source 2 NF	1 13/04/ d None Suppl 1 Source 2 S	ed None Supplier	1 13/04/21 d None Supplied 1 Source 2 WF1	13/04/21 None Supplied Source 2 Base 1		
Project / Job Ref: GJ049 Order No: None Supplied Reporting Date: 05/02/202		Additional Ref Depth (m DETS Sample N		none Supplied None Supplied 2 533873		Mone Supplied	None Supplied					None Supplied 0.10 - 1.00	None Supplied 0.10 - 0.90	None Supplied 0.10 - 1.00	None Supplied 0.10 - 0.90	None Supplied 0.10 - 1.00	None Supplied 0.50 - 1.50			None Supplied 0.10 - 1.00					None Supplie 0.10 - 0.9 53520			ed None Supplie ed None Supplie 91 53829		None Supplied None Supplied 538294	Highest	RT GA
Reporting Date: 05/02/202	1	DETS Sample N	5338	2 533873	533874	533875	533876	533870	533871	533877	533878	535201	535202	534861	534862	534863	534864	534865	534866	534867	534868	534869	534870	535201	53520	2 538290	0 5382	91 53829	2 538293	538294	3	
Determinand Asbestos Screen ^(S)	Unit N/a	RL Accreditatio	n 5													Not Detected	Detected Chrysotile											_				
Sample Matrix ⁽⁵⁾	Material Type	N/a NON	IE														present in microscopic loose fibrous asbestos debris and															
Asbestos Type ^(S) pH Total Cyanide	PLM Result pH Units mg/kg	N/a MCERT	5 S IE													7.5	Chrysotile 7.5 < 2															
Total Sulphate as SO ₄ Total Sulphate as SO ₄ Sulphide	mg/kg < % < mg/kg	200 MCERT 0.02 MCERT < 5 NON 0.1 MCERT	S IE													1237 0.12 < 5	863 0.09 < 5															
Organic Matter Total Organic Carbon (TOC) Arsenic (As) W/S Boron	% < mg/kg mg/kg	0.1 MCERT < 2 MCERT < 1 NON	IE													1.9 15 2.1	0.7														0.00	640 24000
Cadmium (Cd) Chromium (Cr) Copper (Cu) Lead (Pb)	mg/kg mg/kg mg/kg mg/kg	0.2 NON < 2 MCERT < 4 MCERT < 3 MCERT	IE S S													20 895 104	5.1 741 3440 312														0.00 0.00 0.00 0.00	410 8600 6800 2300
Mercury (Hg) Nickel (Ni) Selenium (Se) Zinc (Zn)	mg/kg mg/kg mg/kg mg/kg	< 1 MCERT < 3 MCERT < 2 MCERT < 3 MCERT	'S 'S 'S													< 1 34 < 3 946	< 1 544 < 3 3550														0.00 0.00 0.00 0.00	1100 980 1200 73000
Total Phenols (monohydric) EPH (C10 - C40) Naphthalene Acenaphthylene	mg/kg mg/kg mg/kg <	< 2 NON < 6 MCERT	IE S S			2.33	2.12							< 0.1	< 0.1	< 2 12 < 0.1	< 2 148 < 0.1	< 0.1	< 0.1			< 0.1	< 0.1								0.00 2.33 0.00	460 9700
Acenaphthene Fluorene Phenanthrene	mg/kg < mg/kg < mg/kg < mg/kg <	0.1 MCERT 0.1 MCERT 0.1 MCERT	s s			< 0.1 < 0.1 2.82 4.44	< 0.1 < 0.1 1.84 2.82							< 0.1 < 0.1 < 0.1 0.22	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1			< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1								0.00 2.82 4.44	9700 6800 2200
Anthracene Fluoranthene Pyrene Benzo(a)anthracene	mg/kg < mg/kg < mg/kg < mg/kg <	0.1 MCERT 0.1 MCERT 0.1 MCERT 0.1 MCERT 0.1 MCERT	s s s			< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 0.32 < 0.1							< 0.1 0.58 0.59 0.28	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 0.24 0.2 < 0.1			< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1								0.00 0.58 0.59 0.28	54000 2300 5400 170
Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene	mg/kg < mg/kg < mg/kg < mg/kg <	0.1 MCERT 0.1 MCERT 0.1 MCERT 0.1 MCERT	s s s			< 0.1 < 0.1 < 0.1 < 0.1	0.15 < 0.1 < 0.1 < 0.1							0.28 0.3 0.12 0.21	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1			< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1								0.28 0.30 0.12 0.21	350 44 1200 77
Dibenz(a,h)anthracene Benzo(ohi)pervlene	mg/kg < mg/kg < mg/kg <	0.1 MCERT 0.1 MCERT 0.1 MCERT	s s s			< 0.1 < 0.1 < 0.1 9.6	< 0.1 < 0.1 < 0.1 < 0.1 7 3							< 0.1 < 0.1 < 0.1 2 6	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1 < 1.6	< 0.1 < 0.1 < 0.1 < 1.6			< 0.1 < 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1 < 0.1 < 1.6								0.00 0.00 0.00	510 3.6 4000 500
Total EPA-16 PAHs Aliphatic >C5 - C6 Aliphatic >C6 - C8 Aliphatic >C6 - C10	mg/kg < mg/kg < mg/kg mg/kg	1.6 MCERT 0.01 NON 0.05 NON < 2	E < 0.0 IE < 0.0 IS <	01 < 0.01 05 < 0.05 2 < 2 2	< 0.01 < 0.05 < 2	 < 0.01 < 0.05 < 0.05 132 274 	< 0.01 < 0.05 88							< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2	< 0.01 < 0.05 < 2			< 0.0 < 0.0 < 2	1 < 0 5 < 0 2	01 < 0.0 05 < 0.0 2 < 12	1 < 0.01 5 < 0.05 2 < 2	< 0.01 < 0.05 < 2	0.00 0.00 132.00 374.00	5900 1700 4800 2300
Aliphatic >C8 - C10 Aliphatic >C10 - C12 Aliphatic >C12 - C16 Aliphatic >C16 - C21 Aliphatic >C21 - C34 Aliphatic (C5 - C34)	mg/kg mg/kg mg/kg	 < 2 MCERT < 3 MCERT < 3 MCERT < 10 MCERT 	s < s < s < s <	2 < 2 3 < 3 3 < 3 10 < 10	<pre>< < 2 < < 3 < < 3 < < 3 < < 3 < < 10 </pre>	374 3 1492 3 1621 0 458	1197 1206 360							< 2 < 3 16 50	< 2 < 3 < 3 < 10	< 2 < 3 < 3 < 10	< 2 < 3 < 3 21	< 2 < 3 < 3 < 10	< 2 < 3 < 10	< 2 < 3 < 3 < 10	< 2 < 3 < 3 < 10	< 2 < 3 10 89	3 38 55 250			1 1 1/ 1/ < 10	2 1 4 0	13 < 68 76 18 < 1	2 < 2 7 < 3 7 < 3 0 < 10	45 44 < 10	1492.00 1621.00 458.00	8200
Aliphatic (C5 - C34) Aromatic >C5 - C7 Aromatic >C7 - C8 Aromatic >C8 - C10	mg/kg < mg/kg < mg/kg < mg/kg	2.05 NON < 2 MCERT	IE < 1 IE < 0.1 IE < 0.1 'S <	21 < 21 11 < 0.01 15 < 0.05 2 < 2	< 21 < 0.01 < 0.05 < 2	4077 < 0.01 < 0.05 2 27	3159 < 0.01 < 0.05 38							67 < 0.01 < 0.05 < 2	< 21 < 0.01 < 0.05 < 2	< 21 < 0.01 < 0.05 < 2	< 21 < 0.01 < 0.05 < 2	< 21 < 0.01 < 0.05 < 2	< 21 < 0.01 < 0.05 < 2	< 21 < 0.01 < 0.05 < 2	< 21 < 0.01 < 0.05 < 2	99 < 0.01 < 0.05 < 2	346 < 0.01 < 0.05 < 2			< 0.0 < 0.0 < 0.0	5 1 1 < 0 5 < 0 2 ·	77 < 2 01 < 0.0 05 < 0.0 2 < 2	1 < 21 1 < 0.01 5 < 0.05 2 < 2	98 < 0.01 < 0.05 < 2	4077.00 0.00 0.00 38.00	4600 11000 8100
Aromatic >C10 - C12 Aromatic >C12 - C16 Aromatic >C16 - C21	mg/kg mg/kg mg/kg mg/kg	< 2 MCERT < 2 MCERT < 3 MCERT	'S < 'S < 'S <	2 < 2 2 < 2 3 < 3 10 < 10	2 < 2 2 < 2 8 < 3 < 10	2 190 2 1333 8 1357 3 24	173 1040 1041 236							< 2 2 11 14	< 2 < 2 < 3 < 10	< 2 < 2 < 3 < 10	< 2 < 2 < 3 < 10	< 2 < 2 < 3 < 10	< 2 < 2 < 3 < 10	< 2 < 2 < 3 < 10	< 2 < 2 < 3 < 10	< 2 < 2 4 51	< 2 10 34 122			<	2 2 3 0 <	2 < 22 26 10 < 1	2 < 2 4 < 2 5 < 3 0 < 10	< 2 15 17 < 10	190.00 1333.00 1357.00 324	2800 3700 2800 2800
Aromatic >C21 - C35 Aromatic (C5 - C35) Total >C5 - C35 Benzene Toluene	ug/kg	< 10 MCERT < 21 NON < 42 NON < 2 MCERT < 5 MCERT	IE < . IE < . S <	21 < 21 12 < 42 2 < 2	< 21 < 42 < 2 < 2	2 3232 7309 2 < 2 < 5	2528 5687 < 2							28 94 < 2	< 21 < 42 < 2	< 21 < 42 < 2	< 21 < 42 < 2	< 21 < 42 < 2	< 21 < 42 < 2	< 21 < 42 < 2	< 21 < 42 < 2	55 155 < 2	166 512 < 2			< 2' < 42	1 2 2 7 5	51 < 2 28 < 4 < 2 <	1 < 21 2 < 42 2 9 5 7	32 129 < 2		5000 4700 19200
Ethylbenzene p & m-xylene o-xylene MTRF	ug/kg ug/kg ug/kg ug/kg ug/kg	< 5 MCERT < 2 MCERT < 2 MCERT < 2 MCERT < 5 MCERT	s < s < s <	2 < 2 2 < 2 2 < 2 2 < 2 2 < 2	< 2 < 2 < 2 < 2 < 2 < 2 < 2	2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2	176 279 < 2							< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5	< 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2	7	< 2 6 < 2	34 58 14	< 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2			12	5 2 6		2 4 2 12 2 6	< 2 < 2 < 2 < 2	176.00 279.00 14.00	12200 28200 11200
Dichlorodifluoromethane Vinyl Chloride Chloromethane Chloroethane	ug/kg ug/kg ug/kg	< 5 MCERT < 5 MCERT < 10 MCERT	>	5 < 5 5 < 5 5 < 5 10 < 10	<pre></pre>) 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	< 0	< 5 < 5 < 10	< 5 < 5 < 10	< 2	c >	< 0	< 5	< 5	< 5	< 5 < 5 < 5 < 10	< 5 < 5 < 10	< < < 1	5 < 5 5 < 1 0 < 10	5 5 0 <	< 5 < 1 < 5 < 1 < 5 < 1 10 < 1	5 < 5 5 < 5 5 < 5 0 < 10	< 5 < 5 < 5 < 10	0.00 0.00 0.00 0.00	77 1200							
Chloroethane Bromomethane Trichlorofluoromethane 1,1-Dichloroethene	ug/kg ug/kg ug/kg ug/kg	< 5 MCERT < 10 MCERT < 5 MCERT < 5 MCERT < 5 MCERT	S < S < S < S <	5 < 5 10 < 10 5 < 5 5 < 5	< 5 < 10 < 5 < 5 < 5	5 5		< 5 < 10 < 5 < 5	< 5 < 10 < 5 < 5							< 5 < 10 < 5 < 5	< < 1 < <	5 < 5 0 < 10 5 < 5 5 < 5	5 0 5 5	5 < 1 5 < 1 5 < 1 5 < 1	5 < 5 0 < 10 5 < 5 5 < 5	< 5 < 10 < 5 < 5	0.00 0.00 0.00 0.00	13000								
MTBE trans-1,2-Dichloroethene 1,1-Dichloroethane cis-1,2-Dichloroethene	ug/kg ug/kg ug/kg ug/kg ug/kg	< 5 MCERT < 5 MCERT	× × × ×	5 < 5 5 < 5 5 < 5 5 < 5	< 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5	0		< 5 < 5 < 5	< 5 < 2 < 2 < 2 < 2 < 2 < 3 < 2 < 3 < 4 < 4 < 4 < 4 < 4 < 4 < 4 < 4 < 4 < 4							< 5 < 5 < 5	× × ×	5 < 5	5	5 < 5 < 5 < 5 < 5 < 5 < 7 5 < 7 5 < 7	5 < 5 5 < 5 5 < 5 5 < 5	< 5 < 5 < 5	0.00 0.00 0.00 0.00	130000 8100 85000 2400								
2,2-Dichloropropane Chloroform Bromochloromethane	ug/kg	< 5 MCERT < 5 MCERT < 5 MCERT	S < S < S <	5 < 5 5 < 5 5 < 5 5 < 5	< 5 < 5 < 5 < 5 < 5 < 5	5		< 5 < 5 < 5 < 5	< 5 < 5 < 5	< 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5	< < 5 < < 5 < < 5 < < 5 < < 5 < 5 < 5 <							< 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5	< 5 < 5 < 5 < 5 < 5	< 5 < 5 < 5	< < <	5 < 5 5 < 5 5 < 1	5	< 5 < < 5 < < 5 <	5 < 5 5 < 5 5 < 5 5 < 5	< 5 < 5 < 5 < 5	0.00 0.00 0.00	17000
1,1,1-Trichloroethane 1,1-Dichloropropene Carbon Tetrachloride 1,2-Dichloroethane	ug/kg ug/kg ug/kg ug/kg	< 5 MCERT < 10 MCERT < 5 MCERT < 5 MCERT	s < s < s < s < s < s	5 < 5 10 < 10 5 < 5 5 < 5	0 < 5 < 10 < 5 < 5 < 5	5		< 5 < 10 < 5 < 5	< 10 < 10 < 5 < 5							< 5 < 10 < 5 < 5	< <tr> <1</tr>	5 < 10 5 < 1 5 < 1 5 < 1	5 < 5 5	< 5 < 10 < 1 < 5 < < 5 <	5 < 5 0 < 10 5 < 5 5 < 5	< 5 < 10 < 5 < 5	0.00 0.00 0.00 0.00	13000 6300 970								
Benzene 1,2-Dichloropropane Trichloroethene Bromodichloromethane Dibromomethane	ug/kg ug/kg ug/kg ug/kg	< 2 MCERT < 5 MCERT < 5 MCERT < 5 MCERT	> 20 > 20 > 20 20 20	2 < 2 5 < 5 5 < 5 5 < 5 5 < 5	2 < 2 < 5 < 12 < 5	2 5 2 5		< 2 < 5 9 < 5	< 2 < 5 < 5 < 5	< 2 < 5 < 5 < 5	< 2 < 5 12 < 5	< 2 < 5 < 5 < 5 < 5	< 2 < 5 < 5 < 5 < 5							< 2 < 5 7 < 5	< 2 < 5 8 < 5	< 2 < 5 < 5 < 5	< 2 < 5 6 < 5	< 2 < 5 < 5 < 5	<	2 5 < ! 5 1 5 < !	7 - 5 - 4 - 5 -	< 2 < < 5 < < 5 < < 5 <	2 9 5 < 5 5 13 5 < 5	< 2 < 5 19 < 5	0.00 0.00 12.00 0.00	5900 2600 3700
cis-1,3-Dichloropropene Toluene	ug/kg ug/kg ug/kg ua/ka	< 5 MCERT < 5 MCERT < 5 MCERT < 5 MCERT	S < S < S < S <	5 < 5 5 < 5 5 < 5 5 < 5 5 < 5	< 5 < 5 < 5 < 5 < 5 < 5	5		< 5 < 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5 < 5							< 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5	<	5 < 5 5 < 5 5 < 5 5 < 7	5 5 5	< 5 < 5 < 5 < 5 <	5 < 5 5 < 5 5 < 5 5 7	< 5 < 5 < 5 < 5 < 5	0.00 0.00 0.00 0.00	
trans-1,3-Dichloropropene 1,1,2-Trichloroethane 1,3-Dichloropropane	ug/kg ug/kg ug/kg	 S MCERT MCERT 	s < s < s <	5 < 5 10 < 10 5 < 5	< 5 < 10 < 10 < 5	5		< 5 < 10 < 5 < 5 < 5 < 5 < 5	< 5 < 10 < 5	< 5 < 10 < 5 < 5	< 5 < 10 < 5	< 5 < 10 < 5	< 5 < 10 < 5							< 5 < 10 < 5	< 5 < 10 < 5	< 5 < 10 < 5	< 5 < 10 < 5 < 5 < 10 < 5 < 2	< 5	< <1 < 	5 < 5 0 < 10 5 < 5	5 < 0 < 5 <	< 5 < 1 10 < 1 5 < 5	5 < 5 0 < 10 5 < 5 5 < 5	< 5 < 10 < 5	0.00 0.00 0.00 6.00	19000
Tetrachloroethene Dibromochloromethane 1,2-Dibromoethane Chlorobenzene 1,1,1,2-Tetrachloroethane	ug/kg ug/kg ug/kg	< 5 MCERT < 5 MCERT < 5 MCERT < 5 MCERT < 5 MCERT < 2 MCERT	S < S < S < S <	5 < 5 5 < 5 <	< 5 < 5 < 5 < 5 < 5 < 5 < 5 < 5	5		< 5	< 5 < 5 < 5	< 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5	/ < / < / <							< 5 < 5 < 5 < 5	< 5 < 5 < 5	< 5 < 5 < 5	< 5	< 5 < 5 < 5	<	5 < 5 5 < 5 5 < 5	5		5 < 5 5 < 5 5 < 5 5 < 5	< 5 < 5 < 5	0.00 0.00 0.00 0.00 0.00	13000
Ethyl Benzene m.n-Xylene	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	< 5 MCERT < 2 MCERT < 2 MCERT < 2 MCERT < 2 MCERT < 5 MCERT < 10 MCERT	S S	2 < 2 2 < 2 2 < 2 2 < 2 2 < 2	2 < 2 2 < 2 2 < 2 2 < 2 2 < 2	2		< p < 2 < 2 < 2 < 2	< 5 < 2 < 2 < 2	< 5 < 2 < 2 < 2 < 2	< 5 < 2 < 2 < 2 < 2	< 5 < 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2							< 5 < 2 6 < 2	< 5 34 58 14	< 5 < 2 < 2 < 2 < 2	< 5 < 2 < 2 < 2 < 2	< 5 < 2 < 2 < 2 < 2	< < < <	2 12	5		2 < 5 2 4 2 12 2 6	< 5 < 2 < 2 < 2 < 2	34.00 58.00 14.00	55000
o-Xylene Styrene Bromoform Isopropylbenzene 1,1,2,2-Tetrachloroethane		< 0 MCERT < 10 MCERT < 5 MCERT < 5 MCERT	> < 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	5 < 5 5 < 5 5 < 5	< 5 < 10 < 5 < 5	5		< 5 < 10 < 5 < 5	< 5 < 10 < 5 < 5							< 5 < 10 < 5 < 5	< < 1 < <	0 < 10 5 < 1 5 < 1	0 < 5 ·	10 < 10 5 < 5 <	5 < 5 0 < 10 5 < 5 5 < 5	< 5 < 10 6 < 5	0.00 0.00 0.00 0.00	65000 15000 33000								
1,2,3-Trichloropropane n-Propylbenzene Bromobenzene 2-Chlorotoluene 1,3,5-Trimethylbenzene	ug/kg ug/kg ug/kg ug/kg	< 5 MCERT	s < s < s <	5 < 5 5 < 5 5 < 5 5 < 5 5 < 5	 <td></td> <td></td> <td>< 5 < 5 < 5 < 5 < 5</td> <td>< 5 < 5 < 5 < 5</td> <td>< 5 < 5 < 5 < 5 < 5</td> <td>< 5 < 5 < 5 < 5</td> <td>< 5 < 5 < 5 < 5</td> <td>< 5 < 5 < 5 < 5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>< 5 < 5 < 5 < 5</td> <td>< 5 < 5 < 5 146.0</td> <td>< 5 < 5 < 5 < 5</td> <td>< 5 < 5 < 5 < 5 < 5</td> <td>< 5 < 5 < 5 < 5</td> <td>< < <</td> <td>5 < 5 5 < 5 5 < 5 5 < 5</td> <td>5</td> <td>5 < 5 < 5 < 5 <</td> <td>5 < 5 5 < 5 5 < 5 5 < 5 5 < 5</td> <td>< 5 < 5 < 5 < 5</td> <td>0.00 0.00 0.00 146.00</td> <td>97000 22000</td>			< 5 < 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5							< 5 < 5 < 5 < 5	< 5 < 5 < 5 146.0	< 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5	< < <	5 < 5 5 < 5 5 < 5 5 < 5	5	5 < 5 < 5 < 5 <	5 < 5 5 < 5 5 < 5 5 < 5 5 < 5	< 5 < 5 < 5 < 5	0.00 0.00 0.00 146.00	97000 22000
1,3,5-Trimethylbenzene 4-Chlorotoluene tert-Butylbenzene 1,2,4-Trimethylbenzene	ug/kg ug/kg ug/kg ug/kg	< 5 MCERT < 5 MCERT < 5 MCERT	S < S < S < S <	5 < 5 5 < 5 5 < 5 5 < 5	< 5 < 5 < 5 < 5 < 5 < 7 × 7 × 7 × 7 × 7 × 7 × 7 × 7 × 7 × 7	5		< 5 < 5 < 5 < 5	< 5 < 5 < 5 > 5	< 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5	< 5< < 5							< 5 < 5 < 5 < 5	< 5 < 5 < 5 11 0	< 5 < 5 < 5 < 5	< 5 < 5 < 5	< 5 < 5 < 5	<	5 < 5 5 < 5 5 < 5 5 < 5	5	8 < 1	5 < 5 5 < 5 5 < 5 5 < 7	< 5 < 5 < 5	0.00 0.00 0.00 11.00	9900
sec-Butylbenzene p-Isopropyltoluene 1,3-Dichlorobenzene	ug/kg ug/kg ug/kg	< 5 MCERT < 5 MCERT < 5 MCERT	S S S C	- < 5 5 < 5 5 < 5 5 < 5	< 5 < 5 < 5 < 5 < 5	5		< 5 < 5 < 5 < 5	< 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5							< 5 < 5 < 5 < 5	< 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5	< 5 < 5 < 5 < 5	<	5 < 5 5 < 5 5 < 5	5	26 < 1 7 < 1 5 < 1	7 5 < 5 5 < 5 5 < 5 5 < 5	× 8 < 5 < 5	0.00 0.00 0.00	7300
1,4-Dichlorobenzene n-Butylbenzene 1,2-Dichlorobenzene ,2-Dibromo-3-chloropropane Hexachlorobutadiene	ug/kg ug/kg ug/kg ug/kg ug/kg	< 5 MUERT	> < 2 < 2 < 2 < 2 < 2 < 2 <	5 < 5 5 < 5 5 < 5 6 < 5 < 0 < 10	<pre>< 5 < 5 < 5 < 5 < 10 < 10 </pre>	5		< 5 < 5 < 5 < 10	< 5 < 5 < 5 < 10							< 5 < 5 < 5 < 10	< < < < 1	5 < 5 5 < 5 6 < 10	5 5 0 <	23 < 1 5 < 1 10 < 1	5 < 5 5 < 5 5 < 5 6 < 5 0 < 10	< 5 < 5 < 5 < 10	0.00 0.00 0.00 0.00	48000								
Hexachlorobutadiene PCB Congener 28 PCB Congener 52 PCB Congener 101 PCB Congener 118 PCB Congener 118	uq/kg mg/kg: 0 mg/kg: 0 mg/kg: 0	008 NON 008 NON	IE < 0.01 IE < 0.01	< 0.008	< 5 < 0.008 < 0.008 < 0.008 < 0.008 < 0.008	3 < 0.008 3 < 0.008 3 < 0.008 4 < 0.008	< 0.008 < 0.008 < 0.008	< 5 < 0.008 < 0.008 < 0.008	< 5 < 0.008 < 0.008 < 0.008	< 5 < 0.008 < 0.008 < 0.008	< 5 < 0.008 < 0.008 < 0.008	< 5 < 0.008 < 0.008 < 0.008	<pre>< 5 < 0.008 < 0.008 < 0.008 < 0.008 < 0.008 < 0.008</pre>	< 0.008 < 0.008 < 0.008	< 0.008 < 0.008 < 0.008	< 0.008 < 0.008 < 0.008	0.01 0.01 0.01	< 0.008 < 0.008 < 0.008	0.01 0.01 < 0.008	< 5 < 0.008 < 0.008 < 0.008	< 5 < 0.008 < 0.008 < 0.008 < 0.008	< 5 < 0.008 < 0.008 < 0.008 < 0.008	< 5 < 0.008 < 0.008 < 0.008	< 5 < 0.008 < 0.008 < 0.008	< < 0.00 < 0.00 < 0.00	2 > 2 8 8 8		< > < !		< 5	0.00 0.012 0.012 0.011	6600
PCB Congener 118 PCB Congener 118 PCB Congener 138 PCB Congener 153 PCB Congener 180 Total PCB (7 Congeners)	mg/kg: 0 mg/kg: 0 mg/kg: 0	008 NON 008 NON 008 NON 008 NON 008 NON	< 0.01	< 0.008	< 0.008 < 0.008 < 0.008 < 0.008 < 0.008 < 0.008 < 0.008 < 0.008 < 0.008	3 < 0.008	< 0.008 < 0.008 < 0.008 < 0.008 < 0.008	< 0.008 < 0.008 < 0.008 < 0.008 < 0.008	< 0.008 < 0.008 < 0.008 < 0.008 < 0.008	< 0.008 < 0.008 < 0.008 < 0.008 < 0.008	< 0.008 < 0.008 < 0.008 < 0.008 < 0.008	< 0.008 < 0.008 < 0.008 < 0.008 < 0.008 < 0.008 < 0.1	< 0.008	< 0.008	< 0.008 < 0.008 < 0.008 < 0.008 < 0.008	< 0.008 < 0.008 < 0.008 < 0.008 < 0.008	< 0.008 0.01 0.02 0.02	< 0.008 < 0.008 < 0.008 < 0.008 < 0.008	< 0.00 < 0.00 < 0.00 < 0.00 < 0.00	8					0 0.011 0.022 0.022 0							
Total PCB (7 Congeners)	ma/ka: 0 mg/kg <	008 NON 0.1 NON	IE < 0.01 IE < 0			< 0.008			< 0.008			< 0.008	< 0.008		< 0.08	< 0.1	< 0.1	< 0.1	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008			1	1		1 1		0.022	



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY

DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-03859

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	24/03/2021
Sample Scheduled Date:	25/03/2021
Report Issue Number:	1
Reporting Date:	31/03/2021

Authorised by:

Dave Ashworth

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. 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 except in full, without the prior written approval of the laboratory.





Soil Analysis Certificate - Speciated PAHs DETS Report No: 21-03859 Date Sampled 22/03/21 22/03/21													
		Date Sampled	22/03/21	22/03/21									
ultants Ltd		Time Sampled	None Supplied	None Supplied									
ane		TP / BH No	Source 2-1	Source 2-2									
	ŀ												
	D	IS Sample No	533875	533876									
Linit		Accorditation											
			2.22	2.12									
5 5													
5 5			-										
3.3													
0 0			-										
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0 0													
	< 1.6		9.6	7.3									
	ultants Ltd	ultants Ltd ane Image Image <tdimag< td=""><td>$\begin{tabular}{ c c c c } \hline Date Sampled \\ \hline Time Sampled \\ \hline Time Sampled \\ \hline TP / BH No \\ \hline Additional Refs \\ \hline Depth (m) \\ \hline DETS Sample No \\ \hline \\$</td><td>$\begin{tabular}{ c c c c c c } \hline Date Sampled 22/03/21 \\ \hline None Supplied ane TP / BH No Source 2-1 \\ \hline Additional Refs None Supplied \\ \hline Depth (m) None Supplied \\ \hline Depth (m) None Supplied \\ \hline DETS Sample No 533875 \\ \hline Unit RL Accreditation \\ \hline mg/kg < 0.1 MCERTS 2.33 \\ mg/kg < 0.1 MCERTS < 0.1 \\ mg/kg < 0.1 MCERTS < 0.1 \\ mg/kg < 0.1 MCERTS < 0.1 \\ mg/kg < 0.1 MCERTS 2.82 \\ \hline mg/kg < 0.1 MCERTS 0.1 \\ mg/kg < 0.1 MCERTS 0.1 \\ mg/kg < 0.1 MCERTS < 0.1 \\ mg/kg < 0.1 MCERTS 0.1 \\ mg/kg < 0.1$</td><td>$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$</td><td>Date Sampled$22/03/21$$22/03/21$ultants LtdTime SampledNone SuppliedNone SuppliedaneTP / BH NoSource 2-1Source 2-2Additional RefsNone SuppliedNone SuppliedDepth (m)None SuppliedNone SuppliedDETS Sample No533875533876UnitRLAccreditationmg/kg < 0.1</td>MCERTS2.332.12mg/kg < 0.1</tdimag<>	$\begin{tabular}{ c c c c } \hline Date Sampled \\ \hline Time Sampled \\ \hline Time Sampled \\ \hline TP / BH No \\ \hline Additional Refs \\ \hline Depth (m) \\ \hline DETS Sample No \\ \hline \\ $	$\begin{tabular}{ c c c c c c } \hline Date Sampled 22/03/21 \\ \hline None Supplied ane TP / BH No Source 2-1 \\ \hline Additional Refs None Supplied \\ \hline Depth (m) None Supplied \\ \hline Depth (m) None Supplied \\ \hline DETS Sample No 533875 \\ \hline Unit RL Accreditation \\ \hline mg/kg < 0.1 MCERTS 2.33 \\ mg/kg < 0.1 MCERTS < 0.1 \\ mg/kg < 0.1 MCERTS < 0.1 \\ mg/kg < 0.1 MCERTS < 0.1 \\ mg/kg < 0.1 MCERTS 2.82 \\ \hline mg/kg < 0.1 MCERTS 0.1 \\ mg/kg < 0.1 MCERTS 0.1 \\ mg/kg < 0.1 MCERTS < 0.1 \\ mg/kg < 0.1 MCERTS 0.1 \\ mg/kg < 0.1 $	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Date Sampled $22/03/21$ $22/03/21$ ultants LtdTime SampledNone SuppliedNone SuppliedaneTP / BH NoSource 2-1Source 2-2Additional RefsNone SuppliedNone SuppliedDepth (m)None SuppliedNone SuppliedDETS Sample No533875533876UnitRLAccreditationmg/kg < 0.1							





Soil Analysis Certificate	e - TPH CWG Bande	d						
DETS Report No: 21-038	59		Date Sampled	22/03/21	22/03/21	22/03/21	22/03/21	22/03/21
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	Source 12-1	Source 12-2	Source 12-3	Source 2-1	Source 2-2
Project / Job Ref: GJ049	/	Additional Refs	None Supplied	None Supplied	None Supplied		None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied		None Supplied
Reporting Date: 31/03/2	2021	D	ETS Sample No	533872	533873	533874	533875	533876
		D.						
Determinand	Unit	RL	Accreditation NONE	0.04	0.01	0.01	0.01	0.01
Aliphatic >C5 - C6	5 5	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8	5 5	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	5 5	< 2		< 2	< 2	< 2	132	88
Aliphatic >C10 - C12	mg/kg			< 2	< 2	< 2	374	308
Aliphatic >C12 - C16	5 5			< 3	< 3	< 3	1492	1197
Aliphatic >C16 - C21	mg/kg			< 3	< 3	< 3	1621	1206
Aliphatic >C21 - C34	mg/kg	< 10		< 10	< 10	< 10	458	360
Aliphatic (C5 - C34)	mg/kg			< 21	< 21	< 21	4077	3159
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8		< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	27	38
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	190	173
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	< 2	< 2	1333	1040
Aromatic >C16 - C21	mg/kg	< 3		< 3	< 3	< 3	1357	1041
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	< 10	< 10	< 10	324	236
Aromatic (C5 - C35)	mg/kg	< 21	NONE	< 21	< 21	< 21	3232	2528
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42	< 42	7309	5687





Soil Analysis Certificate -	BTEX / MTBE							
DETS Report No: 21-03859	9		Date Sampled	22/03/21	22/03/21	22/03/21	22/03/21	22/03/21
G & J Geoenvironmental Co	onsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemor		TP / BH No	Source 12-1	Source 12-2	Source 12-3	Source 2-1	Source 2-2	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 31/03/20	21	DI	ETS Sample No	533872	533873	533874	533875	533876
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	176
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	279
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate	e - Volatile Organic (Compo	unds (VOC)					
DETS Report No: 21-0385			Date Sampled	22/03/21	22/03/21	22/03/21	22/03/21	22/03/21
G & J Geoenvironmental (Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	Source 8-1	Source 8-2	Source 12-1	Source 12-2	Source 12-3
Project / Job Ref: GJ049		A	dditional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 31/03/2	2021	DE	TS Sample No	533870	533871	533872	533873	533874
Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chloromethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromomethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethene MTBE	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	< 5 < 5	< 5
trans-1,2-Dichloroethene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,1-Trichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloropropene	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Trichloroethene	ug/kg	< 5	MCERTS	9	< 5	< 5	< 5	12
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
TAME	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene 1,1,2-Trichloroethane	ug/kg ug/kg	< 5 < 10	MCERTS MCERTS	< 5 < 10				
1,3-Dichloropropane	ug/kg ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Styrene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
n-Propylbenzene Bromobenzene	ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5	< 5	< 5	< 5
2-Chlorotoluene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5 < 5	< 5 < 5	< 5 < 5	< 5 < 5
1,3,5-Trimethylbenzene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate				00/00/01	00/00/		
DETS Report No: 21-0385 G & J Geoenvironmental (Date Sampled Time Sampled	22/03/21	22/03/21		
Site Reference: Middlemo				None Supplied	None Supplied		
Site Reference: Middlemo	ore Lane		TP / BH No	Source 7-1	Source 7-2		
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied		
Order No: None Supplied			Depth (m)	None Supplied	None Supplied		
Reporting Date: 31/03/2	2021	DE	TS Sample No	533877	533878		
Determinand	Unit		Accreditation	-	-		
Dichlorodifluoromethane Vinyl Chloride	ug/kg	< 5 < 5	MCERTS MCERTS	< 5	< 5		
Chloromethane	ug/kg ug/kg	< 10	MCERTS	< 5 < 10	< 5 < 10		
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5		
Bromomethane	ug/kg	< 10	MCERTS	< 10	< 10		
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5	< 5		
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5		
MTBE	ug/kg	< 5	MCERTS	< 5	< 5		
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5		
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5		
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5		
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5		
Chloroform	ug/kg	< 5	MCERTS MCERTS	< 5	< 5	├───┤	
Bromochloromethane 1,1,1-Trichloroethane	ug/kg ug/kg	< 5 < 5	MCERTS	< 5 < 5	< 5	<u> </u>	1
1,1-Dichloropropene	ug/kg ug/kg	< 10	MCERTS	< 10	< 10		
Carbon Tetrachloride	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	<u> </u>	1
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5		
Benzene	ug/kg	< 2	MCERTS	< 2	< 2		
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5		
Trichloroethene	ug/kg	< 5	MCERTS	< 5	12		
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5		
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5		
TAME	ug/kg	< 5	MCERTS	< 5	< 5		
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5		
Toluene trans-1,3-Dichloropropene	ug/kg ug/ka	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5		
1,1,2-Trichloroethane	ug/kg ug/kg	< 10	MCERTS	< 10	< 10		
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5		
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5	< 5		
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5		
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5	< 5		
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5		
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5		
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	< 2		
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2		
o-Xylene Styrene	ug/kg ug/ka	< 2 < 5	MCERTS MCERTS	< 2 < 5	< 2 < 5	├───┤	
Bromoform	ug/kg ug/kg	< 10	MCERTS	< 10	< 10	<u> </u>	
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	<u> </u>	
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5		
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5	< 5		
n-Propylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
Bromobenzene	ug/kg	< 5	MCERTS	< 5	< 5		
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5		
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5		
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	├───	
1,2,4-Trimethylbenzene sec-Butylbenzene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	├──── ╂	1
p-Isopropyltoluene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5		
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	<u> </u>	1
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5		1
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5		
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10		
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5		



Soil Analysis Certificate	- PCB (7 Congener	rs)						
DETS Report No: 21-0385	59		Date Sampled	22/03/21	22/03/21	22/03/21	22/03/21	22/03/21
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	Source 8-1	Source 8-2	Source 12-1	Source 12-2	Source 12-3
Project / Job Ref: GJ049		A	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 31/03/2	021	D	ETS Sample No	533870	533871	533872	533873	533874
Determinand	Unit	RL	Accreditation					
PCB Congener 28	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
PCB Congener 52	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
PCB Congener 101	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
PCB Congener 118		: 0.008		< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
PCB Congener 138	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
PCB Congener 153	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
PCB Congener 180	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
Total PCB (7 Congeners)	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1



Soil Analysis Certificate	- PCB (7 Congener	s)						
DETS Report No: 21-0385			Date Sampled	22/03/21	22/03/21	22/03/21	22/03/21	
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo		TP / BH No	Source 2-1	Source 2-2	Source 7-1	Source 7-2		
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	
Reporting Date: 31/03/2	021	D	ETS Sample No	533875	533876	533877	533878	
Determinand	Unit	RL	Accreditation					
PCB Congener 28	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	
PCB Congener 52	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	
PCB Congener 101	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	
PCB Congener 118	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	
PCB Congener 138	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	
PCB Congener 153	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	
PCB Congener 180	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	
Total PCB (7 Congeners)	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-03859	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 31/03/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
533870	Source 8-1	None Supplied	None Supplied	9.1	Light brown sandy clay with stones
533871	Source 8-2	None Supplied	None Supplied	8.8	Light brown sandy clay with stones
533872	Source 12-1	None Supplied	None Supplied	12.7	Brown sandy gravel with stones
533873	Source 12-2	None Supplied	None Supplied		Brown sandy gravel with stones and concrete
533874	Source 12-3	None Supplied	None Supplied	18.1	Brown sandy gravel with stones and concrete
533875	Source 2-1	None Supplied	None Supplied	9.6	Light brown sandy clay
533876	Source 2-2	None Supplied	None Supplied	8.2	Light brown sandy clay with stones
533877	Source 7-1	None Supplied	None Supplied	13.3	Brown sandy clay with stones
533878	Source 7-2	None Supplied	None Supplied	13.5	Brown sandy gravel with stones

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample^{1/S} Unsuitable Sample^{U/S}





pil Analysis Certificate - Methodology & Miscellaneous Information
ETS Report No: 21-03859
& J Geoenvironmental Consultants Ltd
te Reference: Middlemore Lane
oject / Job Ref: GJ049
rder No: None Supplied
eporting Date: 31/03/2021

Soil Soil Soil Soil Soil Soil Soil Soil	On D AR D AR AR AR AR AR AR AR AR AR AR AR AR D AR AR D AR AR D D D D	BTEX Cations Chloride - Water Soluble (2:1) Chromium - Hexavalent Cyanide - Complex Cyanide - Free Cyanide - Free Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40)	Determination of chloride by extraction with water & analysed by ion chromatography Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry Determination of free cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry	No E012 E001 E002 E009 E016 E015 E015 E015 E015 E011 E004 E022 E023
Soil Soil Soil Soil Soil Soil Soil Soil	D D AR AR AR AR AR AR AR AR AR AR D AR AR D D D D	BTEX Cations Chloride - Water Soluble (2:1) Chromium - Hexavalent Cyanide - Complex Cyanide - Free Cyanide - Free Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40)	Determination of BTEX by headspace GC-MS Determination of cations in soil by aqua-regia digestion followed by ICP-OES Determination of chloride by extraction with water & analysed by ion chromatography Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry Determination of complex cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement	E002 E009 E016 E015 E015 E015 E011 E004 E022 E023
Soil Soil Soil Soil Soil Soil Soil Soil	D D AR AR AR AR AR AR AR AR AR AR D AR AR D D D D	Cations Chloride - Water Soluble (2:1) Chromium - Hexavalent Cyanide - Complex Cyanide - Free Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40)	Determination of cations in soil by aqua-regia digestion followed by ICP-OES Determination of chloride by extraction with water & analysed by ion chromatography Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry Determination of free cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement	E009 E016 E015 E015 E011 E004 E022 E023
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR AR D AR AR AR AR AR AR AR D D D D	Chloride - Water Soluble (2:1) Chromium - Hexavalent Cyanide - Complex Cyanide - Free Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40)	Determination of chloride by extraction with water & analysed by ion chromatography Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry Determination of complex cyanide by distillation followed by colorimetry Determination of free cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement	E016 E015 E015 E015 E011 E004 E022 E023
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR D AR AR AR AR AR AR AR D D D D	Chromium - Hexavalent Cyanide - Complex Cyanide - Free Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40)	1.5 diphenylcarbazide followed by colorimetry Determination of complex cyanide by distillation followed by colorimetry Determination of free cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement	E015 E015 E015 E011 E004 E022 E023
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR D AR AR AR AR AR AR D AR D D D	Cyanide - Free Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40)	Determination of complex cyanide by distillation followed by colorimetry Determination of free cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement	E015 E015 E011 E004 E022 E023
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR D AR AR AR AR AR AR D AR D D D	Cyanide - Free Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40)	Determination of free cyanide by distillation followed by colorimetry Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement	E015 E015 E011 E004 E022 E023
Soil Soil Soil Soil Soil Soil Soil Soil	D AR AR AR D AR AR AR D D D	Cyanide - Total Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40)	Determination of total cyanide by distillation followed by colorimetry Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement	E011 E004 E022 E023
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR D AR AR AR D D D D	Cyclohexane Extractable Matter (CEM) Diesel Range Organics (C10 - C24) Electrical Conductivity Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 - C40)	Gravimetrically determined through extraction with cyclohexane Determination of hexane/acetone extractable hydrocarbons by GC-FID Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement	E004 E022 E023
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR D AR AR AR D D D	Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 – C40)	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement	E022 E023
Soil Soil Soil Soil Soil Soil Soil Soil	AR D AR AR AR D D	Electrical Conductivity Electrical Conductivity Elemental Sulphur EPH (C10 – C40)	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil Soil Soil Soil Soil Soil Soil Soil	D AR AR AR D D	Elemental Sulphur EPH (C10 – C40)		
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR AR D D	EPH (C10 – C40)	Determination of elemental sulphur by solvent extraction followed by GC-MS	FO - -
Soil Soil Soil Soil Soil Soil Soil Soil	AR AR D D			E020
Soil Soil Soil Soil Soil Soil Soil Soil	AR D D	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil Soil Soil Soil Soil Soil Soil	D D		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil Soil Soil Soil Soil Soil Soil	D D	EPH TEXAS (C6-C8, C8-C10, C10-C12,	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	E004
Soil Soil Soil Soil Soil Soil Soil	D	C12-C16, C16-C21, C21-C40)	headspace GC-MS	E004
Soil Soil Soil Soil Soil Soil		Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil Soil Soil Soil Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil Soil Soil Soil	-	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil Soil Soil	D		Determination of TOC by combustion analyser.	E027
Soil Soil	AR		Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D		Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR		Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCI followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR		Determination of sulphide by distillation followed by colorimetry	E018
Soil	D		Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR		Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (11) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34,	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil		VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of volatile organic compounds by neadspace de Mo	

D Dried AR As Received



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-04103

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	30/03/2021
Sample Scheduled Date:	30/03/2021
Report Issue Number:	1
Reporting Date:	08/04/2021

Authorised by:

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. 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 except in full, without the prior written approval of the laboratory.





Soil Analysis Certificate					
DETS Report No: 21-04103	Date Sampled	25/03/21	25/03/21		
G & J Geoenvironmental Consultants Ltd	Time Sampled	None Supplied	None Supplied		
Site Reference: Middlemore Lane	TP / BH No	Source 11-1	Source 11-2		
Project / Job Ref: GJ049	Additional Refs	None Supplied	None Supplied		
Order No: None Supplied	Depth (m)	0.10 - 1.00	0.50 - 1.50		
Reporting Date: 08/04/2021	DETS Sample No	534863	534864		

Determinand	Unit	RL	Accreditation				
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Detected		
					Chrysotile		
					present in		
	Material Truck	N/a	NONE		microscopic loose		
Sample Matrix ^(S)	Material Type				fibrous asbestos		
					debris and		
					bundles		
Asbestos Type (S)	PLM Result	N/a	ISO17025		Chrysotile		
рН	pH Units	N/a	MCERTS	7.5	7.5		
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2		
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	1237	863		
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.12	0.09		
Sulphide	mg/kg	< 5	NONE	< 5	< 5		
Organic Matter	%	< 0.1	MCERTS	3.3	1.2		
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	1.9	0.7		
Arsenic (As)	mg/kg	< 2	MCERTS	15	10		
W/S Boron	mg/kg	< 1	NONE	2.1	< 1		
Cadmium (Cd)	mg/kg	< 0.2	NONE	1.7	5.1		
Chromium (Cr)	mg/kg	< 2	MCERTS	20	741		
Copper (Cu)	mg/kg	< 4	MCERTS	895	3440		
Lead (Pb)	mg/kg	< 3	MCERTS	104	312		
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1		Ī
Nickel (Ni)	mg/kg	< 3	MCERTS	34	544		
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3		Ī
Zinc (Zn)	mg/kg	< 3	MCERTS	946	3550		
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2		
EPH (C10 - C40)	mg/kg	< 6	MCERTS	12	148		

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion Subcontracted analysis (S)





Soil Analysis Certificate	- Speciated PAHs							
DETS Report No: 21-0410	03	Date Sampled		25/03/21	25/03/21	25/03/21	25/03/21	25/03/21
G & J Geoenvironmental Consultants Ltd			Time Sampled	None Supplied				
Site Reference: Middlemo	Middlemore Lane TP / BH No		Source 3-1	Source 3-2	Source 11-1	Source 11-2	Source 4-1	
Project / Job Ref: GJ049			Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	0.10 - 1.00	0.10 - 0.90	0.10 - 1.00	0.50 - 1.50	0.10 - 1.00
Reporting Date: 08/04/2	021	DI	ETS Sample No	534861	534862	534863	534864	534865
Determinand	Unit	RL						
Naphthalene	5 5	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	0.22	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	0.58	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	mg/kg	< 0.1	MCERTS	0.59	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.28	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg	< 0.1	MCERTS	0.28	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.30	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.12	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.21	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	2.6	< 1.6	< 1.6	< 1.6	< 1.6





Soil Analysis Certificate	- Speciated PAHs						
DETS Report No: 21-0410)3		Date Sampled	25/03/21	25/03/21	25/03/21	
G & J Geoenvironmental Consultants Ltd			Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	Source 4-2	Source 9-1	Source 9-2	
							_
Project / Job Ref: GJ049		ŀ	Additional Refs	None Supplied	None Supplied	None Supplied	
Order No: None Supplied	001	DI	Depth (m)	0.50 - 1.20	0.10 - 1.00	0.10 - 1.00	_
Reporting Date: 08/04/2	021	Di	ETS Sample No	534866	534869	534870	
Determinand	Unit	DL	Accreditation				I
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	-
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	-
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	-
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	 _
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	-
Fluoranthene	mg/kg	< 0.1	MCERTS	0.24	< 0.1	< 0.1	 _
Pyrene	mg/kg	< 0.1	MCERTS	0.24	< 0.1	< 0.1	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	





Soil Analysis Certificate - TPH CWG Bande	d						
DETS Report No: 21-04103		Date Sampled	25/03/21	25/03/21	25/03/21	25/03/21	25/03/21
G & J Geoenvironmental Consultants Ltd	Time Sampled		None Supplied				
Site Reference: Middlemore Lane		TP / BH No	Source 3-1	Source 3-2	Source 11-1	Source 11-2	Source 4-1
Project / Job Ref: GJ049	ŀ	Additional Refs	None Supplied				
Order No: None Supplied	D.	Depth (m)	0.10 - 1.00	0.10 - 0.90	0.10 - 1.00	0.50 - 1.50	0.10 - 1.00
Reporting Date: 08/04/2021	DI	ETS Sample No	534861	534862	534863	534864	534865
Determinand Unit	RL	Accreditation					
Aliphatic >C5 - C6 mg/kg		NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8 mg/kg			< 0.05	< 0.01	< 0.01	< 0.01	< 0.05
Aliphatic >C8 - C10 mg/kg	< 0.05		-	< 0.03	< 0.03	< 0.03	< 0.05
	< 2		< 2 < 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12 mg/kg Aliphatic >C12 - C16 mg/kg			< 2	< 2	< 2	< 2	< 2
Aliphatic >C16 - C21 mg/kg	< 3		< 3	< 3	< 3	< 3	< 3
	< 10		50	< 10	< 10	< 3	< 10
Aliphatic >C21 - C34 mg/kg Aliphatic (C5 - C34) mg/kg			50 67	< 10	< 10	< 21	< 21
Aromatic >C5 - C7 mg/kg		NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8 mg/kg			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10 mg/kg	< 0.00	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12 mg/kg	< 2		< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16 mg/kg	< 2	MCERTS	2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21 mg/kg	< 3		11	< 3	< 3	< 3	< 3
Aromatic >C21 - C35 mg/kg			14	< 10	< 10	< 10	< 10
Aromatic (C5 - C35) mg/kg		NONE	28	< 21	< 21	< 21	< 21
Total >C5 - C35 mg/kg	< 42	NONE	94	< 42	< 42	< 42	< 42





Soil Analysis Certificate	- TPH CWG Bande	d						
DETS Report No: 21-041	03		Date Sampled	25/03/21	25/03/21	25/03/21	25/03/21	25/03/21
G & J Geoenvironmental Consultants Ltd			Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	Source 4-2	Source 14-1	Source 14-2	Source 9-1	Source 9-2
Project / Job Ref: GJ049			Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	0.50 - 1.20	0.10 - 1.00	0.10 - 1.00	0.10 - 1.00	0.10 - 1.00
Reporting Date: 08/04/2	021	D	ETS Sample No	534866	534867	534868	534869	534870
Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	mg/kg		NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8	mg/kg	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	3
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	38
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	10	55
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 10	< 10	89	250
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	< 21	< 21	< 21	99	346
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	10
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	4	34
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	< 10	< 10	< 10	51	122
Aromatic (C5 - C35)	mg/kg		NONE	< 21	< 21	< 21	55	166
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42	< 42	155	512





Soil Analysis Certificate -	- BTEX / MTBE							
DETS Report No: 21-04103	3	Date Sampled		25/03/21	25/03/21	25/03/21	25/03/21	25/03/21
G & J Geoenvironmental Co	onsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemor	Reference: Middlemore Lane TP / BH No		Source 3-1	Source 3-2	Source 11-1	Source 11-2	Source 4-1	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied				
Order No: None Supplied	Order No: None Supplied		Depth (m)	0.10 - 1.00	0.10 - 0.90	0.10 - 1.00	0.50 - 1.50	0.10 - 1.00
Reporting Date: 08/04/20)21	DETS Sample No		534861	534862	534863	534864	534865
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate	- BTEX / MTBE							
DETS Report No: 21-0410	DETS Report No: 21-04103			25/03/21	25/03/21	25/03/21	25/03/21	25/03/21
G & J Geoenvironmental C	onsultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemore Lane TP /			TP / BH No	Source 4-2	Source 14-1	Source 14-2	Source 9-1	Source 9-2
Project / Job Ref: GJ049		/	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	0.50 - 1.20	0.10 - 1.00	0.10 - 1.00	0.10 - 1.00	0.10 - 1.00
Reporting Date: 08/04/2021			ETS Sample No	534866	534867	534868	534869	534870
Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	7	< 2	34	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	11	6	58	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	14	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





DETS Report No: 21-0410	- Volatile Organic (Date Sampled	25/03/21	25/03/21	25/03/21	25/03/21	
G & J Geoenvironmental Consultants Ltd			Time Sampled	None Supplied		None Supplied	25/03/21 None Supplied	
Site Reference: Middlemo			TP / BH No	Source 14-1	None Supplied Source 14-2	Source 9-1	Source 9-2	
Site Reference. Midulerito	Die Laile		IF / BITNU	30urce 14-1	3001CE 14-2	Source 9-1	3001CE 9-2	
Project / Job Ref: GJ049		Д	dditional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	0.10 - 1.00	0.10 - 1.00	0.10 - 1.00	0.10 - 1.00	
Reporting Date: 08/04/2	021	DE	TS Sample No	534867	534868	534869	534870	
Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Chloromethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromomethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1-Dichloroethene MTBE	ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	< 5	
trans-1,2-Dichloroethene	ug/kg ug/kg	< 5 < 5	MCERTS	< 5	< 5	< 5	< 5 < 5	
1,1-Dichloroethane	0 0	< 5 < 5	MCERTS	< 5	< 5	< 5	< 5	
cis-1,2-Dichloroethene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
2,2-Dichloropropane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1,1-Trichloroethane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1-Dichloropropene	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Trichloroethene	ug/kg	< 5	MCERTS	7	8	< 5	6	
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
TAME	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	6	
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	L
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	34	< 2	< 2	
m,p-Xylene	ug/kg	< 2	MCERTS	6	58	< 2	< 2	
o-Xylene	ug/kg	< 2	MCERTS MCERTS	< 2	14 < 5	< 2 < 5	< 2	
Styrene Bromoform	ug/kg ug/kg	< 5 < 10	MCERTS	< 5 < 10	< 5 < 10	< 10	< 5 < 10	
Isopropylbenzene	ug/kg ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2,3-Trichloropropane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
n-Propylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	146	< 5	< 5	
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	11	< 5	< 5	
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	



Soil Analysis Certificate	- PCB (7 Congener	s)						
DETS Report No: 21-04103		Date Sampled		25/03/21	25/03/21	25/03/21	25/03/21	25/03/21
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	Source 3-1	Source 3-2	Source 11-1	Source 11-2	Source 4-1
Project / Job Ref: GJ049		A	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	0.10 - 1.00	0.10 - 0.90	0.10 - 1.00	0.50 - 1.50	0.10 - 1.00
Reporting Date: 08/04/2	021	DE	TS Sample No	534861	534862	534863	534864	534865
Determinand	Unit	RL	Accreditation					
PCB Congener 28	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	0.011	< 0.008
PCB Congener 52	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	0.011	< 0.008
PCB Congener 101	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	0.011	< 0.008
PCB Congener 118	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
PCB Congener 138	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	0.011	< 0.008
PCB Congener 153	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	0.022	< 0.008
PCB Congener 180	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	0.022	< 0.008
Total PCB (7 Congeners)	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1



Soil Analysis Certificate	- PCB (7 Congener	s)						
DETS Report No: 21-04103		Date Sampled		25/03/21	25/03/21	25/03/21	25/03/21	25/03/21
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	Source 4-2	Source 14-1	Source 14-2	Source 9-1	Source 9-2
Project / Job Ref: GJ049		A	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	0.50 - 1.20	0.10 - 1.00	0.10 - 1.00	0.10 - 1.00	0.10 - 1.00
Reporting Date: 08/04/2	021	D	ETS Sample No	534866	534867	534868	534869	534870
Determinand	Unit	RL	Accreditation					
PCB Congener 28	mg/kg	0.008	NONE	0.012	< 0.008	< 0.008	< 0.008	< 0.008
PCB Congener 52	mg/kg	0.008	NONE	0.012	< 0.008	< 0.008	< 0.008	< 0.008
PCB Congener 101	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
PCB Congener 118	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
PCB Congener 138	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
PCB Congener 153	mg/kg	0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
PCB Congener 180	mg/kg	: 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
Total PCB (7 Congeners)	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-04103	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 08/04/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
534861	Source 3-1	None Supplied	0.10 - 1.00	14	Brown loamy sand with stones and brick
534862	Source 3-2	None Supplied	0.10 - 0.90	11.7	Brown loamy sand with stones and concrete
534863	Source 11-1	None Supplied	0.10 - 1.00		Brown loamy sand with brick and concrete
534864	Source 11-2	None Supplied	0.50 - 1.50	9.4	Brown sandy gravel with stones and concrete
534865	Source 4-1	None Supplied	0.10 - 1.00	10.2	Brown sandy clay with stones
534866	Source 4-2	None Supplied	0.50 - 1.20		Brown sandy clay with stones
534867	Source 14-1	None Supplied	0.10 - 1.00	10	Brown sandy gravel with stones and concrete
534868	Source 14-2	None Supplied	0.10 - 1.00		Brown sandy clay with stones and concrete
534869	Source 9-1	None Supplied	0.10 - 1.00		Brown sandy gravel with stones and concrete
534870	Source 9-2	None Supplied	0.10 - 1.00	12.4	Brown loamy sand with brick and concrete

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample^{1/S}

Insufficient Sample^{1/S} Unsuitable Sample^{U/S}





Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 21-04103
G & J Geoenvironmental Consultants Ltd
Site Reference: Middlemore Lane
Project / Job Ref: GJ049
Order No: None Supplied
Reporting Date: 08/04/2021

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR		Determination of BTEX by headspace GC-MS	E001
Soil	D		Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E001
Soil	D		Determination of cations in soil by aqua-regia digestion followed by fcP-0ES Determination of chloride by extraction with water & analysed by ion chromatography	E002
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of	E016
			1,5 diphenylcarbazide followed by colorimetry	
Soil	AR		Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D		Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
			Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	
Soil	AR	C12-C16, C16-C21, C21-C40)		E004
Soil	D		Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of TOC by combustion analyser.	E009
Soil	D		Determination of TOC by combustion analyser.	E027 E027
			Determination of TOC by combustion analyser.	
Soil	D		Determination of 100 by combustion analyser. Determination of ammonium by discrete analyser.	E027
Soil	AR	Exchangeable Ammonium		E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D		Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (11) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Condeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D		Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR		Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR		Determination of phenols by distillation followed by colorimetry	E021
Soil	D		Determination of phosphate by extraction with water & analysed by ion chromatography	E021
Soil	D		Determination of phosphate by extraction with water & analysed by for chloratography Determination of total sulphate by extraction with 10% HCI followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of water soluble sulphate by extraction with water & analysed by for chroniatography Determination of water soluble sulphate by extraction with water followed by ICP-OES	E009 E014
Soil	AR		Determination of sulphide by distillation followed by colorimetry	E014 E018
Soil	D		Determination of sulphide by distillation followed by colorimetry Determination of total sulphur by extraction with agua-regia followed by ICP-OES	E018 E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by	E024
Soil	AR	Thiocyanate (as SCN)	GC-MS Determination of thiocyanate by extraction in caustic soda followed by acidification followed by	E017
			addition of ferric nitrate followed by colorimetry	
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR		Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR		Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR		Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001
	Dried			

D Dried AR As Received



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY

DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-04204

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	31/03/2021
Sample Scheduled Date:	31/03/2021
Report Issue Number:	1
Reporting Date:	08/04/2021

Authorised by:

Dave Ashworth

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. 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 except in full, without the prior written approval of the laboratory.





Soil Analysis Certificate		Compo		00/00/01	001001-		
DETS Report No: 21-0420			Date Sampled	30/03/21	30/03/21		
G & J Geoenvironmental Consultants Ltd		Time Sampled		None Supplied	None Supplied		-
Site Reference: Middlemore Lane			TP / BH No	Source7-3	Source7-4		
Project / Job Ref: GJ049		A	dditional Refs	None Supplied	None Supplied		
Order No: None Supplied			Depth (m)	0.10 - 1.00	0.10 - 0.90		
Reporting Date: 08/04/2	2021	DE	TS Sample No	535201	535202		
Determinand	Unit	RL	Accreditation				
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5		
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5		
Chloromethane	ug/kg	< 10	MCERTS	< 10	< 10		-
Chloroethane Bromomethane	ug/kg ug/kg	< 5 < 10	MCERTS MCERTS	< 5 < 10	< 5 < 10		-
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 10	< 10		-
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5		-
MTBE	ug/kg	< 5	MCERTS	< 5	< 5		-
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5		
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5		
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5		
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5		
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5		
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	 	
1,1,1-Trichloroethane	ug/kg	< 5	MCERTS	< 5	< 5		
1,1-Dichloropropene	ug/kg	< 10	MCERTS	< 10	< 10		_
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5	< 5		-
1,2-Dichloroethane Benzene	ug/kg ug/kg	< 5	MCERTS MCERTS	< 5 < 2	< 5		-
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5		-
Trichloroethene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5		-
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5		
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5		
TAME	ug/kg	< 5	MCERTS	< 5	< 5		
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5		
Toluene	ug/kg	< 5	MCERTS	< 5	< 5		
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5		_
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10		_
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5		-
Tetrachloroethene Dibromochloromethane	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5		-
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5	< 5		-
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5		-
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5		
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	< 2		
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2		
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2		
Styrene	ug/kg	< 5	MCERTS	< 5	< 5		_
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10	├ ─── │	
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	├ ─── │	
1,2,3-Trichloropropane n-Propylbenzene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5		
Bromobenzene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5		
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	<u> </u>	1
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5		1
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5		
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5		_
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5		
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5		
1,2-Dichlorobenzene ,2-Dibromo-3-chloropropane	ug/kg	< 5 < 10	MCERTS MCERTS	< 5 < 10	< 5 < 10		
Hexachlorobutadiene	ug/kg ug/kg	< 10	MCERTS	< 10	< 10	<u> </u>	
riexactiioroputadiene	ug/Kg	< 0	IVICER IS	< 0	< 5		1



Soil Analysis Certificate - PCB (7 Congeners)										
DETS Report No: 21-0420)4		Date Sampled	30/03/21	30/03/21					
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied					
Site Reference: Middlemo	ore Lane		TP / BH No	Source7-3	Source7-4					
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied					
Order No: None Supplied			Depth (m)	0.10 - 1.00	0.10 - 0.90					
Reporting Date: 08/04/2	021	DE	TS Sample No	535201	535202					
Determinand	Unit	RL	Accreditation							
PCB Congener 28	mg/kg	0.008	NONE	< 0.008	< 0.008					
PCB Congener 52	mg/kg	0.008	NONE	< 0.008	< 0.008					
PCB Congener 101	mg/kg	0.008	NONE	< 0.008	< 0.008					
PCB Congener 118		0.008		< 0.008	< 0.008					
PCB Congener 138	mg/kg	0.008	NONE	< 0.008	< 0.008					
PCB Congener 153	mg/kg	0.008	NONE	< 0.008	< 0.008					
PCB Congener 180	mg/kg	0.008	NONE	< 0.008	< 0.008					
Total PCB (7 Congeners)	mg/kg	< 0.1	NONE	< 0.1	< 0.1					





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DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
535201	Source7-3	None Supplied	0.10 - 1.00	6.7	Brown sandy gravel with stones
535202	Source7-4	None Supplied	0.10 - 0.90	9.7	Brown sandy gravel with stones

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample ^{I/S} Unsuitable Sample ^{I/S}





Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 21-04204	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 08/04/2021	

Sol D Biorn Wort South Determination of solar stable issues in a bit 2.1 bit water etter. (Direct by the Construction of the Constru	Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soli A2 EIIE Ideministion of BiLEX by histologics (2.5.4) Soli D Chiorale - Water Soulak (2.1) Chiorale - Water Soulak (2.1) Soli A2 Chiorale - Water Soulak (2.1) Description of those of the chioral (2.1) Chiorale - Water Soulak (2.1) Soli A2 Chiorale - Water Soulak (2.1) Description of those of the chiorale (2.1) Chiorale - Water Soulak (2.1) Soli A3 Chiorale - Water Soulak (2.1) Description of those of the chiorale (2.1) Chiorale - Water Soulak (2.1) Soli A3 Chiorale - Water Soulak (2.1) Chiorale (1.1) Chiorale - Water Soulak (2.1) Soli A3 Chiorale (1.1) Soular (1.1) Chiorale - Water Soulak (2.1) Soli A3 Chiorale (1.1) Soular (1.1) Chiorale (1.1) Chiorale - Water Soulak (2.1) Soli A3 Desal farge Chiarole (2.1) Description of electrical conductive by description of source biorale (2.1) Description (2.1) Soli A3 Electrical Conductive biorale (2.1) Description of electrical conductive biorale (2.1) Description (2.1) Soli A4 Electrical Conductive (2.1) D	Soil		Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 bot water extract followed by ICP-OES	E012
Soli D Catters Determination of actions in sull by assure respiration forthered by color forthered by action with water analysed by ion chromatography Soli A.R Chronium - Heavalein Distribution of those select actions in sull by cateration in water analysed by color instru- Soli A.R Chronium - Heavalein Distribution of the controls in solid protection with water actions in sull by cateration in water and the control by color instru- Soli A.R Chronium - Heavalein Distribution of the controls in sull solid and the control by color instruction Soli A.R Chronium - Heavalein Distribution of the controls in solid solid analysis of the control by color instruction by the control by color instruction by the control by color instruction by the control by the control by color instruction by the control by					E001
Soil D Cholode - Value Soudie (2.1) Determination of chosened thronomum in soil by activation where then by indiffusition, addite is determined in the source of the sour					E002
Soli Air Chordian - Hostication (Line) Soli Air Cyunide - Direction of Camparity developed by definition followed by colorimetry Soli Air Cyunide - Tree Direction of Camparity developed by colorimetry Soli Air Cyunide - Tree Direction of Camparity developed by colorimetry Soli Air Cyunide - Tree Direction of Camparity developed by colorimetry Soli Air Direct Region Direction (Camparity developed by colorimetry) Soli Air Direct Region Direction (Camparity developed by colorimetry) Soli Air Electrical Conductivity Direction Status developed by colorimetry of the col					E009
Soli AR Conside Conside <thconsid< th=""> <thconsid< th=""> <thconside< td="" th<=""><td>Soil</td><td>AR</td><td></td><td>Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of</td><td>E016</td></thconside<></thconsid<></thconsid<>	Soil	AR		Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of	E016
Soli AR Cyanda - Free Determination of the cyanida by distillation followed by continuity Soli D Cyanda - Free Determination of the cyanida by distillation followed by continuity Soli D Cyanda - Free Determination of the size patients by distillation followed by continuity Soli AR Disset Range Organis CCP - 22) Determination of the size patients by distillation of the size patients and size patient and size patients and size patient and size patient and size pa	Soil	AR	Cvanide - Complex		E015
Sold AR Cyacities - Total Determination of traits lyanishing by distillation fellowed by CGFID Sold AR Diesel Range Organics (C10 - C24) Determination of hexare/acctore extractable hydrocarbons by GC FID Sold AR Electrical Conductivity Determination of hexare/acctore extractable hydrocarbons by GC FID Sold AR Electrical Conductivity Determination of electrical accoductivity by addition of water followed by electrometric measurement Sold AR Electrical Conductivity Determination of electrical accoductivity by addition of water followed by GC MS Sold AR EMERTICID - GGD Determination of electrical accoductivity by addition of water followed by electrometric measurement Sold AR EMERTICID - GGD Determination of electron-base extractable hydrocarbons by GC-FID Sold AR EMERTICID - GGD Determination of Tota CV combastion analyser Sold D Fraction Organic Carbon (FGO) Determination of analyser Sold D Fraction Organic Carbon (FGO) Determination of analyser Sold D Fraction Organic Carbon (FGO) Determination of analyser Sold D Fraction Organic Carbon (FGO)					E015
Soil D Cyclomicane Extractable Matter (CEM) Cavimetrically determined through extraction with cyclometers by C2-FD Soil AR Disel Range Organics (CF) - C23) Determination of hexarehoutine extractable hydrocarbons by C2-FD Soil AR Description of the construction of hexarehoutine extractable hydrocarbons by C2-FD Soil AR Description of the construction of hexarehoutine extractable hydrocarbons by C2-FD Soil AR Effection Conductivity Determination of electrical conductivity Dy addition of water followed by electronetric measurem Soil AR Effection Conductivity Determination of acotran-histone electrical by determination of the conductivity Dy addition of water followed by C2-FD followed by electronetric measurem Soil AR Effection CG (C) acotranetric measurem distruction of the conductivity Dy addition of water distruction by C2-FD followed by electronetric measurem Soil D France Epile (C) C (C) (C) (C) (C) (C) (C) (C) (C) (Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil AR Electrical conductivity Determination of alconical conductivity by addition of saturated calclum suphate followed by determination of electrical conductivity by addition of water followed by electrometric measurem Soil AR Electrical Conductivity Determination of electrical conductivity by addition of water followed by electrometric measurem Soil AR EPH (TCA) Conductivity Determination of actionablesane extractable hydrocarbons by C2-10 Soil AR EPH TEXAS (C6-C8; C6-10; C1-12; Determination of actionablesane extractable hydrocarbons by C2-10 Soil AR EPH TEXAS (C6-C8; C6-10; C1-12; Determination of actionablesane extractable hydrocarbons by C2-10 Soil AR EPH TEXAS (C6-C8; C6-10; C1-12; Determination of 10C by combustion analysed; Soil D Fraction Organic Carbon Determination of 10C by combustion analysed; Soil D Fraction Organic Carbon Determination of regrain carbon by odditing with potassium dichromate followed by transition analysed; Soil D Loss on lightion @ 4500; Determination of regrain carbon by odditing with potassium dichromate followed by LCP OES Soil D Migraeiam. Migraeiam. Determination of reals by soils regrainables. Soil AR Migraeiam. <td< td=""><td>Soil</td><td>D</td><td>Cyclohexane Extractable Matter (CEM)</td><td>Gravimetrically determined through extraction with cyclohexane</td><td>E011</td></td<>	Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soli AR Electrical Conductivity Determination of electrical conductivity by addition of water followed by electrometric measurement Soli D Electrical Conductivity Determination of electrical conductivity by addition of water followed by CC-MS Soli AR EPH (CL0 – C40) Determination of electrical conductivity by addition of water followed by CC-MS Soli AR EPH (CL0 – C40) Determination of acctone/hexane extractable hydrocarbons by CC-IID for C8 to C40. C6 to C8 by C12. C16. C12. C12. C16. C12. C12. C14. Distance and set. Soli AR EPH TEXAS (C6.68, C6.10. C10. C10. C12. Determination of TCC by combustion analyse: Soli D Fraction Carbon Campatic Mather (SAM) Determination of TCC by combustion analyse: Soli D Fraction Carbon Campatic Mather (SAM) Determination of TCC by combustion analyse: Soli D Fraction Carbon Campatic Mather (SAM) Determination of TCC by combustion analyse: Soli D Fraction Carbon Campatic Mather (SAM) Determination of TCC by combustion analyse: Soli D Fraction Carbon Campatic Mather (SAM) Determination of TCC by combustion analyse: Soli D Fraction analyse: Determination of tactis by qualar-	Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil D Elemental Subtry Determination of elemental subtry by solvent extraction followed by GC-MS Soil AR EPH (Cu) – G0 Determination of elemental subtry by solvent extractable hydrocatabons by GC-IID Soil AR EPH (Cu) – G0 Determination of elemental subtry by solvent extractable hydrocatabons by GC-IID Soil AR EPH TASS (Cu-C) (CI - CU), CU - CO) weakboxes (CL - SU - CU) to CB	Soil	AR	Electrical Conductivity	5 5	E022
Soil AR EPH (C10 - C40) Determination of actional/hourse extractable hydrocarbons by CC-F10 Soil AR EPH TEXAS (Co-C6, CB-C10, C10-C12) Determination of actional/hourse extractable hydrocarbons by CC-F10 Soil D FPH TEXAS (Co-C6, CB-C10, C10-C12) Determination of actional/hourse extractable hydrocarbons by CC-F10 Soil D FRunchie Water Soluble Determination of ToC by combusition analyser. Soil D FORC (Traction Organic Carbon) Determination of ToC by combusition analyser. Soil D TOC (Total Organic Carbon) Determination of action of spanic carbon by soliding with polassium dichromate followed by traction with work of box provides analyser. Soil D FOC (Fraction Organic Carbon) Determination of action of spanic carbon by soliding with polassium dichromate followed by traction with work of 10 subhate. Soil D Magnesium Vater Soluble Determination of water soluble magnesium by extraction with water followed by ICP-OES Soil D Magnesium Water Soluble (C10-C40) Determination of water soluble magnesium by extraction with water followed by ICP-OES Soil AR Mineral Oli (C10-C40) Determination of vater soluble magnesium by extraction with water followed b	Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soll AR EPH Product ID Determination of acctone/hexane extractable hydrocarbons by GC-FID Soll AR EPH TEXX 5(C-6.G. CG-10. CD 10. CD 10. CD 20 Determination of acctone/hexane extractable hydrocarbons by GC-FID for CB to CA 0. C6 to CB by C12. C16. C11. C21. C40 headspace GC-MS Soll D Fraction Organic Carbon (FOC) Determination of TOC by combustion analyser. Soll D Traction Organic Carbon (FOC) Determination of TOC by combustion analyser. Soll D TOC (Total Organic Carbon) Determination of organic carbon by oxidising with potassium dichronate followed by the charbon of traction of granic carbon. Soll D FOC (Fraction Organic Carbon) Determination of action of organic carbon by oxidising with potassium dichronate followed by thrance. Soll D Loss on lignition @ 460c Determination or distable by quarcerial diselsion followed by ICP-OES Soll D Magnetum- Water Soluble Determination or distable by quarcerial diselsion followed by ICP-OES Soll AR Mineral OII (C10 - C40) Determination or distable by quarcerial diselsion followed by ICP-OES Soll AR Mineral OII (C10 - C40) Determination or distable by distable diselsion followed by ICP-OES Soll AR Mineral OII (C10 - C40) Determinat	Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soll AR EPH TEXAS (3c 6.2 G C10. C10. C12 Determination of acetone/hexane extractable hydrocarbons by GC FID for CB to C40. C6 to CB by Soll Soll D Fluctride - Water Soluble Determination of TOC by conduction with water & analysed. Soll D Fraction Organic Carton (FCD) Determination of TOC by conduction analyser. Soll D Organic Matter (SOM) Determination of TOC by conduction analyser. Soll AR Exchangeable Ammonium Determination of ToC by conduction analyser. Soll D TOC (Tract Ionganic Carbon) Determination of ToC by conduction analyser. Soll D FOC (Fraction Organic Carbon) Determination of tractor by soldsing with potassium dichromate followed by tratalion with iron (11) subhate. Soll D Magnesium - Water Soluble Determination of tracts on ignition in soil by gravimetrically with the sample being ignited in a mult transce Soll D Magnesium - Water Soluble Determination of mater soluble magnesium by extraction with water followed by ICP-OES Soll AR Mineral OII (Cio C40) Determination of mater acable extractible hydrocarbons by GC-FID fractionating with SPE cartridge Soll AR Mineral OII (Cio C40) Determination of These by extraction with water followed by CC-IS Soll AR <td>Soil</td> <td>AR</td> <td>EPH (C10 – C40)</td> <td>Determination of acetone/hexane extractable hydrocarbons by GC-FID</td> <td>E004</td>	Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soli Cli	Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil D Funde Fund	Soil	٨D	EPH TEXAS (C6-C8, C8-C10, C10-C12,	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	E004
Soil D Fraction Organic Carbon (PGC) Determination of TOC by combustion analyser. Soil D TOC (Total Organic Carbon) Determination of TOC by combustion analyser. Soil AR Exchangeable Ammonium Dy discrete analyser. Soil D FOC (Fraction Organic Carbon) Determination of arginic carbon by oxidising with potassium dichromate followed by thrainon with iron (II) subplate. Soil D Loss on Ignition # 4500C Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a multiplication. Soil D Magnesium - Water Solueb Determination of water soluble magnesium by extraction with water followed by ICP-OES Soil AR Mineral OII (C10 - C40) Determination of metals by aqua-regis digestion followed by ICP-OES Soil AR Mistrac Content Molsture content: determination of argain: matter by addising with potassium dichromate followed by ICP-OES Soil AR Mistrac Carbon Determination of argain: Carbon Sy oxidising with potassium dichromate followed by ICP-OES Soil AR Mistrac Carbon Determination of argain: Carbon Sy oxidising with potassium dichromate followed by ICP-OES Soil AR PAH - Speclated (EPA 16) Determination of PAH compounds					
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Soil D TOC (Total Organic Carbon) Determination of TOC by combustion analyser. Soil AR Exchangebile Ammonium Determination of ammonium by discrete analyser. Soil D FOC (Fraction Organic Carbon) Determination of ammonium by discrete analyser. Soil D Loss on Ignition @ 4500C Determination of owner soluble magnesium by extraction with water followed by ICP-OES Soil D Magnesium - Water Soluble Determination of metals by acquarcegla digmation followed by ICP-OES Soil AR Mineral Oli (C10 - C40) Determination of metals by acquarcegla digmation by by CP-OES Soil AR Mineral Oli (C10 - C40) Determination of hexano/actionation followed by ICP-OES Soil AR Mosture Content Mosture Content Metals Determination of hexano/actionation followed by ICP-OES Soil AR Mosture Content Mosture Content Measible distruction with water & analysed try on chromatography Soil AR PAH - Speciated (EPA 10) Determination of arganic matter by oxiding with potassium dichromate followed by GC-MS Soil AR PAH - Speciated (EPA 10) Determination of PAH compounds by extraction with actene and hexane followed by					E027
Soil AR Exchangeable Ammonium Determination of ammonium by discrete analyser. Soil D FOC (Fraction Organic Carbon) Determination of fraction of organic carbon by oxidising with potassium dichromate followed by tratation with iron (11) subpate Soil D Loss on Ignition @ 450c Determination of loss on Ignition isoil by gravimetrically with the sample being ignited in a mult furnace Soil D Magnesium - Water Soluble Determination of metals by aqua-regia digestion followed by ICP-OES Soil AR Mineral OII (C10 - C40) Determination of metals by aqua-regia digestion followed by ICP-OES Soil AR Mineral OII (C10 - C40) Determination of metals by aqua-regia digestion followed by ICP-OES Soil D Nitrate-Water Soluble C-D Determination of mitrate by extraction with water & analysed by ion chromatography Soil D Nitrate-Water Soluble C-D Determination of regatic matter by oxidising with potassium dichromate followed by GC-MS (months) Soil AR PAH - Speciated (EPA to Igravimetrically determined fravimetrical and ads. Soil AR PCB - 7 Congeners Determination of PAE to mopunds by extraction with water & analysed by ion chromatography Soil AR Petroleum Ether Extrat (PEE) Determination of phenosby disiliation followed by (CP-OE					E027
Soil D FOC (Fraction Organic Cardon) Determination of fraction of organic carbon by oxidising with potassium dichromate followed by intractor. Soil D Loss on Ignition @ 45000 Determination of water soluble magnesium by extraction with water followed by ICP-OES Soil D Magnesium - Water Soluble Determination of matals by aqua-regia digesion followed by ICP-OES Soil AR Mineral OII (C10 - C40) Determination of hexane/accine extractable hydrocarbons by CC-FID fractionating with SPE Soil AR Moinstrue Content Molisture content: determined gravimetrically Soil AR Moinstrue Content Molisture content: determined or avainer details by aqua-regia digesion followed by ICP-OES Soil D Nitrate - Water Soluble (2:1) Determination of Intrate by extraction with water & analysed by ion chromatography Soil AR PAH - Speciated (EPA16) Determination of PAH compaunds by extraction with mactone and hexane followed by GC-MS Soil AR PAH - Speciated (EPA16) Determination of phone by addition of water soluble value followed by colormetry Soil AR PAH - Speciated (EPA16) Determination of phone by addition of water soluble extraction with mactone and hexane followed by colormetry Soil <td< td=""><td></td><td></td><td>IUC (Iotal Organic Carbon)</td><td>Determination of TOC by combustion analyser.</td><td>E027</td></td<>			IUC (Iotal Organic Carbon)	Determination of TOC by combustion analyser.	E027
Soil D FOU (Fraction Organic Carbon) Itrate ion with ion (11) subhate Soil D Loss on Ignition @ 45000 Determination of loss on ignition in soil by gravimetrically with the sample being Ignited in a multiprace. Soil D Magnesium - Water Soluble CDD Determination of water soluble magnesium by extraction with water followed by ICP-OES Soil AR Mineral Oil (C10 - C40) Determination of metals by aqua-regia digestion followed by ICP-OES Soil AR Mineral Oil (C10 - C40) Determination of mater by extraction with water & analysed by ion chromatography Soil AR Moisture Content Musture content: determined gravimetrically Soil D Nitrate - Vater Soluble (C1) Determination of runtate by extraction with water & analysed by ion chromatography Soil AR PAH - Speciated (EPA 16) Determination of PAE compounds by extraction with patcheme enter followed by GC-MS with t use of surrogate and internal standards Soil AR PAH - Speciated (EPA 16) Determination of patch by extraction with patcheme ether Soil AR Phenoles - Total (monohydric) determination of patch by extraction with water & analysed by ion chromatography Soil AR Phenoles - Total (monohydric) determination of patch by	2011	AK		Determination of ammonium by discrete analyser.	E029
Soil D Description Magnesium - Water Soluble Determination of water soluble magnesium by extraction with water followed by ICP-OES Soil D Metal Determination of metals by aqua-regis digestion followed by ICP-OES Soil AR Mineral Oil (C10 - C40) Determination of metals by aqua-regis digestion followed by ICP-OES Soil AR Mineral Oil (C10 - C40) Determination of water soluble carritide carritides Soil D Nitrate - Water Soluble (C11) Determination of organic matter by oxidising with potassium dichromate followed by Itration with ron (II) subhate Soil AR PAH - Speciated (EPA 16) Determination of PAH compounds by extraction with water & analysed by ion chromatography Soil AR PCB - 7 Congeners Determination of PAH compounds by extraction with periodeum ether Soil AR PCB - 7 Congeners Determination of PAH compounds by extraction with periodeum ether Soil AR PHenols - Total (monbrydric) Determination of PAH compounds by extraction with water & analysed by ion chromatography Soil AR Phenols - Total (monbrydric) Determination of PAH compounds by extraction with water & analysed by ion chromatography Soil AR Phenol	Soil	D	FOC (Fraction Organic Carbon)	titration with iron (II) sulphate	E010
Soil D Metals Determination of metals by aqua-explacible systematicable hydrocarbons by GC-FID fractionating with SPE cartridge Soil AR Mineral OII (C10 - C40) Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge Soil D Nitrate - Water Soluble (21) Determination of ruitrate by extraction with water & analysed by ion chromatography Soil D Nitrate - Water Soluble (21) Determination of organic matter by oxidising with potassium dichromate followed by titration with inco (10) subnate Soil AR PAH - Speciated (EPA 16) Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS Soil AR PCB - 7 Congeners Determination of PAB by extraction with petroleum ether Soil AR PCB - 7 Congeners Determination of phenophet by extraction with petroleum ether Soil AR Phenopis - Total (monhydric) Determination of phenophet by extraction with water & analysed by ion chromatography Soil AR Phenopis - Total Determination of total subhate by extraction with acetone and hexane followed by (CP-OES Soil AR Phenopis - Total Determination of subhate by extraction with water & analysed by ion chromatography			0	furnace	E019
Soil AR Mineral Oil (C10 - C40) cartridge Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge Soil AR Moisture Content Moisture content: determined gravimetrically Soil D Nitrate - Water Soluble (21) Determination of rain imate by extraction with water & analysed by ion chromatography Soil D Organic Matter Determination of Park in the second in					E025
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Soli D Nitrate - Water Soluble (2-1) Determination of nitrate by extraction with water & analysed by ion chromatography. Soli D Organic Matter Determination of organic matter by oxidising with potassium dichromate followed by titration with run (11) sulphate Soli AR PAH - Speciated (EPA 16) Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with 1 use of surrogate and internal standards. Soli AR PCB - 7 Congeners Determination of PIH by addition of water followed by electrometric measurement Soli AR PHenols - Total (monohydric) Determination of pHby addition of water followed by electrometric Soli AR Pheophate - Water Soluble (2:1) Determination of phosphate by extraction with mater & analysed by ion chromatography. Soli D Sulphate (as SO4) - Vater Soluble (2:1) Determination of suphate by extraction with mater followed by ICP-OES Soli D Sulphate (as SO4) - Vater Soluble (2:1) Determination of suphate by extraction with water exign and water with water followed by ICP-OES Soli D Sulphate (as SO4) - Water Soluble (2:1) Determination of suphate by extraction with mater followed by ICP-OES Soli D Sulphate (as SO4) - Water Soluble (2:1) Dete			. ,	cartridge	E004
Soil D Organic Matter Iron (11) subplate Soil AR PAH - Speciated (EPA 16) Use of surrogate and internal standards Soil AR PAH - Speciated (EPA 16) Use of surrogate and internal standards Soil AR PCB - 7 Congeners Soil D Petroleum Ether Extract (PEE) Soil AR Phenols - Total (monohydric) Soil AR Phenols - Total (monohydric) Soil D Phenols - Total (monohydric) Soil D Phenols - Total (monohydric) Soil D Sulphate (as SO4) - Vater Soluble (2:1) D Sulphate (as SO4) - Water Soluble (2:1) Determination of phenols by extraction with water & analysed by ion chromatography Soil D Sulphate (as SO4) - Water Soluble (2:1) Determination of sulphate by extraction with water & analysed by ion chromatography Soil D Sulphate (as SO4) - Water Soluble (2:1) Determination of sulphate by extraction with water & analysed by ion chromatography Soil D Sulphate (as SO4) - Water Soluble (2:1) Determination of sulphate by extraction with water followed by (CP-OES Soil D Sul				Moisture content; determined gravimetrically	E003
Soli AR PAH - Speciated (EPA 16) use of surrogate and internal standards Soli AR PCB - 7 Congeners Determination of PAH compounds by extraction with acetone and hexane followed by GC-MS with to use of surrogate and internal standards Soli D Petroleum Ether Extract (PEE) Gravimetrically determined through extraction with petroleum ether Soli AR Phenols - Total (monohydric) Determination of phenols by distillation followed by clectrometric measurement Soli D Phosphate - Water Soluble (2:1) Determination of subphate by extraction with water & analysed by ion chromatography Soli D Sulphate (as SO4) - Total Determination of subphate by extraction with water & analysed by ion chromatography Soli D Sulphate (as SO4) - Water Soluble (2:1) Determination of valer soluble sulphate by extraction with water & analysed by ion chromatography Soli D Sulphate (as SO4) - Water Soluble (2:1) Determination of total sulphur by extraction with water & analysed by ion chromatography Soli D Sulphate (as SO4) - Water Soluble (2:1) Determination of sulphate by extraction with water & analysed by ion chromatography Soli D Sulphate (as SO4) - Water Soluble (2:1) Determination of sulphate by extraction with acua-regia followed by (CP-OES </td <td></td> <td></td> <td></td> <td>Determination of organic matter by oxidising with potassium dichromate followed by titration with</td> <td>E009 E010</td>				Determination of organic matter by oxidising with potassium dichromate followed by titration with	E009 E010
Soil AR PCB - 7 Congeners Determination of PCB by extraction with acetone and hexane followed by GC-MS Soil D Petroleum Ether Extract (PEE) Gravimetrically determined through extraction with acetone and hexane followed by electrometric Soil AR Phenols - Total (monohydric) Determination of phe by addition of water followed by electrometric Soil AR Phenols - Total (monohydric) Determination of phosphate by extraction with water & analysed by ion chromatography Soil D Phosphate - Water Soluble (2:1) Determination of sulphate by extraction with water & analysed by ion chromatography Soil D Sulphate (as SO4) - Water Soluble (2:1) Determination of sulphate by extraction with water & analysed by ion chromatography Soil D Sulphate (as SO4) - Water Soluble (2:1) Determination of sulphate by extraction with water followed by ICP-OES Soil D Sulphate (as SO4) - Water Soluble (2:1) Determination of total sulphur by extraction with aqua-regia followed by ICP-OES Soil D Sulphate (as SO4) - Total Determination of sulphate by extraction with aqua-regia followed by ICP-OES Soil AR Thiocyanate (as SCN) Determination of sulphate rolube y distiliation followed by extraction in acetone and hexane followed GC-	Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the	E005
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SoilARpHDetermination of pH by addition of water followed by electrometric measurementSoilARPhenols - Total (monohydric)Determination of phenols by distillation followed by colorimetrySoilDPhosphate - Water Soluble (2:1)Determination of phosphate by extraction with water & analysed by ion chromatographySoilDSulphate (as SO4) - TotalDetermination of valephate by extraction with 10% HCI followed by ICP-OESSoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographySoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water followed by ICP-OESSoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water followed by ICP-OESSoilARSulphut - TotalDetermination of total sulphur by extraction with aqua-regia followed by ICP-OESSoilARSulphur - TotalDetermination of total sulphur by extraction in acustic soda followed by acidification followed by acidification followed by acidification followed by acidification followed by addition of ferric nitrate followed by colorimetrySoilARThiocyanate (as SCN)Determination of organic matter by oxidising with potassium dichromate followed by titration with gravitation of formatically determined through extraction with tolueneSoilDTotal Organic Carbon (TOC)Determination of nexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C34, C16-C21, C21-C34, C16-C35, C35-C44, Determination of hexane/acetone extractable hy					E008 E011
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SoilDSulphate (as SO4) - Water Soluble (2:1)Determination of sulphate by extraction with water & analysed by ion chromatographySoilDSulphate (as SO4) - Water Soluble (2:1)Determination of water soluble sulphate by extraction with water followed by ICP-OESSoilARSulphur - TotalDetermination of sulphide by distillation followed by colorimetrySoilDSulphur - TotalDetermination of sulphur by extraction with aqua-regia followed by ICP-OESSoilARSvocDetermination of total sulphur by extraction in acetone and hexane followedSoilARThiocyanate (as SCN)Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetrySoilARThiocyanate (as SCN)Determination of organic matter by oxidising with potassium dichromate followed by titration with rough extraction with tolueneSoilDTotal Organic Carbon (TOC)Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE arrow (1) sulphateSoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35SoilARTPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, C5 to C8 by headspace GC-MSSoilARVOCSDetermination of volatile organic compounds by headspace GC-MS <td></td> <td></td> <td>Sulphate (as SO4) - Total</td> <td>Determination of total sulphate by extraction with 10% HCl followed by ICP-OES</td> <td>E013</td>			Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil D Sulphate (as SO4) - Water Soluble (2:1) Determination of water soluble sulphate by extraction with water followed by ICP-OES Soil AR Sulphur - Total Determination of sulphide by distillation followed by colorimetry Soil D Sulphur - Total Determination of sulphur by extraction with aqua-regia followed by ICP-OES Soil AR SVOC Determination of semi-volatile organic compounds by extraction in acetone and hexane followed GC-MS Soil AR Thiocyanate (as SCN) Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of forric nitrate followed by colorimetry Soil D Toluene Extractable Matter (TEM) Determination of organic matter by oxidising with potassium dichromate followed by titration with ion (11) sulphate Soil D Total Organic Carbon (TOC) Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, betermination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, betermination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C					E009
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Solit AR Stoce GC-MS Solit AR Thiocyanate (as SCN) Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry Solit D Toluene Extractable Matter (TEM) Gravimetrically determined through extraction with toluene Solit D Total Organic Carbon (TOC) Determination of organic matter by oxidising with potassium dichromate followed by titration with supprate for (11) supprate Solit AR TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10	Soil	D			E024
Soil AR Thickyanale (as SCN) addition of ferric nitrate followed by colorimetry Soil D Toluene Extractable Matter (TEM) Gravimetrically determined through extraction with toluene Soil D Total Organic Carbon (TOC) Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate Soil D TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35 Soil AR TPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35) Soil AR TPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35) Soil AR TPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35) Soil AR TPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35) Soil AR TPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C23, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C23, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of volatile organic compounds by headspace GC-MS Soil AR VOCs Determination of volatile	Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
SoilDToluene Extractable Matter (TEM) Gravimetrically determined through extraction with tolueneSoilDTotal Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphateSoilDTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35SoilARTPH LOM (ali: C5-C6, C6-C8, C8-C10, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, cartridge for C8 to C44. C5 to C8 by headspace GC-MSSoilARVOCsDetermination of volatile organic compounds by headspace GC-MS	Soil	AR	Thiocyanate (as SCN)		E017
SoilDTotal Organic Carbon (TOC)Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphateSoilARTPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, cartridge for C8 to C35. C5 to C8 by headspace GC-MSSoilARTPH LOM (ali: C5-C6, C6-C8, C8-C10, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, cartridge for C8 to C44. C5 to C8 by headspace GC-MSSoilARVOCsDetermination of volatile organic compounds by headspace GC-MS	Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil AR TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, arc: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35) Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE (C12-C16, C16-C21, C21-C35) Soil AR TPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35) Soil AR TPH LOM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE (C10-C12, C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE (C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE (C12-C16, C16-C21, C21-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE (C12-C16, C16-C21, C21-C35, C35-C44, Determination of volatile organic compounds by headspace GC-MS Soil AR VOCs Determination of volatile organic compounds by headspace GC-MS				Determination of organic matter by oxidising with potassium dichromate followed by titration with	E010
Soil AR C10-C12, C12-C16, C16-C35, C35-C44, Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE aro: C5-C7, C7-C8, C8-C10, C10-C12, cartridge for C8 to C44. C5 to C8 by headspace GC-MS Soil AR VOCs Determination of volatile organic compounds by headspace GC-MS	Soil	AR	C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12,	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE	E004
			C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
					E001
Soil AR VPH (C6-C8 & C8-C10) Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID D Dried			VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

AR As Received



Chris Hepworth G & J Geoenvironmental Consultants Ltd 35-37 High Street Barrow-upon-Soar Loughborough Leicestershire LE12 8PY

DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-04957

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	16/04/2021
Sample Scheduled Date:	16/04/2021
Report Issue Number:	1
Reporting Date:	22/04/2021

Authorised by:

Dave Ashworth

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. 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 except in full, without the prior written approval of the laboratory.





Soil Analysis Certificate	- TPH CWG Bande	d						
DETS Report No: 21-049	57		Date Sampled	13/04/21	13/04/21	13/04/21	13/04/21	13/04/21
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied				
Site Reference: Middlemo	ore Lane		TP / BH No	Source 2 NF1	Source 2 SF1	Source 2 EF1	Source 2 WF1	Source 2 Base 1
Project / Job Ref: GJ049		,	Additional Refs	None Supplied				
Order No: None Supplied			Depth (m)	None Supplied				
Reporting Date: 22/04/2	021	DI	ETS Sample No	538290	538291	538292	538293	538294
					•			
Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	2	< 2	< 2	< 2
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	13	< 2	< 2	9
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	11	68	7	< 3	45
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	14	76	7	< 3	44
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	18	< 10	< 10	< 10
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	25	177	< 21	< 21	98
Aromatic >C5 - C7	mg/kg		NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8	mg/kg	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	2	< 2	< 2	< 2
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	22	4	< 2	15
Aromatic >C16 - C21	mg/kg		MCERTS	< 3	26	5	< 3	17
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35)	mg/kg		NONE	< 21	51	< 21	< 21	32
Total >C5 - C35	mg/kg	< 42	NONE	< 42	228	< 42	< 42	129





Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 21-04957	Date Sampled	13/04/21	13/04/21	13/04/21	13/04/21	13/04/21
G & J Geoenvironmental Consultants Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Middlemore Lane	TP / BH No	Source 2 NF1	Source 2 SF1	Source 2 EF1	Source 2 WF1	Source 2 Base 1
Project / Job Ref: GJ049	Additional Refs	Hollo oupplied		None Supplied		
Order No: None Supplied	Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 22/04/2021	DETS Sample No	538290	538291	538292	538293	538294
Determinand Unit	RI Accreditation					

Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	7	< 2	< 2	9	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	7	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	5	< 2	< 2	4	< 2
p & m-xylene	ug/kg	< 2	MCERTS	12	< 2	< 2	12	< 2
o-xylene	ug/kg	< 2	MCERTS	6	< 2	< 2	6	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate	- Volatile Organic (Compo	ounds (VOC)					
DETS Report No: 21-04957		Date Sampled		13/04/21	13/04/21	13/04/21	13/04/21	13/04/21
G & J Geoenvironmental Consultants Ltd		Time Sampled		None Supplied				
Site Reference: Middlemo	Site Reference: Middlemore Lane		TP / BH No	Source 2 NF1	Source 2 SF1	Source 2 EF1	Source 2 WF1	Source 2 Base 1
Project / Job Ref: GJ049			Additional Refs	None Supplied				
Order No: None Supplied		,	Depth (m)	None Supplied				
Reporting Date: 22/04/2		D	ETS Sample No	538290	538291	538292	538293	538294
				000270	000271	000272	000270	000271
Determinand	Unit	RL						
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chloromethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromomethane Trichlorofluoromethane	ug/kg ug/ka	< 10 < 5	MCERTS MCERTS	< 10 < 5	< 10 < 5	< 10	< 10	< 10
1,1-Dichloroethene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5 < 5	< 5 < 5	< 5
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,1-Trichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloropropene	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Benzene 1,2-Dichloropropane	ug/kg	< 2	MCERTS MCERTS	/	< 2	< 2	9 < 5	< 2
Trichloroethene	ug/kg ug/ka	< 5 < 5	MCERTS	< 5	< 5 < 5	< 5 < 5	< 5	< 5
Bromodichloromethane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
TAME	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	7	< 5
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane Chlorobenzene	ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5 < 5	<u>< 5</u> < 5
Ethyl Benzene	ug/kg ug/kg	< 2	MCERTS	< 5	< 2	< 2	< 5	< 2
m,p-Xylene	ug/kg	< 2	MCERTS	12	< 2	< 2	12	< 2
o-Xylene	ug/kg	< 2	MCERTS	6	< 2	< 2	6	< 2
Styrene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/kg	< 10		< 10	< 10	< 10	< 10	< 10
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	6
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
n-Propylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromobenzene 2-Chlorotoluene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5	< 5 < 5	< 5
1,3,5-Trimethylbenzene	ug/kg ug/kg	< 5 < 5	MCERTS	< 5 < 5	< 5	< 5 < 5	< 5 < 5	< 5
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	11	< 5	< 5	7	5
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5	26	< 5	< 5	8
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	7	< 5	< 5	< 5
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	23	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-04957	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 22/04/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
538290	Source 2 NF1	None Supplied	None Supplied	10	Red sandy clay
538291	Source 2 SF1	None Supplied	None Supplied	9.9	Light grey sandy clay
538292	Source 2 EF1	None Supplied	None Supplied	10.7	Light grey sandy clay
538293	Source 2 WF1	None Supplied	None Supplied	9.2	Red sandy clay with stones
538294	Source 2 Base 1	None Supplied	None Supplied	10.2	Red sandy clay with stones

Moisture content is part of procedure E003 & is not an accredited test

Insufficient Sample^{1/S} Unsuitable Sample^{U/S}





Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 21-04957	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 22/04/2021	

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX		E001
Soil	D	Cations		E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)		E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D		Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Call		EPH TEXAS (C6-C8, C8-C10, C10-C12,	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	F004
Soil	AR	C12-C16, C16-C21, C21-C40)	headspace GC-MS	E004
Soil	D		Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil	D	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil	D		Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium		E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble		E025
Soil	D	Metals		E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC EID fractionating with SPE	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexage followed by GC MS with the	E005
Soil	AR	PCB - 7 Congeners		E008
Soil	D	Petroleum Ether Extract (PEE)		E011
Soil	AR	, Ha	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D		Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of total sulphate by extraction with 10% HCI followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR		Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)		E004
Soil	AR AR	VOCs	Determination of volatile organic compounds by headspace GC-MS Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried AR As Received

Middlemore Lane, Aldridge Verification Report



C4 – Road Validation and Surfacing Material Samples

DETS Report No: 21-01136	Date Sampled	26/03/21	26/03/21	26/03/21	26/03/21	26/03/21	26/03/2021	26/03/2021	26/03/2021	26/03/2021	26/03/2021	26/03/21	26/03/21	26/03/21	26/03/21	26/03/21
G & J Geoenvironmental Consultants Ltd	Time Sampled	None Supplied														
Site Reference: Middlemore Lane	TP / BH No	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
Project / Job Ref: GJ049	Additional Refs	None Supplied														
Order No: None Supplied	Depth (m)	0.10 - 1.00	0.10 - 1.00	0.10 - 1.00	0.50 - 1.50	0.50 - 1.50	0.10 - 1.00	0.10 - 1.00	0.40 - 1.00	0.10 - 1.50	0.10 - 1.00	0.50 - 1.00	0.10 - 1.00	0.50 - 1.00	0.50 - 1.00	0.50 - 1.00
Reporting Date: 05/02/2021	DETS Sample No	534910	534911	534912	534913	534914	534915	534916	534917	534918	534919	534920	534921	534922	534923	534924

Determinand	Unit	RL	Accreditation															
Asbestos Screen ^(S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Detected	Not Detected	Detected	Not Detected	Not Detected
S			NONE											Chrysotile Present		Chrysotile Present		
Sample Matrix ^(S)	Material Type	N/a	NONE											as bundles		as bundles		
Asbestos Type ^(S)	PLM Result	N/a	ISO17025											Chrysotile		Chrysotile		
pH	pH Units	N/a	MCERTS	6.5	6.7	7	6.9	8.3	7.9	6.9	7	10.5	9.7	8.2	8.6	9.2	10.5	8.6
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Total Sulphate as SO ₄	mg/kg	< 200	MCERTS	1270	374	1723	238	1290	303	529	1445	1148	679	5080	837	680	6562	303
Total Sulphate as SO ₄	%	< 0.02	MCERTS	0.13	0.04	0.17	0.02	0.13	0.03	0.05	0.14	0.11	0.07	0.51	0.08	0.07	0.66	0.03
Sulphide Organic Matter	mg/kg	< 0.1	NONE MCERTS	< 5	< 5	< 5	< 5	< 5	< 5 < 0.1	< 5	< 5	< 5	< 5 < 0.1	< 5 5.3	< 5	< 5 0.5	< 5	< 5
Total Organic Carbon (TOC)	%	< 0.1	MCERTS	0.9	0.8	0.4	0.2	0.5	< 0.1	0.2	0.3	0.3	< 0.1	3.1	0.2	0.3	0.8	0.4
Arsenic (As)	mg/kg	< 2	MCERTS	7	7	7	7	8	14	10	7	8	5	13	3	6	9	4
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	6.1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	NONE	0.2	0.3	< 0.2	< 0.2	0.3	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	1.1	< 0.2	0.3	1.1	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	9	12	8	10	34	26	18	11	13	8	23	5	9	17	6
Copper (Cu)	mg/kg	< 4	MCERTS MCERTS	30	19	22	52	349	65	28	143	32	133	883 167	117	144	1790	21
Lead (Pb) Mercury (Hg)	mg/kg mg/kg	< 3	MCERTS		< 1	22 < 1	< 1	< 1	< 1	15 < 1	32	< 1	< 1	< 1	14 < 1	< 1	292 < 1	//
Nickel (Ni)	mg/kg	< 3	MCERTS	9	13	12	10	21	25	19	12	17	7	37	<u> </u>	7	17	5
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	MCERTS	76	99	74	94	1130	118	58	278	70	295	1550	135	597	2320	724
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	5.8	< 2	< 2	< 2
EPH (C10 - C40)	mg/kg	< 6	MCERTS	32	< 6	< 6	< 6	302	< 6	< 6	52	11	< 6	233	154	16	1500	< 6
Naphthalene Acenaphthylene	mg/kg	< 0.1	MCERTS MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg mg/kg	< 0.1	MCERTS	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 0.19	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.19	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	0.13	< 0.1	0.14	< 0.1	0.11	< 0.1	< 0.1	0.18	< 0.1	0.12	0.36	0.77	< 0.1	2.45	< 0.1
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.27	< 0.1	0.64	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	0.18	< 0.1	< 0.1	< 0.1	0.12	< 0.1	< 0.1	0.2	0.14	0.16	0.35	1.47	< 0.1	3.08	< 0.1
Pyrene	mg/kg	< 0.1	MCERTS	0.16	< 0.1	< 0.1	< 0.1	0.12	< 0.1	< 0.1	0.18	0.11	0.13	0.3	1.34	< 0.1	2.63	< 0.1
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.11	0.5	< 0.1	1.32	< 0.1
Chrysene Benzo(b)fluoranthene	mg/kg mg/kg	< 0.1	MCERTS	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 0.13	< 0.1 < 0.1	0.16 0.16	0.49	< 0.1 < 0.1	1.21 1.8	< 0.1 < 0.1
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.23		0.52	< 0.1
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.5	< 0.1	1.32	< 0.1
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.29	< 0.1	0.81	< 0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.18	< 0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.27	< 0.1	0.71	< 0.1
Coronene Total Oily Waste PAHs	mg/kg	< 0.1	NONE MCERTS															
Total Dutch 10 PAHs	mg/kg ma/ka	< 1	MCERTS															
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	6.8	< 1.6	17	< 1.6
Total WAC-17 PAHs	mg/kg	< 1.7	NONE															·
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10 Aliphatic >C10 - C12	mg/kg	< 2	MCERTS MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C12	mg/kg mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	3 25	< 2
Aliphatic >C12 - C10	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	5	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	70	< 3
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34)	mg/kg		NONE	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	109	< 21
Aromatic >C5 - C7	mg/kg		NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8 Aromatic >C8 - C10	mg/kg mg/kg	< 0.05	NONE MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10 Aromatic >C10 - C12	mg/kg mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2 < 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	4	4	< 2	16	< 2
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	7	14	< 3	61	< 3
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	41	42	< 10	310	< 10
Aromatic (C5 - C35)	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	55	60		389	< 21
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	< 42	< 42	< 42		< 42	< 42	55	60		498	< 42
Benzene Toluene	ug/kg ug/kg	< 2	MCERTS MCERTS	< 2 < 5	< 2 < 5	< 2 < 5	< 2 < 5	< 2 < 5	< 2 < 5	< 2 < 5	< 2	< 2 < 5	< 2 < 5	< 2 < 5	< 2 < 5	< 2 < 5	< 2 < 5	< 2 < 5
Ethylbenzene	ug/kg ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

_	26/03/21	26/03/21	26/03/21	26/03/21	26/03/21	26/03/21	26/03/21	25/03/21	25/03/21	25/03/21	25/03/21	25/03/21	26/03/21	26/03/21	26/03/21	
	None Supplied															
	R16	R17	R18	R19	R20	R21	R22	Road Tarmac 1	Road Tarmac 2	Road Tarmac 3	Road Tarmac 4	Road Tarmac 5	Tarmac 3	Tarmac 4	Tarmac 5	
_	None Supplied															
_	0.10 - 1.00	0.10 - 1.00	0.10 - 1.00	0.10 - 1.00	0.50 - 1.50	0.10 - 1.00	1.00 - 1.80	None Supplied								
_	534925	534926	534927	534928	534929	534930	534931	534842	534843	534844	534845	534846	534936	534937	534938	

															_
Not Detected									С						
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															⊢
7 5	7 7	7.8	9.7	7.6	7	8.3									⊢
< 2	< 2	< 2	< 2	< 2	< 2	< 2									\vdash
1155	677	262		800	209	495									1
0.12	0.07	0.03	0.17	0.08	0.02	0.05									F
< 5	< 5	< 5	< 5	< 5	< 5	< 5									Γ
1.4	0.8	0.4	0.3	0.4	0.4	0.1									Γ
0.8	0.4	0.2	0.2	0.2	0.2	< 0.1									L
5	4	< 2	7	8	< 2	5									L
< 1	< 1	< 1	< 1	< 1	< 1	< 1									L
< 0.2	< 0.2	< 0.2	< 0.2	0.5	< 0.2	0.3									1
14	14	5	11	16	12	15									1
83	39	65 343		972 75	13	104 22									┢
< 1	< 1	< 1	< 1	< 1	< 1	< 1									⊢
10	11	5	13	18	7	12									⊢
< 3	< 3	< 3	< 3	< 3	< 3	< 3									Γ
244	82	81	106	929	34	144									Г
< 2	< 2	< 2	< 2	< 2	< 2	< 2									Γ
52	192	1870	< 6	78	< 6	< 6									Ē
< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.13	< 0.1	< 0.1	< 0.1	< 0.1	1.55		Ĺ
< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.57	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	1.87	-
< 0.1	< 0.1	< 0.1	< 0.1	0.28	< 0.1	< 0.1	< 0.1	9.21	< 0.1	< 0.1	< 0.1	< 0.1	0.93	63.9	-
< 0.1 0.43	< 0.1	< 0.1	< 0.1	0.26 3.34	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1	17.7 320	< 0.1	< 0.1 0.91	< 0.1	< 0.1 0.41	0.5	62.5 655	⊢
< 0.1	0.13	0.14	< 0.1	0.59	< 0.1	< 0.1	< 0.1 < 0.1	70.8	0.31 < 0.1	0.91	1.75	< 0.1	0.22	172	⊢
0.58	< 0.1	< 0.1	< 0.1	4.34	0.13	< 0.1	0.31	214	0.25		1.48	0.15	0.35	452	⊢
0.44	< 0.1	< 0.1	< 0.1	3.75	< 0.1	< 0.1	0.33	168	0.22	0.44	1.26	< 0.1	0.19	350	L
0.15	< 0.1	< 0.1	< 0.1	1.3	< 0.1	< 0.1	< 0.1	94	< 0.1	< 0.1	0.54	< 0.1	< 0.1	133	Γ
0.17	< 0.1	< 0.1	< 0.1	1.27	< 0.1	< 0.1	< 0.1	70.7	< 0.1	< 0.1	0.61	< 0.1	< 0.1	117	Γ
0.2	< 0.1	< 0.1	< 0.1	1.2	< 0.1	< 0.1	< 0.1	83	< 0.1	< 0.1	0.63	< 0.1	< 0.1	117	
< 0.1	< 0.1	< 0.1	< 0.1	0.54	< 0.1	< 0.1	< 0.1	36.6	< 0.1	< 0.1	0.28	< 0.1	< 0.1	49.3	L
0.15	< 0.1	< 0.1	< 0.1	0.99	< 0.1	< 0.1	< 0.1	83.4	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	99.2	1
< 0.1	< 0.1	< 0.1	< 0.1	0.48	< 0.1	< 0.1	< 0.1	38.6	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	54.2	1
< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	7.22	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	9.25	⊢
< 0.1	< 0.1	< 0.1	< 0.1	0.46	< 0.1	< 0.1	< 0.1 < 0.1	32.7 13.9	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1 < 0.1	< 0.1	< 0.1	44.5	⊢
							< 1	414	< 0.1	< 1	2.1				⊢
							< 1	962	< 1	1.5	5.1				F
2.1	< 1.6	< 1.6	< 1.6	18.8	< 1.6	< 1.6	< 1.6	1250	< 1.6		6.9	< 1.6	4.8	2420	Γ
							< 1.7	1260	< 1.7	2	6.9				Г
< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	Г
< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	Ē
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< 3	11	473		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	9	149	-
< 3	< 3	41		< 3	< 3	< 3	5	< 3	< 3	< 3 403	5	< 3 507	102 2364		⊢
< 10	< 10 < 21	< 10 686		< 10 < 21	< 10 < 21	< 10 < 21	703 708	< 10 < 21	< 10 < 21	403	660	507	2364		\vdash
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< 3	< 3	30		14	< 3	< 3	< 3	1290	< 3		< 3	< 3	28		Ē
< 10	26	118		< 10	< 10	< 10	829	602	305		653	< 10	1119		Ĺ
< 21	26	395		< 21	< 21	< 21	829	1943	305		653	< 21	1147		Ĺ
< 42	43	1081	< 42	< 42	< 42	< 42		1943	305		1318	507	3621	9760	⊢
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	26/03/21
None	Supplied
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None	Supplied
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	0.16
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	0.27 < 0.1 < 0.2 < 0.1 < 0.2 < 0.1 < 0.0 < 0.1 < 0.0 < 0.0
	0.27 < 0.1 < 0.2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 <
	0.27 < 0.1 < 0.2 < 2 < 2 < 2 < 2 < 3 < 3 < 14 1795 1809 < 0.05 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2
	0.27 < 0.1 < 0.05 < 2 < 2 < 2 < 3 144 1795 1809 < 0.01 < 0.05 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2
	0.27 < 0.1 < 0.05 < 2 < 2 < 2 < 3 144 1795 1809 < 0.01 < 0.05 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2
	0.27 < 0.1 < 0.0 < 0.0
	0.27 < 0.1 < 0.0 < 0.0
	0.27 < 0.1 < 0.0 < 0.0
	0.27 < 0.1 < 0.0 < 0.0

14.00 6.10 1.10 34.00 1790.00 343.00 0.00 37.00 0.00 2320.00		640 240000 410 8600 2300 1100 980 12000 730000
1870.00 36.40 1.87 63.90 62.50 655.00 172.00 452.00 350.00 133.00 117.00 117.00 49.30 99.20 54.20 9.25 44.50		460 97000 9700 68000 22000 540000 23000 540000 170 350 44 1200 77 510 3.6 4000
2420.00	500	
0.00 0.00 12.00 160.00 473.00 561.00 2364.00 2474.00		5900 17000 4800 23000 82000
0.00 0.00 3.00 55.00 661.00 3786.00 3471		46000 110000 8100 28000 37000 28000 28000
9760.00 0.00 0.00 0.00 0.00 0.00 0.00	5000	47000 1920000 1220000 2820000 1120000

Highest RT GAC



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LE12 8PY

G & J Geoenvironmental Consultants Ltd



DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-04102

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	29/03/2021
Sample Scheduled Date:	30/03/2021
Report Issue Number:	1
Reporting Date:	06/04/2021

Authorised by:

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. 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 except in full, without the prior written approval of the laboratory.





Soil Analysis Certificate		d					
DETS Report No: 21-041	02		Date Sampled	25/03/21	25/03/21	25/03/21	
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	Windrow 1-1	Windrow 1-2	Windrow 1-3	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	
Reporting Date: 06/04/2	021	DI	ETS Sample No	534858	534859	534860	
Determinand	Unit	DL	Accreditation				
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01	< 0.01	1
Aliphatic >C6 - C8		< 0.01	NONE				 ł
	00			< 0.05	< 0.05	< 0.05	
Aliphatic >C8 - C10	mg/kg		MCERTS	33	< 2	31	
Aliphatic >C10 - C12	mg/kg		MCERTS	199	< 2	394	
Aliphatic >C12 - C16	mg/kg		MCERTS	2119	13	3862	
Aliphatic >C16 - C21	mg/kg		MCERTS	3020	43	4850	
Aliphatic >C21 - C34	mg/kg		MCERTS	1141	< 10	1521	
Aliphatic (C5 - C34)	mg/kg		NONE	6511	55	10659	
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	
Aromatic >C7 - C8	mg/kg	< 0.05		< 0.05	< 0.05	< 0.05	
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	31	< 2	31	
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	767	7	681	
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	1178	23	1063	
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	377	< 10	359	
Aromatic (C5 - C35)	mg/kg	< 21	NONE	2353	30	2134	
Total >C5 - C35	mg/kg	< 42	NONE	8864	85	12793	





Soil Analysis Certificate - BTEX / MT	BE						
DETS Report No: 21-04102				25/03/21	25/03/21	25/03/21	
G & J Geoenvironmental Consultants Lt	d		Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemore Lane			TP / BH No	Windrow 1-1	Windrow 1-2	Windrow 1-3	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	
Reporting Date: 06/04/2021			ETS Sample No	534858	534859	534860	
Determinand	Unit	RL	Accreditation				
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	





Soil Analysis Certificate				25/02/24	25/02/24	25/02/24	l	
DETS Report No: 21-0410			Date Sampled	25/03/21	25/03/21	25/03/21		
G & J Geoenvironmental (Site Reference: Middlemo			Time Sampled TP / BH No	None Supplied	None Supplied	None Supplied Windrow 1-3		
Site Reference: Midalemo	pre Lane		IP / BH NO	Windrow 1-1	Windrow 1-2	Windrow 1-3		
Project / Job Ref: GJ049		A	dditional Refs	None Supplied	None Supplied	None Supplied		
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied		
Reporting Date: 06/04/2	.021	DE	TS Sample No	534858	534859	534860		
			8					
Determinand	Unit	RL	Accreditation			_		
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5 < 10	< 5 < 10		
Chloromethane Chloroethane	ug/kg ug/ka	< 10 < 5	MCERTS MCERTS	< 10 < 5	< 10	< 10		
Bromomethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10		
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	 	
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5	< 5	 	
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	 	
1,1,1-Trichloroethane 1,1-Dichloropropene	ug/kg	< 5 < 10	MCERTS MCERTS	< 5 < 10	< 5 < 10	< 5 < 10		
Carbon Tetrachloride	ug/kg ug/ka	< 10	MCERTS	< 10	< 10	< 10	 	
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2		
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Trichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
TAME	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10		
1,3-Dichloropropane	ug/kg	< 5	MCERTS MCERTS	< 5	< 5	< 5		
Tetrachloroethene Dibromochloromethane	ug/kg ug/kg	< 5 < 5	MCERTS	< 5 < 5	< 5 < 5	< 5 < 5		
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2		
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2		
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2		
Styrene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10	< 10		
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	 	
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	 	
n-Propylbenzene Bromobenzene	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	32 < 5	< 5 < 5	< 5	 	
2-Chlorotoluene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,3,5-Trimethylbenzene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5		
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	l	
sec-Butylbenzene	ug/kg	< 5	MCERTS	94	< 5	< 5		
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
n-Butylbenzene	ug/kg	< 5	MCERTS	191	< 5	< 5	 	
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	 	
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	 	
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-04102	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 06/04/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
534858	Windrow 1-1	None Supplied	None Supplied	8	Brown sand with stones and concrete
534859	Windrow 1-2	None Supplied	None Supplied	12.1	Light brown sand
534860	Windrow 1-3	None Supplied	None Supplied	10	Grey sandy gravel with stones and concrete

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample^{US}

Unsuitable Sample ^{U/S}





Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 21-04102	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 06/04/2021	

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR		Determination of BTEX by headspace GC-MS	E001
Soil	D		Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E001
Soil	D		Determination of cations in soil by aqua-regia digestion followed by fcP-0ES Determination of chloride by extraction with water & analysed by ion chromatography	E002
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of	E016
			1,5 diphenylcarbazide followed by colorimetry	
Soil	AR		Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D		Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
			Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by	
Soil	AR	C12-C16, C16-C21, C21-C40)		E004
Soil	D		Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of TOC by combustion analyser.	E009
Soil	D		Determination of TOC by combustion analyser.	E027 E027
			Determination of TOC by combustion analyser.	
Soil	D		Determination of 100 by combustion analyser. Determination of ammonium by discrete analyser.	E027
Soil	AR	Exchangeable Ammonium		E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D		Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (11) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Condeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D		Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR		Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR		Determination of phenols by distillation followed by colorimetry	E021
Soil	D		Determination of phosphate by extraction with water & analysed by ion chromatography	E021
Soil	D		Determination of phosphate by extraction with water & analysed by for chloratography Determination of total sulphate by extraction with 10% HCI followed by ICP-OES	E013
Soil	D		Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D		Determination of water soluble sulphate by extraction with water & analysed by for chroniatography Determination of water soluble sulphate by extraction with water followed by ICP-OES	E009 E014
Soil	AR		Determination of sulphide by distillation followed by colorimetry	E014 E018
Soil	D		Determination of sulphide by distillation followed by colorimetry Determination of total sulphur by extraction with agua-regia followed by ICP-OES	E018 E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by	E024
Soil	AR	Thiocyanate (as SCN)	GC-MS Determination of thiocyanate by extraction in caustic soda followed by acidification followed by	E017
			addition of ferric nitrate followed by colorimetry	
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR		Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR		Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR		Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001
	Dried			

D Dried AR As Received

Middlemore Lane, Aldridge Verification Report



C5 - Treated Material

Appendices



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G & J Geoenvironmental Consultants Ltd



DETS Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN t: 01622 850410

DETS Report No: 21-04102

Site Reference:	Middlemore Lane
Project / Job Ref:	GJ049
Order No:	None Supplied
Sample Receipt Date:	29/03/2021
Sample Scheduled Date:	30/03/2021
Report Issue Number:	1
Reporting Date:	06/04/2021

Authorised by:

Dave Ashworth Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

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Soil Analysis Certificate		d					
DETS Report No: 21-04102			Date Sampled	25/03/21	25/03/21	25/03/21	
G & J Geoenvironmental C	Consultants Ltd		Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemo	ore Lane		TP / BH No	Windrow 1-1	Windrow 1-2	Windrow 1-3	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	
Reporting Date: 06/04/2	021	DI	ETS Sample No	534858	534859	534860	
Determinand	Unit	DL	Accreditation				
Aliphatic >C5 - C6		< 0.01	NONE	< 0.01	< 0.01	< 0.01	1
Aliphatic >C6 - C8		< 0.01	NONE				 ł
	00			< 0.05	< 0.05	< 0.05	
Aliphatic >C8 - C10	mg/kg		MCERTS	33	< 2	31	
Aliphatic >C10 - C12	mg/kg		MCERTS	199	< 2	394	
Aliphatic >C12 - C16	mg/kg		MCERTS	2119	13	3862	
Aliphatic >C16 - C21	mg/kg		MCERTS	3020	43	4850	
Aliphatic >C21 - C34	mg/kg		MCERTS	1141	< 10	1521	
Aliphatic (C5 - C34)	mg/kg		NONE	6511	55	10659	
Aromatic >C5 - C7		< 0.01	NONE	< 0.01	< 0.01	< 0.01	
Aromatic >C7 - C8	mg/kg	< 0.05		< 0.05	< 0.05	< 0.05	
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	31	< 2	31	
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	767	7	681	
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	1178	23	1063	
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	377	< 10	359	
Aromatic (C5 - C35)	mg/kg	< 21	NONE	2353	30	2134	
Total >C5 - C35	mg/kg	< 42	NONE	8864	85	12793	





Soil Analysis Certificate - BTEX / MT	BE						
DETS Report No: 21-04102				25/03/21	25/03/21	25/03/21	
G & J Geoenvironmental Consultants Lt	d		Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: Middlemore Lane			TP / BH No	Windrow 1-1	Windrow 1-2	Windrow 1-3	
Project / Job Ref: GJ049		A	Additional Refs	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	
Reporting Date: 06/04/2021			ETS Sample No	534858	534859	534860	
Determinand	Unit	RL	Accreditation				
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	





Soil Analysis Certificate - Vo	natile Organic (25/02/24	25/02/24	25/02/24	
DETS Report No: 21-04102 G & J Geoenvironmental Const	ultanta Ltd		Date Sampled	25/03/21	25/03/21	25/03/21	
			TP / BH No	None Supplied	None Supplied Windrow 1-2	None Supplied	
Site Reference: Middlemore L	ane		TP / BH NO	Windrow 1-1	VVINDIOW 1-2	Windrow 1-3	
Project / Job Ref: GJ049		A	dditional Refs	None Supplied	None Supplied	None Supplied	
Order No: None Supplied			Depth (m)	None Supplied	None Supplied	None Supplied	
Reporting Date: 06/04/2021		DE	TS Sample No	534858	534859	534860	
Determinand	Unit	RL	Accreditation				
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Chloromethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Bromomethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
2,2-Dichloropropane Chloroform	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	
Bromochloromethane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,1,1-Trichloroethane	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,1-Dichloropropene	ug/kg ug/kg	< 10	MCERTS	< 5 < 10	< 10	< 5 < 10	
Carbon Tetrachloride	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Trichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
TAME	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	
Styrene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Bromoform	ug/kg	< 10	MCERTS MCERTS	< 10	< 10	< 10	
Isopropylbenzene	ug/kg	-		< 5	< 5	< 5	
1,1,2,2-Tetrachloroethane 1,2,3-Trichloropropane	ug/kg ug/kg	< 5 < 5	MCERTS MCERTS	< 5 < 5	< 5 < 5	< 5 < 5	
n-Propylbenzene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	
Bromobenzene	ug/kg ug/kg	< 5	MCERTS	< 5	< 5	< 5	
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
sec-Butylbenzene	ug/kg	< 5	MCERTS	94	< 5	< 5	
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
n-Butylbenzene	ug/kg	< 5	MCERTS	191	< 5	< 5	
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	
,2-Dibi offio-3-chioroproparie	uy/ky	~ 10	WIGER 13	< 10	< 10	< 10	





Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 21-04102	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 06/04/2021	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
534858	Windrow 1-1	None Supplied	None Supplied	8	Brown sand with stones and concrete
534859	Windrow 1-2	None Supplied	None Supplied	12.1	Light brown sand
534860	Windrow 1-3	None Supplied	None Supplied	10	Grey sandy gravel with stones and concrete

Moisture content is part of procedure E003 & is not an accredited test Insufficient Sample^{US}

Unsuitable Sample ^{U/S}





Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 21-04102	
G & J Geoenvironmental Consultants Ltd	
Site Reference: Middlemore Lane	
Project / Job Ref: GJ049	
Order No: None Supplied	
Reporting Date: 06/04/2021	

Soil D Betra - Valuer Sociable Determination of water solute boron in solit p. 21 hot water solute boron by UC-05. BOI Soil AR Entropy of the STEx by background C-MS BOI Soil D Chierdia - Water Solute (2). Electrimination of colors in solit p. 21 hot water solute by control on water by solutication. solition PB BOI Soil AR Chronium - Hexavient 1.5. Electrimination of complex synche down in wolt and a solition of water solute by colorinativy. BOI Soil AR Cyclebraum Entropy of colors synche down by colorinativy. BOI Soil AR Cyclebraum Entropy of colors synche down by colorinativy. BOI Soil AR Cyclebraum Entratable Matter (CPA) Gavamentation of neuroscipation of solitication followed by colorinativy. BOI Soil AR Exercted Advectory Determination of neuroscipation of solitication of solitication (Solitication Solitication). BOI Soil AR Exercted Advectory Determination of neuroscipation of solitication of solitication of solitication followed by colorinativy. BOI Soil AR Exercted Advectory Determination of neuronation and solitication of solitication of solitication followed by colorinativy. BOI Soil AR Exer	Matrix	Analysed On	Determinand	Brief Method Description	Method No
Sail Ail BTED Determination of BTEX by headques CC. MS End for the second s	Soil		Boron - Water Soluble	Determination of water soluble boron in soil by 2.1 bot water extract followed by ICP-OES	
Soli D Catalona Determination of carlons in solit as all and and determination of PORTS ED00 Soli A.R. Choranum - Hosoviam Determination of chorano by catalonic num work as alwayed by ion Proceedingship ED00 Soli A.R. Choranum - Hosoviam Determination of theorem by catalonic num work as alwayed by ion Proceedingship ED00 Soli A.R. Charano - Energy and the proceeding by catalogian in work of the proceeding by catalogian in work of the proceeding by catalogian in work of the proceeding by catalogian in theproceeding by catalogian in theproceeding by catalogian in the pr					
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Soli All Crantol: Compose Determination of complex cynine by distillation followed by colorimetry [D15] Soli All CyclePreame Extractable Name: Colorised to the cyclePreame of the cyclePreame o				Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of	E016
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Soil D Magnesium - Water Soluble Determination of water soluble magnesium by extraction with water followed by ICP-OES E002 Soil D Metals Determination of metals by auauregia digestion followed by ICP-OES E003 Soil AR Mineral OII (C10 - C40) Determination of metals by auauregia digestion followed by ICP-OES E004 Soil AR Moisture Content. Moisture content. determined gravimetrically E003 Soil D Nitrate-Water Soubbe (2:1) Determination of organic matter by oxidising with potassium dichromate followed by titration with content. determined province they oxidising with potassium dichromate followed by ICP-OES E003 Soil AR PAH - Speciated (EPA 16) Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards. E008 Soil AR PAH - Speciated (EPA 16) Determination of PAH compounds by extraction with acetone and hexane followed by GC-MS. E008 Soil AR Phenols - Total (monohydic): Determination of variar matter by oxidising with petroleum ether E001 Soil AR Phenols - Total (monohydic): Determination of hexane by extraction with acete analysed by ion chromatography E003 <td>Soil</td> <td>D</td> <td>Loss on Ignition @ 450oC</td> <td>Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle</td> <td>E019</td>	Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle	E019
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			C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil AR VPH (C6-C8 & C8-C10) Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID E001	Soil	AR			E001
	Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

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APPENDIX 2

Technical Note Reviewing the Remediation Works



Our ref: SF/CA11906/TN001 Your ref: Date: 05 August 2021

Technical Note CA11906-REM: Review of Remediation Works at Middlemore Lane

G&J Geoenvironmental Consultants Ltd (G&J) was commissioned by St Francis Group (Aldridge) Ltd to carry out the verification of remediation works at the former McKechnie Brass Works, located off Middlemore Lane, Aldridge, West Midlands. It has been proposed that the site will be redeveloped for commercial use.

Remediation works were undertaken by <u>DSM</u>, who are considered to be a reputable remediation contractor with evident experience.

Remediation Validation

Remediation works on site resulted in approximately 400-500m³ of hydrocarbon contaminated soil being removed for treatment, primarily from an excavation around an old underground storage tank.

Bioremediation of the hydrocarbon hotspots and any organic materials suitable for this remediation technique. Inorganic contaminants (such as metals) will obviously be mitigated within the end development by surface sealing (concrete slabs, yards, roads etc.). We would not necessarily expect any disposal of soils but free product on water would be disposed / sent to an offsite treatment centre.

Bioremediation treatment was undertaken followed by direct re-use of material, to address potential vapour inhalation by site users and reduce the risk of organic pollution of controlled waters to acceptable levels.

Although the original testing of the material showed concentrations exceeding the site remedial target for total hydrocarbons, which is a nominal target considered to be indicative of potential 'gross' contamination, there were no exceedances of the generic assessment criteria (GAC) for a commercial land use, suggesting the material does not present a significant risk.



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Furthermore, inspection of the area where it is understood the material was reused/backfilled did not reveal any evidence of significant or gross contamination. It is therefore considered that there are no residual significant risks associated with this material.

It was intended that the soils would undergo further treatment before reuse, along with the small amount of soil added from certain excavations. However, towards the end of April, the soils were re-used in error by the Contractor. Inspection by the geo-environmental consultant of the approximate area where it is understood to be re-used did not reveal any evidence of significant contamination, and no evidence of contaminated soils near the surface was noted across the site as a whole.

Validation sampling and analysis undertaken across the site, either based on the site grid, or investigation of potential primary sources, have resulted in all samples passing remedial targets, with the following exceptions:

North-east corner of the site

Excavation of a potential hotspot in the north-east of the site was not possible due to the presence of a live sewer and retained site road. Trial pits were undertaken to the edge of the road and samples taken for analysis, which revealed trichloroethene (TCE) in two samples at concentrations in excess of the commercial GAC. Although there is a likelihood of a hotspot of TCE remaining in this area beneath a portion of the road, it is considered that this localised contamination does not currently present a significant risk.

Whilst the published commercial GACs are considered to be conservative criteria, the elevated TCE concentrations may need further consideration. As part of the proposed development, it is anticipated that a service yard will cover this area and no buildings will be located above this area. If buildings are to be constructed in this area, potential risks via the vapour inhalation pathway would need to be addressed.

<u> Road / Car Park Surfacing</u>

Two out of nine samples of surfacing material recorded total polycyclic aromatic hydrocarbons (PAHs) in excess of the site remedial target, indicating the presence of coal tar. The remediation target for PAH is not risk driven and was agreed with the EA as a mechanism to prevent gross pollution. These materials are not considered to present a significant risk, given the PAHs are bound into a solid matrix.



<u>Asbestos</u>

Previous investigations on site included only limited testing for asbestos. As such, testing for asbestos on validation samples was undertaken to allow a post-remediation assessment of the risks from asbestos to the proposed development.

During the site works, 11 out of 118 samples which underwent asbestos analysis recorded the presence of asbestos fibres, which was generally in the form of microscopic fibre bundles or cement debris.

The risks from asbestos contamination are considered to be low, however it is considered that a cover layer may be required in any landscaped areas given that appropriate soil is required to act as a suitable growing media. This capping layer may need to comprise a barrier layer of 100mm coarse aggregate or a geotextile membrane (subject to further testing confirming presence of asbestos), overlain by 300mm of clean imported soil to act as a suitable growing media.

Cover Layer

Given that appropriate soil is required to act as a suitable growing media, and in order to address any residual risks, a cover of clean soil should be placed in any landscaped areas. The areas of identified asbestos should be recorded in relation to future earthworks. Potential risk associated with asbestos is only of a considerable level where the associated material is exposed at the surface. However, where there is scheduled to be hardstanding and suitable clean cover, the associated asbestos risk is minimised.

Groundwater

Leaching of contamination in soil through the unsaturated zone to the shallow groundwater and via the saturated ground to the Anchor Brook / Wyrley and Essington Canal was highlighted as a potential risk.

The reduction to the agreed remedial targets in soils (which are significantly lower than commercial S4UL / C4SLs for the Contaminants of Concern) will have a concomitant effect on the groundwater in the surrounding area. Given the status and designation of the aquifer for the area, correspondence records show that the Environment Agency are comfortable with primary source removal and soils treatment and 'betterment' of groundwater over time as the most reasonable, sustainable, and practicable approach to the site.



Ground Gas

Based on the site CSM, the requirement for gas protection is unlikely but possible, in any event the post remediation risks are likely to be much reduced when compared to the baseline conditions.

Details of the proposed end use and site layout would dictate the requirement for gas well installation and the monitoring frequency thereof. In addition, any post remediation risks would only be applicable to buildings via vapour intrusion from residual contamination. For example, there would be no need to install any form of gas protection in 'open air areas' as it has been shown using variations of the Johnson and Ettinger Vapor Intrusion Model, and other vapour specialists that vapour from hydrocarbon contamination and ground gas of breakdown products can be present at exceptionally high volumes (but less than explosive limit) in 'non-confined spaces' and still not present a risk to human health.

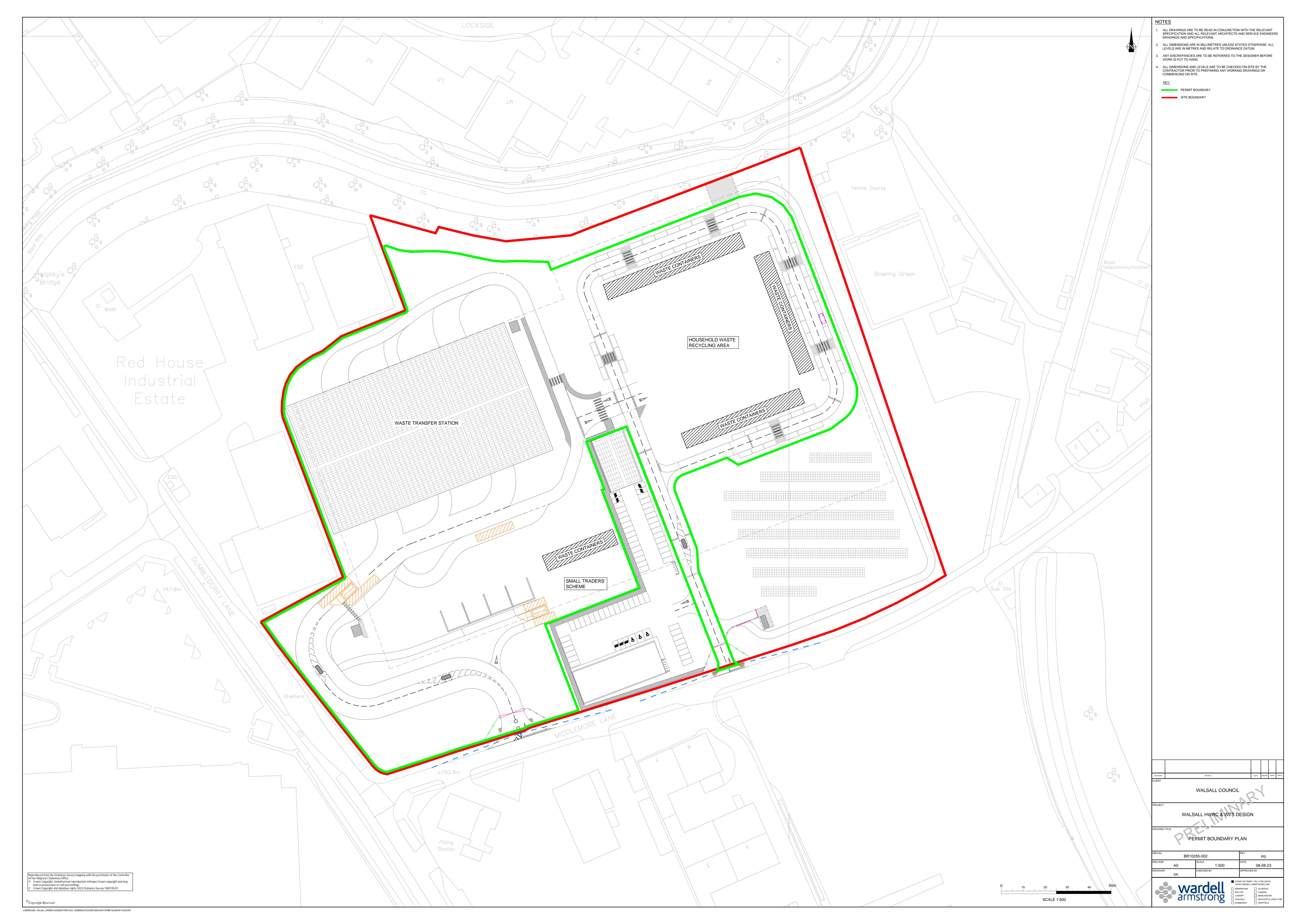
Summary

No further remediation works are deemed necessary, as it is considered that the aims of the remediation scope have been achieved and the site is suitable for use in the context of a commercial end use and current proposed HWRC redevelopment.

Detailed review of soft landscaped areas (and areas with limited ground cover) should be undertaken as part of any Detailed Design Stage. This information will be further assessed in relation to the pending planning conditions that will be associated with the proposed redevelopment.



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