



Halter Inn Development, Holcombe Brook Controlled Waters Risk Assessment

Job Number
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Client
Livero Ltd



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Ground Investigation | Land Remediation | Project Management



LK CONSULT

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Report Title	Controlled Waters Risk Assessment
Job Number	LKC261240
Client	Livero Ltd

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It should be noted this report pertains solely to potential ground stability issues relating to potential shallow mining within the proposed planning boundary only.

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1. Introduction

LK Consult Ltd (LKC) has been commissioned to carry out an updated Controlled Waters Risk Assessment (CWRA) for the Halter Inn Development, Holcombe Brook.

The following previous work has been undertaken at the site:

- Preliminary Risk Assessment (PRA) undertaken by LKC (ref: LKC 14 1496-01, issued February 2015).
- Geo-environmental Investigation Report and Remediation Strategy undertaken by LKC (ref: LKC 14 1496-02, issued April 2015).
- Desk Based Coal Mining Risk Assessment undertaken by LKC (ref: LKC 23 1356-A1-CMRA-Halter Inn Works, issued June 2023).
- Phase 2 Site Investigation Report undertaken by Demeter Environmental Ltd (ref: 25-08-02, issued September 2025).

This report summarises the above and details the work undertaken during groundworks and construction. The aim of this report is to update the controlled waters risk assessment and demonstrate to the local planning authority and the Environment Agency that the site does not pose a risk to the aquifer or nearby surface water course.

A summary of the site details is presented in Table 1-1. Plate 1-1 shows the proposed development plan.

Location	West side of Redisher Croft, west of Bolton Road West, south of Holcombe Old Road, Ramsbottom. Centred at approximate National Grid Reference 377933E 415300N.
Area	1,150m ² .
Topography	166 metres above ordnance datum (AOD). Site slopes down west to east (down to Redisher Croft).
Current Site Use	Part-construction of 3no. houses.
Proposed Development	3no. houses with associated garden and driveways.

Table 1-1: Summary of site details.

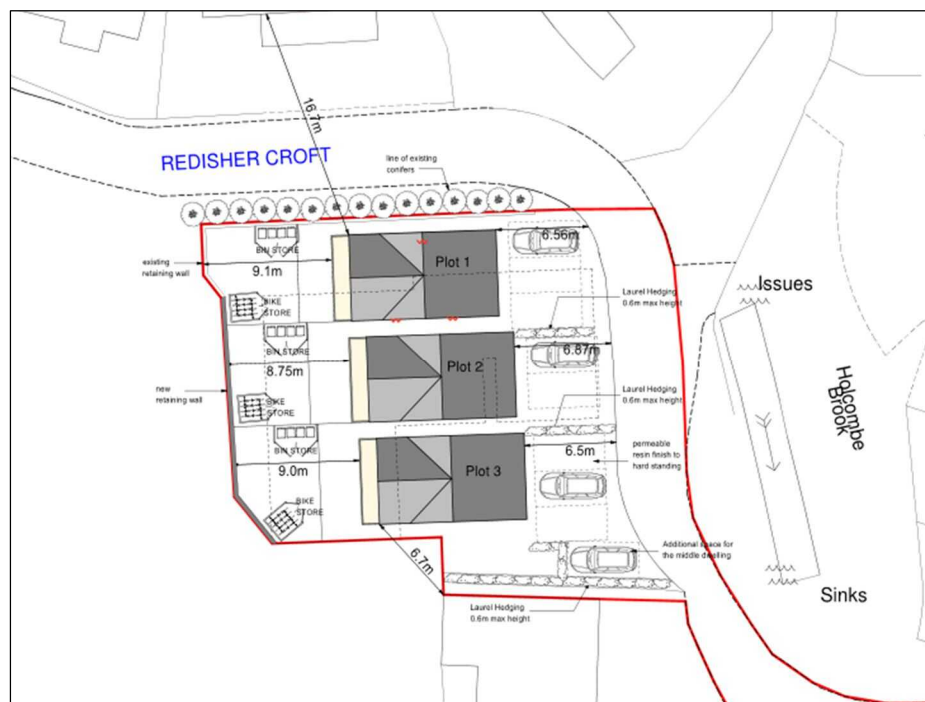


Plate 1-1: Proposed Development Plan.

2. Review of Previous Reports

2.1. Preliminary Risk Assessment

A summary of relevant information is provided in Table 2-1. Additional up to date information has been included in addition to the original report, where applicable.

Site History	Unreferenced building 1893-1960, no longer present on 1978 mapping. Assumed to be the Halter Inn (demolished in 1945). Edge of an adjacent reservoir 1803-1912, later named as filter beds. Wooded area 1893-1912. Building 1978-2014 – most recently occupied as a Metal Finishing Works. Known as the Halter Inn Works. It is understood that the work was operational until approximately 2023.
Geology	Made Ground - None recorded. Superficial - Devensian Till in the south-west of the site. No superficial in the north-east. Bedrock - Holcombe Brook Grit (sandstone) with Millstone Grit (mudstone and siltstone) in the south-west corner. Coal seam (un-named) is recorded close to the south-west site boundary.
Nearest Surface Water	Holcombe Brook 9m east (flowing west to east). River Quality B – 2m NE – Holcombe Brook. No relevant water abstractions, discharge consents or pollution incidents.
Groundwater	Superficial – Unproductive Aquifer. Bedrock – Secondary A. No relevant water abstractions.
Infilled Ground	No registered landfills within 250m. 3 potentially infilled features within 250m.
Site Visit (2015)	L-shaped metal finishing works, concrete yard / car park, several containers noted including IBCs. Manhole cover relating to a culverted natural watercourse, discharging into the Holcombe Brook.
Preliminary Conceptual Model	Low to high risk associated with human health pathways (ACM, heavy metals, PAHs, hydrocarbons, solvents). High risk associated with gas. Moderate risk associated with controlled waters (heavy metals, PAHs, hydrocarbons, solvents) Moderate risk associated with building (sulphate attack). Moderate risk associated with potable water pipes (organic contaminants). Very low risk associated with flora (phytotoxicity).
Recommendations	Investigation work recommended.

Table 2-1: Summary of Preliminary Risk Assessment (2015), with 2023 updates (site history).

2.2. LKC Geo-Environmental Investigation

The investigation undertaken by LKC in 2014 comprised 4no. window sample boreholes and 1no. hand dug pit. The locations were in accessible areas at the time of the investigation (prior to the demolition of the buildings).

The window sample boreholes refused at depths of between 2.39mbgl and 3.25mbgl on bedrock.

The site investigation locations are shown in Plate 2-1.

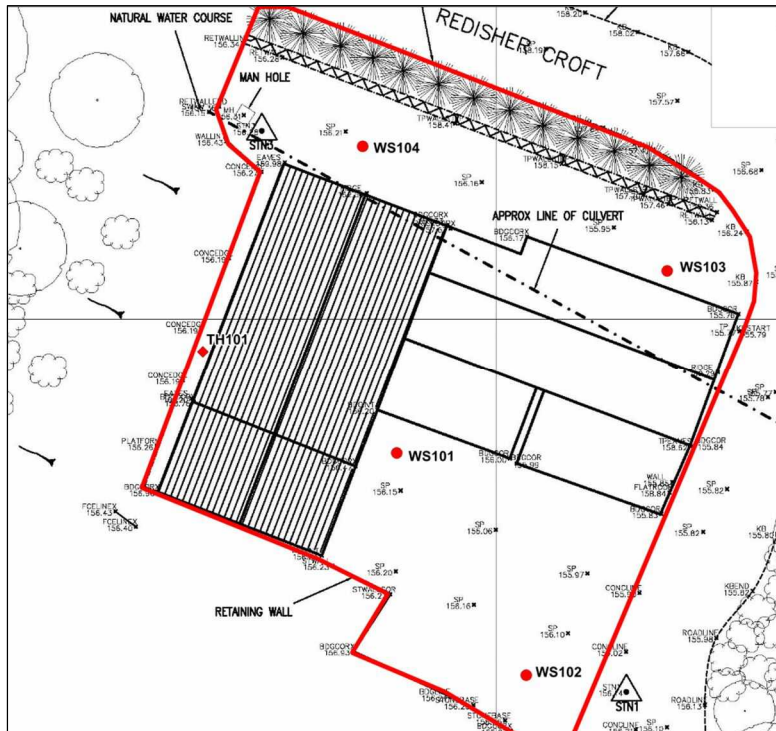


Plate 2-1: Site Investigation Location Plan (2014).

Logs are provided in Appendix A. Ground conditions are summarised below:

- WS101 – Made ground to 1.40mbgl, clay to 2.20mbgl, gravel (likely weathered shale) to 2.98mbgl.
- WS102 – Made ground to 0.60mbgl, clay to 2.90mbgl, weathered mudstone to 3.25mbgl.
- WS103 – Made ground to 1.65mbgl, clay to 2.10mbgl, mudstone to 2.39mbgl.
- WS104 – Made ground to 0.45mbgl, clay to 1.35mbgl, black shale to 1.43mbgl.
- TH101 – Made ground to 1.05mbgl, clay to 1.05mbgl.

Anthropogenic material within the made ground comprised brick, ash and clinker. There was no visual or olfactory evidence of hydrocarbons or volatile contaminants. There were no PID readings greater than 1ppm TVOCs.

Groundwater strikes were recorded in WS101 at 2.3m depth during drilling. Groundwater depths were recorded at ground level to 2.17m depth within monitoring wells.

The soil and groundwater results are provided in Appendix B.

When soils results were compared to relevant assessment criteria for human health (residential), elevated arsenic and lead were identified.

Groundwater sampling was undertaken (WS102 and WS103). No free product was detected and there was no visual olfactory evidence of contamination within the groundwater.

Since no potable groundwater abstractions have been identified within 1km of the site the adjacent brook was considered the primary receptor. Guidelines at this time were used in the assessment and groundwater results were compared to River Basin District Standards and Threshold Values (DSTV) ¹ and Environment Agency Values for freshwater Environmental Quality Standards² (EQS) for coarse fish or UK Drinking Water Standards (UKDWS)^{3,4} if these were not available.

Furthermore, the risk from List 2 compound (EC Dangerous Substance Directive 76/464/EEC) in a freshwater ecosystem is governed by the hardness of the water. Where applicable, the hardness was taken into account for these contaminants.

No elevated contaminants above the relevant assessment criteria were recorded in groundwater samples taken from boreholes on site and no visual or olfactory evidence of significant contamination was identified during the site investigation.

Based on the above LKC considered the risk from pollutant linkage 4 to be low and no remediation was recommended.

2.3. Demeter Phase 2 Site Investigation

The investigation undertaken by Demeter in 2025 was undertaken once the buildings had been demolished and comprised 8no. trial pits (TP101-TP108). The pits were excavated to a maximum depth of 2.60mbgl.

The site investigation locations are shown in Plate 2-2.

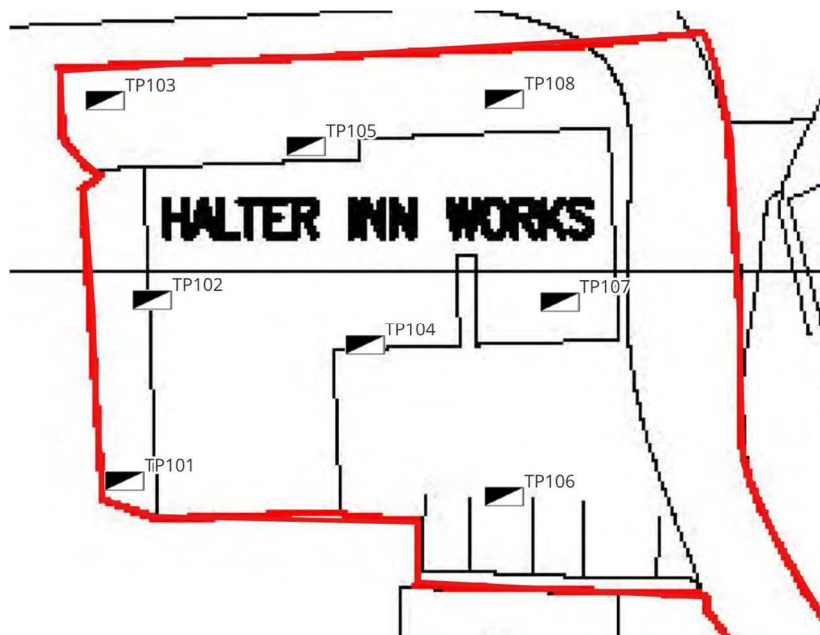


Plate 2-2: Site Investigation Location Plan (2025).

¹ Defra (2010) "The River Basin Districts Typology, Standards and Groundwater Threshold Values". Water Framework Directive (England and Wales) Directions 2010.

² EA (2002). "Environment Agency technical advice to third parties on Pollution of Controlled Waters for Part IIA of the Environment Protection Act 1990."

³ EA (2002). "Environment Agency technical advice to third parties on Pollution of Controlled Waters for Part IIA of the Environment Protection Act 1990."

⁴ HMSO (2009) "Water England: The Private Water Supplies Regulations". Statutory Instruments No.3101.

Logs are provided in Appendix A. Ground conditions are summarised below:

- TP101 - Made ground to 1.00mbgl, clay to 1.50mbgl, sand and gravel (sandstone and mudstone) to 1.70mbgl.
- TP102 – Made ground to 1.30mbgl, clayey / silty gravel to 1.70mbgl.
- TP103 – Made ground to 0.60mbgl, silt to 0.95mbgl, peaty clay to 1.60mbgl, coal to 1.70mbgl.
- TP104 – Made ground to 1.00mbgl, cobbly silt to 2.15mbgl, sandstone to 2.20mbgl.
- TP105 – Made ground to 0.80mbgl, gravelly cobbly (sandstone) silt to 1.50mbgl.
- TP106 – Made ground to 0.50mbgl, clayey gravelly sand to 2.35mbgl, coal to 2.60mbgl.
- TP107 – Made ground to 0.70mbgl, silt to 2.10mbgl (terminated on slate).
- TP108 – Made ground to 1.10mbgl, silt with sandstone boulders to 2.35mbgl, sandstone to 2.4mbgl.

The made ground generally comprised brick and Yorkshire stone flags amongst sand and clay. Localised relic structures were identified in TP107 (old floor, Yorkshire stone flags) and TP108 (reinforced concrete floor). Other than the made ground noted, there was no visual or olfactory evidence of hydrocarbons or volatile contaminants.

Groundwater strikes were recorded in TP101, TP102 and TP104 at 1.0-2.2m depth. The remaining trial pits were dry.

Laboratory testing were undertaken on the soil samples, including leachate testing (in TP101, TP102, TP106, TP107). Results are present in Appendix B.

When compared to assessment criteria for human health, the following were identified in the soils:

- Elevated PAHs in TP102, TP107 and TP108.
- Elevated petroleum hydrocarbons (Aromatic EC16-21 and Aromatic EC 21-35) recorded in TP102 and TP108.
- Elevated chromium (TP108) and lead (TP104 and TP108).

Although some contamination was identified in the natural in TP102, it is considered likely that a small amount of material from the made ground was pushed down into the natural showing a false result. There was nothing in the soil description to suggest contamination within the natural.

It is assumed that the petroleum hydrocarbon contamination is associated with PAHs and possible ashy made ground.

No controlled waters assessment was undertaken as part of this investigation.

3. Current Site Settings

LKC attended site on 24th March 2026. At the time of the visit, construction work was in progress, and the foundations for each building had been completed. Photographs are presented in Plate 3-1.



Photo 1. Taken at the front of Plot 3, facing west.



Photo 2. Southern site boundary showing old and new retaining wall, facing west.



Photo 3. Front of Plots 1-3, facing north.



Photo 3. Rear of Plots 1-3, facing north.

Plate 3-1: Photographs of Site Visit 24th March 2026.

It is understood that no evidence of hydrocarbon or volatile contaminants were identified during groundworks. No other unexpected contamination was identified.

A culvert (300mm diameter) running through the site into the Holcombe Brook was located and diverted around the perimeter of the site (adjacent to Plot 1), still discharging into the brook.

It is assumed that some of the made ground will have been excavated and removed from site below the footprint of the buildings to accommodate the building foundations.

Further excavation in the west of the site will be required to accommodate the required 600mm environmental cover system in the proposed rear garden areas.

4. Updated Controlled Waters Risk Assessment

The main receptor is considered to be the Holcombe Brook 9m east of the site. It is assumed that the groundwater identified during investigation work is within direct continuity with the brook and flowing to the east. The bedrock aquifer below the site is classified as Secondary A with no groundwater abstractions recorded within influencing distance. The aquifer is not considered to be a significant receptor.

The 2014 investigation included groundwater sampling in the two boreholes closest to Holcombe Brook (WS102 and WS104). No elevated contaminants were identified when compared to relevant assessment criteria at the time of the report. However, this has been re-assessed to take into account updated guidance documents below.

LKC have compared results above Limits of Detection (LOD). Where relevant the review of priority substances takes precedence considering threshold values for groundwater cannot be used '*as part of site-specific investigations*' from the River Basin Typology guidance (2015). The hierarchy is as follows:

- River Basin District Standards and updated Water Framework Directive⁶ for Annual Average (AA) Environmental Quality Standards for priority substances (EQS WFD).
- 2016 private water supply standards (UKDWS potable)⁷.
- 2001 Environment Agency Values for Environmental Quality Standards (EQS) and UK Drinking Water Standard (UKDWS)⁸.

With regards to hydrocarbon mixtures (TPHCWG) for UKDWS, LKC will use the CL:AIRE guidance on petroleum hydrocarbons in groundwater⁹ based on WHO guidelines.

The risk from List 2 compound (EC Dangerous Substance Directive 76/464/EEC) in a freshwater ecosystem is governed by the hardness of the water. Where applicable the hardness was considered for these contaminants. An MBAT assessment was undertaken (Appendix B) and where applicable / possible parameters were converted to DOC (from SOM and TOC) and Ca (from hardness).

Data above limits of detection (LOD) have been used.

With regards to the LKC groundwater testing, when compared to relevant assessment criteria, the following was elevated:

- Elevated copper in WS104 (bioavailable copper concentration of 1.75ug/l compared to assessment criteria of 1ug/l).

It is assumed that the elevated metals identified in the soils and elevated copper in the groundwater in WS104 are likely associated with ash, clinker and coal observed within made ground and are unlikely to be mobile due to the residual crystalline nature of the material.

There was no visual / olfactory evidence of hydrocarbons observed.

Although some time has passed since the investigation was undertaken, the investigation work undertaken in 2025 recorded similar ground conditions as the 2014 investigation.

The site continued to be a works for a further 10 years, however, the site was predominately hardstood with minimal pathways for contamination to enter the ground.

⁶ DEFRA, 2015, "The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015".

⁷ Statutory Instruments, 2016, "Private Water Supplies (England) Regulations 2016", No. 618.

⁸ Environment Agency, May 2002, "Environment Agency technical advice to third parties on Pollution of Controlled Waters for Part IIA of the Environmental Protection Act 1990", Version 2.

⁹ CL:AIRE, March 2017, "Petroleum Hydrocarbons in Groundwater: Guidance on assessing petroleum hydrocarbons using existing hydrogeological risk assessment methodologies", Version 1.1.

Although there could be expected to be some additional demolition rubble, a significant source of mobile contamination would not be expected from this material and significant additional quantities were not identified, suggesting the majority of the demolition material was removed from site.

On the assumption that the ground conditions have not changed significantly since the original 2014 investigation, and the data from this investigation has still be used as a 'line of evidence' in this updated risk assessment.

Elevated metals, PAHs and petroleum hydrocarbons Aromatic EC16-21 and EC 21-35 were identified in the soils in the 2025 investigation. The source of this is expected to be the ash, clinker and coal noted within the made ground. Tarmacadam was also noted which could be the source of PAH and petroleum hydrocarbons. The petroleum hydrocarbons bands elevated are expected to be associated with PAHs (ash, clinker, coal, tarmac) rather than a fuel / oil source.

Leachate tests were undertaken on 4no. soils samples from the 2025 investigation and tested for a range of contaminants.

The leaching test is aggressive (de-ionised water) and is not in aqueous equilibrium (steady state) with the solid sample. This may cause rapid dissolution and overestimation of the aqueous phase concentrations compared to groundwater in contact with contaminated soils. Although dissolution may be reduced for highly hydrophobic contaminants¹⁰ such as B(a)P, it is likely that the initial leaching will remove the most readily available hydrocarbons and subsequent flushing would reduce the leachable concentrations¹¹. Traditionally the leaching test was developed for inorganic constituents and the leaching of organics is poorly understood¹².

The leachate results from the 2025 have been compared to the up-to-date assessment criteria as detailed above. With regards to Ca, the Demeter testing did not include hardness, therefore the lowest value based on the LKC groundwater data has been used.

When compared to the assessment criteria above, the following elevations were identified:

- Chromium elevated in TP102 (7.57ug/l compared to the assessment criteria of 4.7ug/l). No Chromium VI above LOD.
- Copper elevated in TP101, TP102 and TP107 (bioavailable copper concentrations of 3.83-7.17ug/l compared to assessment criteria of 1ug/l).
- Zinc elevated in TP102 (bioavailable zinc concentrations of 12.03ug/l compared to assessment criteria of 10.9ug/l)
- Lead elevated in TP101, TP102 and TP107 (bioavailable lead at 4.98-13.74ug/l compared to the assessment criteria of 1.2ug/l).

As discussed above, the leachate test may not be representative of groundwater conditions and is likely to show higher concentrations of inorganic contaminants compared to actual groundwater samples.

Again, it is assumed that the elevated metals identified are likely associated with ash, clinker and coal and are unlikely to be mobile due to the residual crystalline nature of the material.

The highest concentrations are identified in TP102, which is located to the rear of the plot (furthest distance from Holcombe Brook).

The PAHs and TPHs were all recorded at or close to the limits of detection.

No evidence of any further contamination was identified during groundworks. Some made ground has been removed from site to accommodate the foundations and further made ground will be removed

¹⁰ Environment Agency, 2006, "Remedial Targets Methodology: Hydrogeological Risk Assessment for Land Contamination".

¹¹ Environment Agency, 2006, "Remedial Targets Methodology: Hydrogeological Risk Assessment for Land Contamination".

¹² Environment Agency, 2009, "Petroleum Hydrocarbons in Groundwater: Supplementary Guidance for Hydrological Risk Assessment".

to accommodate the environmental cover system required in the west of the site. This will remove some of the contamination source (including the location of TP102).

Given the ground conditions encountered in both investigations, the results of the groundwater and more recent leachate tests, and the partial source removal, there is not considered to be a significant source of mobile contamination on site. The source of the localised elevated metals and PAHs are assumed to be associated with ash, clinker, coal and localised tarmacadam which are unlikely to be significantly mobile and are not expected to pose a significant risk to Holcombe Brook.

Given the size and nature of the development, it is not considered proportionate to undertake carry out further investigation and assessment.

5. Conclusions

LKC considered that there is sufficient information to conclude that the risk to controlled waters (Holcombe Brook and Secondary A Aquifer) is low and no further investigation or assessment is required with respect to this pollutant linkage. This takes into account information from two phases of investigation work and current site settings.

This report should be presented to the regulators for approval and discharge of the relevant condition.

Appendix A

Profile logs

**LK CONSULT LTD**Bury Business Centre, Kay Street, Bury, BL9 6BU
Tel: 0161 763 7200 web: www.thelkgroup.com**Site**

Halter Inn Works, Holcombe

Number
WS101**Excavation Method**

Drive-in Window Sampler

Dimensions**Ground Level (mOD)****Client**

Finishing Techniques Ltd.

Job
Number
LKC 14 1496**Location** (Observed measurements)

WS101

Dates

21/01/2015

Engineer

LKC

Sheet
1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
0.10-0.30 0.30-0.50	C1 PID1 0.79ppm				0.08 (0.72)	MADE GROUND: Concrete. MADE GROUND: Brown / grey sandy cobbly gravel with frequent brick fragments, clinker and occasional ash. Sand is fine to medium. Gravel is fine to coarse, subangular to angular.	 		
0.80-1.00	C2				0.80 (0.30)	MADE GROUND: Light brown gravelly sand with frequent brick fragments and occasional ash. Sand is fine to coarse. Gravel is fine to coarse, subangular to subangular.			
1.00-1.45 1.10-1.30	SPT N=1 C3		2,1/0,0,0,1		1.10 (0.30)	MADE GROUND: Dark brown / grey silty gravelly clay with occasional ash, rare brick fragments and clinker. Sand is fine to medium. Gravel is fine to medium, subrounded to subangular.			
1.40-1.60 1.50 1.60-1.80 1.80	C4 SV 10kPa B1 SV 12kPa				1.40 (0.80)	MADE GROUND: Dark brown / grey silty gravelly clay with occasional ash, rare brick fragments and clinker. Sand is fine to medium. Gravel is fine to medium, subrounded to subangular.			
2.00-2.45	SPT N=16		1,2/3,3,5,5		2.20	Soft consistency, low strength, dark brown / grey slightly gravelly silty CLAY with frequent wood. Gravel is fine to medium, subrounded to subangular. Gravel comprises shale and sandstone. Organic odour noted.		Σ1	
2.20-2.40	B2		Water strike(1) at 2.30m.		(0.78)	Black silty clayey GRAVEL. Gravel is fine to medium, subangular to angular. Gravel comprises shale.			
2.80-2.98	SPT 25/30		5,5/25		2.98	Complete at 2.98m			
Remarks Groundwater strike at 2.3mbgl.							Scale (approx) 1:50	Logged By TB	Figure No. LKC 14 1496.WS101

**LK CONSULT LTD**Bury Business Centre, Kay Street, Bury, BL9 6BU
Tel: 0161 763 7200 web: www.thelkgroup.com**Site**

Halter Inn Works, Holcombe

Number
WS102**Excavation Method**

Drive-in Window Sampler

Dimensions**Location** (Observed measurements)
WS102**Ground Level (mOD)****Dates**
21/01/2015**Client**

Finishing Techniques Ltd.

Job
Number
LKC 14 1496**Engineer**

LKC

Sheet
1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
0.15-0.30 0.30-0.50	C1 PID1 0.67ppm				0.11 (0.49)	MADE GROUND: Concrete. MADE GROUND: Brown slightly clayey sandy gravel with occasional ash and fine brick fragments. Sand is fine to coarse. Gravel is fine to medium, subangular to angular.	 		
0.70 0.70-0.90 0.80 1.00-1.45	SV 145kPa C2 SV 155kPa SPT N=47		4,5/11,12,13,11		(0.80) 1.40	Firm to stiff consistency, high strength, brown sandy gravelly CLAY with rare coal fragments. Sand is fine to medium. Gravel is fine to medium, subrounded to subangular. Gravel comprises sandstone and siltstone.	 		
1.80 1.80-2.00 2.00-2.45 2.40	SV 55kPa B1 SPT N=5 SV 62kPa		1,2/1,1,2,1		(1.50)	Soft to firm consistency, medium strength, brown silty gravelly CLAY. Gravel is fine to medium, subrounded to subangular. Gravel comprises sandstone and shale.	 		
3.00-3.25	SPT 49/100		10,13/24,25		2.90 (0.35) 3.25	Black weathered MUDSTONE.			
						Complete at 3.25m			

Remarks

No groundwater strike.

Scale
(approx)

1:50

Logged
By

TB

Figure No.

LKC 14 1496.WS102

**LK CONSULT LTD**Bury Business Centre, Kay Street, Bury, BL9 6BU
Tel: 0161 763 7200 web: www.thelkgroup.com**Site**

Halter Inn Works, Holcombe

Number
WS103**Excavation Method**

Drive-in Window Sampler

Dimensions**Ground Level (mOD)****Client**

Finishing Techniques Ltd.

Job
Number
LKC 14 1496**Location** (Observed measurements)

WS103

Dates

21/01/2015

Engineer

LKC

Sheet
1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
1.00-1.45 1.00-1.20	SPT N=6 C1		1,1/3,2,0,1		0.05 (0.35) 0.40 (0.50) 0.90	MADE GROUND: Tarmacadam. MADE GROUND: Brown sandy gravel. Sand is fine to medium. Gravel is fine to coarse, subrounded to subangular. MADE GROUND: Light brown gravel. Gravel is fine to medium, subrounded to rounded.	  		  
1.70-1.90 1.80 1.90 2.00-2.39	C2 SV 21kPa SV 28kPa SPT 50/240		3,3/3,10,27,10		(0.75) 1.65 (0.45) 2.10 (0.29) 2.39	MADE GROUND: Dark brown sandy clayey gravel with frequent ash, occasional brick fragments and rare clinker. Gravel is fine to medium, subangular to angular. Soft consistency, low strength, brown silty gravelly CLAY. Gravel is fine to medium, subangular to angular. Gravel comprises shale. Grey MUDSTONE. Complete at 2.39m	  		  

Remarks

No groundwater strike.

Scale
(approx)

1:50

Logged
By

TB

Figure No.

LKC 14 1496.WS103

**LK CONSULT LTD**Bury Business Centre, Kay Street, Bury, BL9 6BU
Tel: 0161 763 7200 web: www.thelkgroup.com**Site**

Halter Inn Works, Holcombe

Number
WS104**Excavation Method**

Drive-in Window Sampler

Dimensions**Location**

WS104

Ground Level (mOD)**Dates**

01/01/2015

Client

Finishing Techniques Ltd.

Job
Number

LKC 14 1496

Engineer

LKC

Sheet

1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
0.20-0.40 0.50 0.50-0.70	C1 SV 31kPa C2		2,2/2,2,15,35		0.05 (0.15) 0.20 (0.25) 0.45	MADE GROUND: Tarmacadam. MADE GROUND: Light brown sandy gravel. Sand is fine to medium. Gravel is fine to medium, subangular to angular.	 	 	
0.70-0.90 0.95 1.00-1.43	B1 SV 46kPa SPT 54/280				(0.90) 1.35 1.43	MADE GROUND: Grey / orange sandy gravel with frequent brick fragments, clinker and ash. Gravel is fine to medium, subrounded to subangular. Soft consistency, low to medium strength, silty gravelly CLAY. Gravel is fine to medium, subrounded to subangular. Gravel is sandstone and shale. Black SHALE. Complete at 1.43m	  	  	

Remarks

No groundwater strike.

Scale (approx)

1:50

Logged By

TB

Figure No.

LKC 14 1496.WS104

**LK CONSULT LTD**Bury Business Centre, Kay Street, Bury, BL9 6BU
Tel: 0161 763 7200 web: www.thelkgroup.com**Site**

Halter Inn Works, Holcombe

**Trial Pit
Number****TH101****Excavation Method**

Trial Pit

Dimensions**Ground Level (mOD)****Client**

Finishing Techniques Ltd.

**Job
Number**

LKC 14 1496

Location (Observed measurements)**Dates**

01/01/2015

Engineer

LKC

Sheet

1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.20-0.30	C1				(0.15) 0.13 (0.80) 0.95 1.05	MADE GROUND: Brown slightly clayey sandy gravel. Sand is fine to medium. Gravel is fine to medium, subangular to angular. MADE GROUND: Orange / brown clayey gravelly cobbles with abundant brick fragments. Gravel is fine to coarse, subangular to angular. Soft consistency, brown gravelly CLAY. Gravel is fine to coarse, subangular to angular. Complete at 1.05m	  	

Plan

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Remarks

No groundwater strike.

Scale (approx)

1:50

Logged By

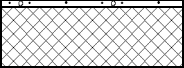
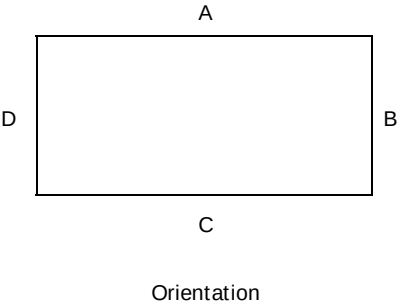
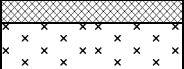
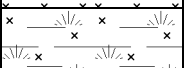
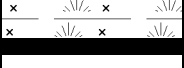
TB

Figure No.

LKC 14 1496.TH101

				TRIAL PIT LOG		TRIAL PIT NO. TP101	
CLIENT				SITE			
Livero Ltd				Halter Inn Works			
DATE OF FIELDWORK		SCALE	LEVEL/POSITION		LOGGED BY	JOB NO.	
12/08/25-12/08/25		1:50	See location plan		DH	25-08-02	
PIT DIMENSIONS			DEPTH	FACE A	FACE B	FACE C	FACE D
A/C : 2.00 B/D : 1.00			0.10				
ORIENTATION							
A D B C Orientation			1.00				
			1.50				
FACE AND POSITION LOGGED ALL							
SAMPLE AND TEST RECORD			DEPTH	DESCRIPTION OF STRATUM (thickness)		STRATUM NO.	WATER
DEPTH	TYPE	RESULT					DEPTH
0.50	JAR		0.10	CONCRETE (0.10) Brown sand with brick, concrete and gravel. (MADE GROUND). (0.90)			1 2
1.30	JAR	29*	1.00	Greyish brown sandy slightly gravelly silty CLAY. Gravel is fine to coarse subangular sandstone. (0.50)			
1.20	HSV		1.50	Grey/orange clayey SAND and GRAVEL with occasional rounded cobbles. Cobbles are sandstone and mudstone. TRIAL PIT TERMINATED			
1.20	TUB		1.70				
GROUNDWATER INFORMATION				EXCAVATION METHOD AND REMARKS			
DEPTH STRUCK	ELAPSED TIME	WATER LEVEL	REMARKS ON GROUNDWATER				
1.00			Slight seepage into trial pit				
1.20			Turning very wet				
All dimensions are in metres unless otherwise stated							

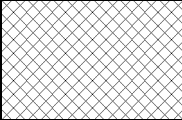
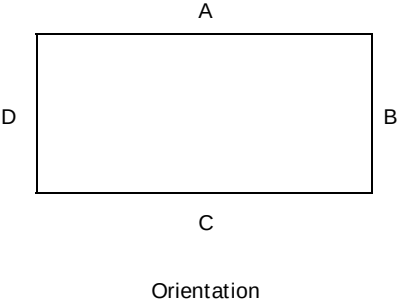
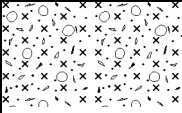
				TRIAL PIT LOG		TRIAL PIT NO. TP102		
CLIENT Livero Ltd				SITE Halter Inn Works				
DATE OF FIELDWORK 12/08/25-12/08/25		SCALE 1:50	LEVEL/POSITION See location plan			LOGGED BY DH	JOB NO. 25-08-02	
PIT DIMENSIONS A/C : 2.00 B/D : 1.00			DEPTH	FACE A	FACE B	FACE C	FACE D	
ORIENTATION			1.00 1.30					
A D B C Orientation								
FACE AND POSITION LOGGED All								
SAMPLE AND TEST RECORD			DEPTH	DESCRIPTION OF STRATUM (thickness)			STRATUM NO.	WATER DEPTH
DEPTH	TYPE	RESULT						
	JAR		1.00	Brown gravelly SAND with brick. (MADE GROUND). (1.00)				1 √
	JAR		1.30	Brown clayey gravelly SILT with occasional brick. (MADE GROUND). (0.30)				
			1.70	Brown/grey clayey silty GRAVEL Becoming more orange and sandy with depth. TRIAL PIT TERMINATED				
GROUNDWATER INFORMATION				EXCAVATION METHOD AND REMARKS				
DEPTH STRUCK	ELAPSED TIME	WATER LEVEL	REMARKS ON GROUNDWATER	Tracked excavator				
1.40			Slight seepage into trial pit					
All dimensions are in metres unless otherwise stated								

				TRIAL PIT LOG		TRIAL PIT NO. TP103	
CLIENT Livero Ltd				SITE Halter Inn Works			
DATE OF FIELDWORK 12/08/25-12/08/25		SCALE 1:50	LEVEL/POSITION See location plan		LOGGED BY DH	JOB NO. 25-08-02	
PIT DIMENSIONS A/C : 2.00 B/D : 1.00			DEPTH	FACE A	FACE B	FACE C	FACE D
ORIENTATION			0.05				
			0.45				
			0.60				
			0.95				
			1.60				
FACE AND POSITION LOGGED All							
SAMPLE AND TEST RECORD			DEPTH	DESCRIPTION OF STRATUM (thickness)		STRATUM NO.	WATER DEPTH
DEPTH	TYPE	RESULT					
0.30	JAR		0.05	ASPHALT (0.05)			
0.50	JAR		0.45	Brown sand with brick. (MADE GROUND). (0.40)			
0.65	JAR		0.60	Brown very silty CLAY. (MADE GROUND). (0.15)			
1.00	JAR		0.95	Grey SILT (0.35)			
				Black peaty silty CLAY (0.65)			
1.65	JAR		1.60	Black COAL			
			1.70	TRIAL PIT TERMINATED			
GROUNDWATER INFORMATION			EXCAVATION METHOD AND REMARKS				
DEPTH STRUCK	ELAPSED TIME	WATER LEVEL	REMARKS ON GROUNDWATER				
NS			Trial pit dry				

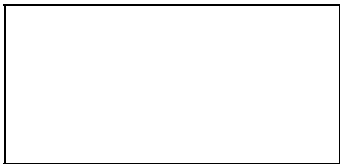
All dimensions are in metres unless otherwise stated

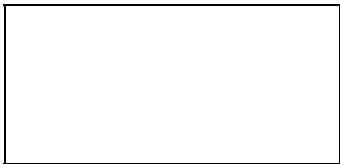
				TRIAL PIT LOG		TRIAL PIT NO. TP104		
CLIENT Livero Ltd				SITE Halter Inn Works				
DATE OF FIELDWORK 12/08/25-12/08/25		SCALE 1:50	LEVEL/POSITION See loaction plan			LOGGED BY DH	JOB NO. 25-08-02	
PIT DIMENSIONS A/C : 2.00 B/D : 1.00			DEPTH	FACE A	FACE B	FACE C	FACE D	
ORIENTATION			0.50 1.00 2.15					
A D B C Orientation								
FACE AND POSITION LOGGED ALL								
SAMPLE AND TEST RECORD			DEPTH	DESCRIPTION OF STRATUM (thickness)			STRATUM NO.	WATER DEPTH
DEPTH	TYPE	RESULT						
	JAR		0.50	Brown sandy BRICKS. (MADE GROUND). (0.50)				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
			1.00	Brown gravelly black clay with bricks. (MADE GROUND). (0.50)				
1.20	JAR			Brown clayey cobbly SILT (1.15)				
1.90	JAR		2.15	TRIAL PIT TERMINATED				
			2.20	SANDSTONE				
GROUNDWATER INFORMATION				EXCAVATION METHOD AND REMARKS				
DEPTH STRUCK	ELAPSED TIME	WATER LEVEL	REMARKS ON GROUNDWATER	Tracked excavator				
2.20			Slight seepage at base of trial pit					

All dimensions are in metres unless otherwise stated

				TRIAL PIT LOG		TRIAL PIT NO. TP105		
CLIENT Livero Ltd				SITE Halter Inn Works				
DATE OF FIELDWORK 12/08/25-12/08/25		SCALE 1:50	LEVEL/POSITION See location plan			LOGGED BY DH	JOB NO. 25-08-02	
PIT DIMENSIONS A/C : 2.00 B/D : 1.00			DEPTH	FACE A	FACE B	FACE C	FACE D	
ORIENTATION			0.80					
								
FACE AND POSITION LOGGED All								
SAMPLE AND TEST RECORD			DEPTH	DESCRIPTION OF STRATUM (thickness)			STRATUM NO.	WATER DEPTH
DEPTH	TYPE	RESULT						
0.50	JAR			Brown gravelly SAND with bricks and yorkshire stone flags. (MADE GROUND). (0.80)				
1.00	BULK		0.80	Brown/grey clayey gravelly cobbley SILT. Gravels and cobbles are sandstone.				
			1.50	TRIAL PIT TERMINATED				
GROUNDWATER INFORMATION				EXCAVATION METHOD AND REMARKS				
DEPTH STRUCK	ELAPSED TIME	WATER LEVEL	REMARKS ON GROUNDWATER	Tracked excavator				
NS			Trial pit dry					

All dimensions are in metres unless otherwise stated

					TRIAL PIT LOG		TRIAL PIT NO. TP107		
					Sheet 1 of 1				
CLIENT					SITE				
Livero Ltd					Halter Inn Works				
DATE OF FIELDWORK		SCALE	LEVEL/POSITION			LOGGED BY	JOB NO.		
12/08/25-12/08/25		1:50	See location plan			DH	25-08-02		
PIT DIMENSIONS			DEPTH	FACE A	FACE B	FACE C	FACE D		
A/C : 2.00 B/D : 1.00									
ORIENTATION									
			0.60 0.70						
FACE AND POSITION LOGGED ALL									
SAMPLE AND TEST RECORD		DEPTH	DESCRIPTION OF STRATUM (thickness)				STRATUM NO.	WATER DEPTH	
DEPTH	TYPE	RESULT							
0.50	JAR		0.60 0.70	Brown SAND with bricks, yorkshire stone flags, old drain, old lead water main. (MADE GROUND). (0.60)					
0.90	JAR			Yorkshire stone flags. (Old floor). (MADE GROUND). (0.10) Brown clayey SILT					
			2.10	TRIAL PIT TERMINATED ON SLATE					
GROUNDWATER INFORMATION				EXCAVATION METHOD AND REMARKS					
DEPTH STRUCK	ELAPSED TIME	WATER LEVEL	REMARKS ON GROUNDWATER						
NS			Trial pit dry	Tracked excavator					
All dimensions are in metres unless otherwise stated									

				TRIAL PIT LOG		TRIAL PIT NO. TP108		
				Sheet 1 of 1				
CLIENT				SITE				
Livero Ltd				Halter Inn Works				
DATE OF FIELDWORK		SCALE	LEVEL/POSITION		LOGGED BY	JOB NO.		
12/08/25-12/08/25		1:50	See location plan		DH	25-08-02		
PIT DIMENSIONS			DEPTH	FACE A	FACE B	FACE C	FACE D	
A/C : 2.00 B/D : 1.00								
ORIENTATION								
								
Orientation								
			0.85 0.95 1.10					
			2.35					
FACE AND POSITION LOGGED All								
SAMPLE AND TEST RECORD			DEPTH	DESCRIPTION OF STRATUM (thickness)			STRATUM NO.	WATER DEPTH
DEPTH	TYPE	RESULT						
0.55	JAR		0.85 0.95 1.10	Brown sandy BRICKS. (MADE GROUND). (0.85)				
1.20	JAR		2.35 2.40	Reinforced CONCRETE (0.10) Yellow COBBLES. (MADE GROUND). (0.15) Yellow SILT with occaional sandstone boulders (1.25)				
				SANDSTONE TRIAL PIT TERMINATED - REFUSAL ON SANDSTONE				
GROUNDWATER INFORMATION				EXCAVATION METHOD AND REMARKS				
DEPTH STRUCK	ELAPSED TIME	WATER LEVEL	REMARKS ON GROUNDWATER					
NS			Trial pit dry	Tracked excavator				
All dimensions are in metres unless otherwise stated								

Appendix B

Soils, groundwater and leachate laboratory test results

M-BAT Output Sheets



2183



Final Report

Report Number: 15-01298 Issue-1

Initial Date of Issue: 26-Jan-15

Client: Leyden Kirby

Client Address: Unit 25 Bury Business Centre
Kay Street
Bury
Lancashire
BL9 6BU

Contact(s): Chris Hughes

Project: LKC 14 1496 Halter Inn Works, Holcombe

Quotation No.: **Date Received:** 22-Jan-15

Order No.: 731172 **Date Instructed:** 22-Jan-15

No. of Samples: 11 **Results Due:** 26-Jan-15

Turnaround:
(Weekdays) 3

Date Approved: 26-Jan-15

Approved By:

Details: Darrell Hall, Laboratory Director

Results Summary - Soil

Project: LKC 14 1496 Halter Inn Works, Holcombe

Client: Leyden Kirby	Chemtest Job No.:				15-01298	15-01298	15-01298	15-01298	15-01298
Quotation No.:	Chemtest Sample ID.:				92220	92224	92226	92228	92230
Order No.: 731172	Client Sample Ref.:								
	Client Sample ID.:				WS101	WS102	WS103	WS104	TH101
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.10	0.15	1.00	0.20	0.20
	Bottom Depth(m):				0.30	0.30	1.20	0.40	0.30
	Date Sampled:				21-Jan-15	21-Jan-15	21-Jan-15	21-Jan-15	21-Jan-15
Determinand	Accred.	SOP	Units	LOD					
ACM Type	U	2192			-	-	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.02	17	13	22	11	16
Soil Colour	N				Brown	Brown	Brown	Brown	Brown
Other Material	N				Stones	Stones	Stones	Stones	Stones
Soil Texture	N				Sand	Sand	Sand	Sand	Clay
pH	M	2010			11.0	10.7	7.9	8.2	8.0
Sulphate (2:1 Water Soluble) as SO ₄	M	2120	g/l	0.01	0.19	0.20	0.034	0.78	0.041
Arsenic	M	2450	mg/kg	1	18	17	72	11	2.0
Cadmium	M	2450	mg/kg	0.1	0.30	0.62	0.32	0.30	0.21
Chromium	M	2450	mg/kg	1	18	60	40	73	24
Copper	M	2450	mg/kg	0.5	28	78	150	34	19
Mercury	M	2450	mg/kg	0.1	< 0.10	< 0.10	0.22	0.21	< 0.10
Nickel	M	2450	mg/kg	0.5	22	28	53	48	21
Lead	M	2450	mg/kg	0.5	380	170	140	540	19
Selenium	M	2450	mg/kg	0.2	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Vanadium	U	2450	mg/kg	5	30	30	120	32	20
Zinc	M	2450	mg/kg	0.5	130	140	120	200	58
Chromium (Hexavalent)	N	2490	mg/kg	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter	M	2625	%	0.4	6.6	13	17	2.1	0.88
Naphthalene	M	2700	mg/kg	0.1	< 0.10	0.82	< 0.10	< 0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.1	< 0.10	0.20	< 0.10	< 0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.1	< 0.10	1.0	< 0.10	< 0.10	< 0.10
Fluorene	M	2700	mg/kg	0.1	< 0.10	0.99	< 0.10	< 0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.1	< 0.10	6.0	0.65	2.1	< 0.10
Anthracene	M	2700	mg/kg	0.1	< 0.10	1.7	0.30	0.47	< 0.10
Fluoranthene	M	2700	mg/kg	0.1	0.25	7.5	0.40	2.4	< 0.10
Pyrene	M	2700	mg/kg	0.1	0.22	7.3	0.43	2.3	< 0.10
Benzo[a]anthracene	M	2700	mg/kg	0.1	< 0.10	3.6	< 0.10	0.89	< 0.10
Chrysene	M	2700	mg/kg	0.1	< 0.10	4.7	< 0.10	1.1	< 0.10
Benzo[b]fluoranthene	M	2700	mg/kg	0.1	< 0.10	5.2	< 0.10	0.81	< 0.10
Benzo[k]fluoranthene	M	2700	mg/kg	0.1	< 0.10	1.9	< 0.10	0.12	< 0.10

Results Summary - Soil

Project: LKC 14 1496 Halter Inn Works, Holcombe

Client: Leyden Kirby	Chemtest Job No.:					15-01298	15-01298	15-01298	15-01298	15-01298
Quotation No.:	Chemtest Sample ID.:					92220	92224	92226	92228	92230
Order No.: 731172	Client Sample Ref.:									
	Client Sample ID.:					WS101	WS102	WS103	WS104	TH101
	Sample Type:					SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):					0.10	0.15	1.00	0.20	0.20
	Bottom Depth(m):					0.30	0.30	1.20	0.40	0.30
	Date Sampled:					21-Jan-15	21-Jan-15	21-Jan-15	21-Jan-15	21-Jan-15
Determinand	Accred.	SOP	Units	LOD						
Benzo[a]pyrene	M	2700	mg/kg	0.1	< 0.10	4.3	< 0.10	0.65	< 0.10	
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.1	< 0.10	3.0	< 0.10	0.47	< 0.10	
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.1	< 0.10	0.81	< 0.10	< 0.10	< 0.10	
Benzo[g,h,i]perylene	M	2700	mg/kg	0.1	< 0.10	2.7	< 0.10	1.1	< 0.10	
Total Of 16 PAH's	M	2700	mg/kg	2	< 2.0	52	< 2.0	12	< 2.0	

Report Information

Key

- U UKAS accredited
- M MCERTS and UKAS accredited
- N Unaccredited
- S This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
- SN This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
- T This analysis has been subcontracted to an unaccredited laboratory
- I/S Insufficient Sample
- U/S Unsuitable sample
- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVCOs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at our Coventry laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container

Sample Retention and Disposal

All soil samples will be retained for a period of 60 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk



Final Report

Report Number: 15-01789 Issue-1

Initial Date of Issue: 30-Jan-15

Client: Leyden Kirby

Client Address: Unit 25 Bury Business Centre
Kay Street
Bury
Lancashire
BL9 6BU

Contact(s): Chris Hughes

Project: LKC 14 1496 Halter Inn Works, Holcombe

Quotation No.: **Date Received:** 28-Jan-15

Order No.: 731187 **Date Instructed:** 28-Jan-15

No. of Samples: 2 **Results Due:** 30-Jan-15

Turnaround:
(Weekdays) 3

Date Approved: 30-Jan-15

Approved By:

Details: Darrell Hall, Laboratory Director

Project: LKC 14 1496 Halter Inn Works, Holcombe

Client: Leyden Kirby	Chemtest Job No.:				15-01789	15-01789
Quotation No.:	Chemtest Sample ID.:				94895	94896
Order No.: 731187	Client Sample Ref.:					
	Client Sample ID.:				WS102	WS104
	Sample Type:				WATER	WATER
	Top Depth (m):					
	Bottom Depth(m):					
	Date Sampled:				27-Jan-15	27-Jan-15
Determinand	Accred.	SOP	Units	LOD		
pH	U	1010			8.0	8.4
Sulphate	U	1220	mg/l	1	55	150
Cyanide (Total)	U	1300	mg/l	0.05	< 0.050	< 0.050
Cyanide (Free)	U	1300	mg/l	0.05	< 0.050	< 0.050
Hardness	U	1415	mg/l	15	290	140
Arsenic (Dissolved)	U	1450	µg/l	1	2.6	2.1
Boron (Dissolved)	U	1450	µg/l	20	110	< 20
Cadmium (Dissolved)	U	1450	µg/l	0.08	< 0.080	< 0.080
Chromium (Dissolved)	U	1450	µg/l	1	2.1	2.1
Copper (Dissolved)	U	1450	µg/l	1	< 1.0	4.1
Mercury (Dissolved)	U	1450	µg/l	0.5	< 0.50	< 0.50
Nickel (Dissolved)	U	1450	µg/l	1	1.6	2.2
Lead (Dissolved)	U	1450	µg/l	1	< 1.0	< 1.0
Selenium (Dissolved)	U	1450	µg/l	1	3.1	6.0
Vanadium (Dissolved)	U	1450	µg/l	1	< 1.0	2.2
Zinc (Dissolved)	U	1450	µg/l	1	6.6	4.1
Chromium (Hexavalent)	U	1490	µg/l	20	< 20	< 20
Total Organic Carbon	N	1610	mg/l	1	4.3	< 2.5
Fuel Type	N	1670			na	na
Aliphatic TPH >C5-C6	N	1675	µg/l	0.1	< 0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.1	< 0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.1	< 0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.1	< 0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.1	< 0.10	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.1	< 0.10	< 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.1	< 0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.1	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.1	< 0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.1	< 0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.1	< 0.10	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.1	< 0.10	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.1	< 0.10	< 0.10

Project: LKC 14 1496 Halter Inn Works, Holcombe

Client: Leyden Kirby	Chemtest Job No.:				15-01789	15-01789
Quotation No.:	Chemtest Sample ID.:				94895	94896
Order No.: 731187	Client Sample Ref.:					
	Client Sample ID.:				WS102	WS104
	Sample Type:				WATER	WATER
	Top Depth (m):					
	Bottom Depth(m):					
	Date Sampled:				27-Jan-15	27-Jan-15
Determinand	Accred.	SOP	Units	LOD		
Aromatic TPH >C16-C21	N	1675	µg/l	0.1	< 0.10	< 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.1	< 0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.1	< 0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5	< 5.0	< 5.0
Total Petroleum Hydrocarbons	U	1675	µg/l	10	< 10	< 10
Naphthalene	N	1700	µg/l	0.01	< 0.010	< 0.010
Acenaphthylene	N	1700	µg/l	0.01	< 0.010	< 0.010
Acenaphthene	N	1700	µg/l	0.01	< 0.010	< 0.010
Fluorene	N	1700	µg/l	0.01	< 0.010	< 0.010
Phenanthrene	N	1700	µg/l	0.01	< 0.010	< 0.010
Anthracene	N	1700	µg/l	0.01	< 0.010	< 0.010
Fluoranthene	N	1700	µg/l	0.01	< 0.010	< 0.010
Pyrene	N	1700	µg/l	0.01	< 0.010	< 0.010
Benzo[a]anthracene	N	1700	µg/l	0.01	< 0.010	< 0.010
Chrysene	N	1700	µg/l	0.01	< 0.010	< 0.010
Benzo[b]fluoranthene	N	1700	µg/l	0.01	< 0.010	< 0.010
Benzo[k]fluoranthene	N	1700	µg/l	0.01	< 0.010	< 0.010
Benzo[a]pyrene	N	1700	µg/l	0.01	< 0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1700	µg/l	0.01	< 0.010	< 0.010
Dibenz(a,h)Anthracene	N	1700	µg/l	0.01	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	1700	µg/l	0.01	< 0.010	< 0.010
Total Of 16 PAH's	N	1700	µg/l	0.2	< 0.20	< 0.20
Benzene	U	1760	µg/l	1	< 1.0	< 1.0
Toluene	U	1760	µg/l	1	< 1.0	< 1.0
Ethylbenzene	U	1760	µg/l	1	< 1.0	< 1.0
m & p-Xylene	U	1760	µg/l	1	< 1.0	< 1.0
o-Xylene	U	1760	µg/l	1	< 1.0	< 1.0
Methyl Tert-Butyl Ether	N	1760	µg/l	1	< 1.0	< 1.0
Total Phenols	U	1920	mg/l	0.03	< 0.030	< 0.030

Report Information

Key

- U UKAS accredited
- M MCERTS and UKAS accredited
- N Unaccredited
- S This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
- SN This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
- T This analysis has been subcontracted to an unaccredited laboratory
- I/S Insufficient Sample
- U/S Unsuitable sample
- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVCOs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at our Coventry laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container

Sample Retention and Disposal

All soil samples will be retained for a period of 60 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.co.uk

ANALYTICAL TEST REPORT

Report Number 25-07968, issue number 1

Contract name: Halter Inn Works

Client reference: 25-08-02

Clients name: Demeter Environmental Ltd

Clients address: DEMENV
54 St James Street
Liverpool
L1 0AB

Samples received: 14/08/2025

Analysis started: 14/08/2025

Analysis completed: 02/09/2025

Report issued: 02/09/2025

Key

U UKAS accredited test

M MCERTS & UKAS accredited test

(B) Analysis performed at Southampton Site

I/S Insufficient sample to carry out test

U/S Sample not suitable for testing

NAD No Asbestos Detected



Approved by: Georgia Hunter
Senior Reporting Administrator

SAMPLE INFORMATION

MCERTS (Soils):

Soil descriptions are only intended to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions. MCERTS accreditation applies for sand, clay and loam/topsoil, or combinations of these whether these are derived from naturally occurring soils or from made ground, as long as these materials constitute the major part of the sample. Other materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
% Moisture reported as MCERTS drying at 30°C

Lab ref	Sample ID	Depth (m)	Sample description	Material removed	% Removed	% Moisture
63062	TP101	0.50	Brown Sand with Gravel.	-	-	16.1
63063	TP101	1.30	Grey Clay with Gravel and Vegetation.	-	-	20.8
63064	TP102	0.40	Brown Sandy Clay with Gravel.	-	-	15.4
63065	TP102	1.40	Brown Sandy Clay with Gravel.	-	-	16.6
63066	TP103	0.30	Brown Sand with Gravel.	-	-	15.0
63067	TP103	0.50	Brown Clay with Gravel.	-	-	22.0
63068	TP103	0.65	Black Clay with Gravel.	-	-	15.3
63069	TP103	1.00	Brown Clay with Gravel.	-	-	23.9
63070	TP104	0.30	Brown Sandy Clay with Gravel.	-	-	19.9
63071	TP105	0.50	Brown Sandy Clay with Gravel.	-	-	19.3
63072	TP106	0.40	Brown Clay with Gravel and Vegetation.	-	-	15.8
63073	TP106	0.55	-	-	-	-
63074	TP107	0.50	Brown Sandy Clay with Gravel.	-	-	15.9
63075	TP107	0.90	-	-	-	-
63076	TP103	1.65	-	-	-	-
63077	TP104	1.20	-	-	-	-
63078	TP105	1.00	-	-	-	-
63079	TP106	2.40	-	-	-	-
63080	TP108	0.50	Brown Sand with Gravel and Vegetation.	-	-	17.0
63081	TP108	1.20	-	-	-	-

DEVIATING SAMPLE INFORMATION

Comments

Sample deviation is determined in accordance with the UKAS note "Guidance on Deviating Samples" and based on reference standards and laboratory trials.

For samples identified as deviating, test result(s) may be compromised and may not be representative of the sample at the time of sampling.

Chemtech Environmental Ltd cannot be held responsible for the integrity of sample(s) received if Chemtech Environmental Ltd did not undertake the sampling. Such samples may be deviating.

Key

- a Sampling date not provided
- b Sampling time not provided (waters only)
- c Sample not received in appropriate containers
- d Storage Temperature
- e Headspace present in sample container
- f Sample exceeded sampling to receipt
- g Sample exceeded holding time(s)

Lab ref	Sample ID	Depth (m)	Deviating	Tests (Reason for deviation)
63062	TP101	0.50	Y	Sulphide By DA in Soil (f,g)
63063	TP101	1.30	Y	Sulphide By DA in Soil (f,g)
63064	TP102	0.40	Y	Sulphide By DA in Soil (f,g)
63065	TP102	1.40	Y	Sulphide By DA in Soil (f,g)
63066	TP103	0.30	Y	Sulphide By DA in Soil(g)
63067	TP103	0.50	Y	Sulphide By DA in Soil(g)
63068	TP103	0.65	Y	Sulphide By DA in Soil(g)
63069	TP103	1.00	Y	Sulphide By DA in Soil(g)
63070	TP104	0.30	Y	Sulphide By DA in Soil(g)
63071	TP105	0.50	Y	Sulphide By DA in Soil(g)
63072	TP106	0.40	Y	Sulphide By DA in Soil(g)
63073	TP106	0.55	N	
63074	TP107	0.50	Y	Sulphide By DA in Soil(g)
63075	TP107	0.90	N	
63080	TP108	0.50	Y	BTEX in Soils(g), VPH in Soil(g), Cyanides in Soils(g), Sulphide By DA in Soil (f,g)

SOILS

Lab Number					63062	63063	63064	63065	63066
Client Reference					1	1	1	1	1
Sample ID					TP101	TP101	TP102	TP102	TP103
Depth (m)					0.50	1.30	0.40	1.40	0.30
Sampling Date					12/08/2025	12/08/2025	12/08/2025	12/08/2025	12/08/2025
Test	Method	Accred	LoD	Units					
Asbestos									
Asbestos Identification	SUBCO N	SU	0	-	NAD	NAD	NAD	NAD	NAD
Metals									
Acid Soluble Sulphate (SO4)	CE062	M	0.01	%	0.14	0.02	0.09	0.02	0.10
Water Soluble Boron	CE063	N	0.5	mg/kg	< 0.50	< 0.50	0.54	< 0.50	< 0.50
Arsenic	CE264	U	1.8	mg/kg	7.3	5.3	11.0	5.7	9.0
Barium	CE264	U	1.9	mg/kg	106	60.3	401	130	180
Beryllium	CE264	M	0.2	mg/kg	0.7	0.9	0.8	1.2	0.6
Cadmium	CE264	M	1.6	mg/kg	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
Chromium	CE264	U	2	mg/kg	11.7	23.8	85.4	41.4	27.5
Copper	CE264	M	1.6	mg/kg	28.6	20.5	69.0	30.3	23.4
Lead	CE264	U	2.3	mg/kg	94.3	18.8	97.7	32.2	114
Mercury	CE264	U	0.7	mg/kg	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7
Molybdenum	CE264	U	1.6	mg/kg	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
Nickel	CE264	M	2.1	mg/kg	11.4	20.8	18.3	24.1	14.7
Selenium	CE264	U	3	mg/kg	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Thallium	CE264	N	6	mg/kg	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0
Vanadium	CE264	N	1.8	mg/kg	26.9	46.0	57.9	56.5	38.8
Zinc	CE264	M	4	mg/kg	150	65.8	82.8	73.1	95.3
Colourimetric									
Nitrate as N	CE261	U	1	mg/l	n/t	< 1.00	n/t	< 1.00	n/t
Nitrate as N	CE261	U	2	mg/kg	9.80	< 2.00	11.8	< 2.00	28.8
Water Soluble Chromium VI	CE263	N	0.04	mg/kg	< 0.040	< 0.040	< 0.040	< 0.040	0.130
Water Soluble Sulphate	CE261	U	1.8	mg/l	180	91.9	89.8	34.4	92.6
Total Cyanide	CE077	N	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide	CE077	N	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Complex Cyanide	CE077	N	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphide	CE284	N	4	mg/kg	fg < 4	fg < 4	fg < 4	fg < 4	g < 4
Combustion									
Moisture Content	CE001	N	0.1	%	16.1	20.8	15.4	16.6	15.0
Soil Organic Matter	CE192	N	0.1	%	1.72	2.79	5.22	2.48	2.36

SOILS

Lab Number					63062	63063	63064	63065	63066
Client Reference					1	1	1	1	1
Sample ID					TP101	TP101	TP102	TP102	TP103
Depth (m)					0.50	1.30	0.40	1.40	0.30
Sampling Date					12/08/2025	12/08/2025	12/08/2025	12/08/2025	12/08/2025
Test	Method	Accred	LoD	Units					
Organics									
Elemental Sulphur	CE034	M	10	mg/kg	< 10.0	< 10.0	77.8	10.5	13.7
Polyaromatic hydrocarbons									
Naphthalene	CE087	M	0.016	mg/kg	< 0.016	0.028	0.129	0.050	0.105
Acenaphthylene	CE087	M	0.015	mg/kg	< 0.015	< 0.015	0.188	0.136	0.018
Acenaphthene	CE087	M	0.013	mg/kg	< 0.013	< 0.013	0.386	0.175	0.031
Fluorene	CE087	U	0.013	mg/kg	< 0.013	< 0.013	0.264	0.198	0.024
Phenanthrene	CE087	M	0.014	mg/kg	0.041	0.046	6.67	3.78	0.333
Anthracene	CE087	U	0.017	mg/kg	< 0.017	< 0.017	3.46	2.39	0.086
Fluoranthene	CE087	M	0.017	mg/kg	0.057	0.021	34.6	18.4	0.573
Pyrene	CE087	M	0.016	mg/kg	0.049	0.029	29.0	15.6	0.506
Benzo(a)anthracene	CE087	U	0.012	mg/kg	0.037	< 0.012	15.0	7.54	0.278
Chrysene	CE087	M	0.028	mg/kg	< 0.028	< 0.028	12.6	6.07	0.267
Benzo(b)fluoranthene	CE087	M	0.02	mg/kg	0.029	< 0.020	14.7	6.65	0.359
Benzo(k)fluoranthene	CE087	M	0.025	mg/kg	< 0.025	< 0.025	6.48	2.94	0.163
Benzo(a)pyrene	CE087	U	0.019	mg/kg	0.025	< 0.019	14.1	6.38	0.294
Indeno(1,2,3-cd)pyrene	CE087	M	0.019	mg/kg	0.021	< 0.019	8.86	3.93	0.247
Dibenzo(a,h)anthracene	CE087	M	0.017	mg/kg	< 0.017	< 0.017	1.79	0.782	0.054
Benzo(g,h,i)perylene	CE087	M	0.019	mg/kg	< 0.019	< 0.019	8.31	3.31	0.239
Total PAH(16)	CE087	N	0.28	mg/kg	< 0.280	< 0.280	157	78.3	3.58
BTEX									
Benzene	CE267	U	0.001	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	CE267	U	0.001	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	CE267	U	0.001	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MTBE	CE267	N	0.002	mg/kg	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Total BTEX	CE267	N	0.007	mg/kg	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007
m,p-Xylene	CE267	U	0.002	mg/kg	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
oXylenes	CE267	U	0.002	mg/kg	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Total Petroleum Hydrocarbons									
>C5-C6 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C6-C8 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

SOILS

Lab Number					63062	63063	63064	63065	63066
Client Reference					1	1	1	1	1
Sample ID					TP101	TP101	TP102	TP102	TP103
Depth (m)					0.50	1.30	0.40	1.40	0.30
Sampling Date					12/08/2025	12/08/2025	12/08/2025	12/08/2025	12/08/2025
Test	Method	Accred	LoD	Units					
>C8-C10 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C10-C12 Aliphatic (EH_2D_AL)	CE250	N	1	mg/kg	< 1.0	< 1.0	3.2	< 1.0	< 1.0
>C12-C16 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	< 0.5	< 0.5	10.0	< 0.5	< 0.5
>C16-C21 Aliphatic (EH_2D_AL)	CE250	N	0.7	mg/kg	< 0.7	< 0.7	25.1	< 0.7	< 0.7
>C21-C35 Aliphatic (EH_2D_AL)	CE250	N	4	mg/kg	< 4.0	< 4.0	74.2	< 4.0	< 4.0
>C35-C40 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	< 0.5	< 0.5	9.8	< 0.5	< 0.5
>C5-C7 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C7-C8 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C8-C10 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C10-C12 Aromatic (EH_2D_AR)	CE250	N	0.6	mg/kg	< 0.6	< 0.6	26.6	1.3	1.5
>C12-C16 Aromatic (EH_2D_AR)	CE250	N	1	mg/kg	< 1.0	< 1.0	89.7	2.9	3.5
>C16-C21 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	< 2.0	< 2.0	816	3.5	6.1
>C21-C35 Aromatic (EH_2D_AR)	CE250	N	4.5	mg/kg	< 4.5	< 4.5	1670	33.6	37.3
>C35-C40 Aromatic (EH_2D_AR)	CE250	N	1.5	mg/kg	< 1.5	< 1.5	288	4.5	3.3
>C5-C10 Total (HS_1D_Total)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C10-C40 Total (EH_2D_Total)	CE250	N	11.5	mg/kg	< 11.5	< 11.5	3010	48.0	54.1
Total Hydrocabons C5-C40 (HS_1D+EH_2D_Total)	CE250	N	11.5	mg/kg	< 11.5	< 11.5	3010	48.0	54.1
Wet Chem									
pH	CE004	M	0.1	pH units	10.2	7.9	8.3	7.2	8.6

SOILS

Lab Number					63067	63068	63069	63070	63071
Client Reference					1	1	1	1	1
Sample ID					TP103	TP103	TP103	TP104	TP105
Depth (m)					0.50	0.65	1.00	0.30	0.50
Sampling Date					12/08/2025	12/08/2025	12/08/2025	12/08/2025	12/08/2025
Test	Method	Accred	LoD	Units					
Asbestos									
Asbestos Identification	SUBCO N	SU	0	-	NAD	NAD	NAD	NAD	NAD
Metals									
Acid Soluble Sulphate (SO4)	CE062	M	0.01	%	0.03	< 0.01	0.02	0.18	0.11
Water Soluble Boron	CE063	N	0.5	mg/kg	< 0.50	< 0.50	< 0.50	0.52	< 0.50
Arsenic	CE264	U	1.8	mg/kg	3.9	3.7	26.1	16.5	9.7
Barium	CE264	U	1.9	mg/kg	81.7	55.0	99.3	536	229
Beryllium	CE264	M	0.2	mg/kg	0.9	0.8	1.2	0.9	0.5
Cadmium	CE264	M	1.6	mg/kg	< 1.6	< 1.6	4.2	< 1.6	< 1.6
Chromium	CE264	U	2	mg/kg	29.0	22.8	16.5	703	123
Copper	CE264	M	1.6	mg/kg	14.5	15.2	20.2	52.2	67.4
Lead	CE264	U	2.3	mg/kg	17.9	15.1	82.8	2350	423
Mercury	CE264	U	0.7	mg/kg	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7
Molybdenum	CE264	U	1.6	mg/kg	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
Nickel	CE264	M	2.1	mg/kg	27.1	19.9	25.4	21.8	15.0
Selenium	CE264	U	3	mg/kg	< 3.0	< 3.0	3.2	< 3.0	< 3.0
Thallium	CE264	N	6	mg/kg	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0
Vanadium	CE264	N	1.8	mg/kg	59.2	45.2	75.2	51.2	34.7
Zinc	CE264	M	4	mg/kg	103	54.6	175	245	122
Colourimetric									
Nitrate as N	CE261	U	1	mg/l	n/t	n/t	n/t	n/t	n/t
Nitrate as N	CE261	U	2	mg/kg	10.0	< 2.00	< 2.00	39.8	22.4
Water Soluble Chromium VI	CE263	N	0.04	mg/kg	< 0.040	< 0.040	< 0.040	0.060	0.060
Water Soluble Sulphate	CE261	U	1.8	mg/l	57.3	23.0	29.6	223	164
Total Cyanide	CE077	N	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide	CE077	N	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Complex Cyanide	CE077	N	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphide	CE284	N	4	mg/kg	g 13	g < 4	g < 4	g < 4	g < 4
Combustion									
Moisture Content	CE001	N	0.1	%	22.0	15.3	23.9	19.9	19.3
Soil Organic Matter	CE192	N	0.1	%	1.93	1.48	37.2	5.78	2.60

SOILS

Lab Number					63067	63068	63069	63070	63071
Client Reference					1	1	1	1	1
Sample ID					TP103	TP103	TP103	TP104	TP105
Depth (m)					0.50	0.65	1.00	0.30	0.50
Sampling Date					12/08/2025	12/08/2025	12/08/2025	12/08/2025	12/08/2025
Test	Method	Accred	LoD	Units					
Organics									
Elemental Sulphur	CE034	M	10	mg/kg	< 10.0	< 10.0	49.5	45.6	< 10.0
Polyaromatic hydrocarbons									
Naphthalene	CE087	M	0.016	mg/kg	< 0.016	< 0.016	< 0.016	0.152	0.028
Acenaphthylene	CE087	M	0.015	mg/kg	< 0.015	< 0.015	< 0.015	0.057	< 0.015
Acenaphthene	CE087	M	0.013	mg/kg	< 0.013	< 0.013	0.125	0.226	< 0.013
Fluorene	CE087	U	0.013	mg/kg	< 0.013	< 0.013	0.731	0.172	< 0.013
Phenanthrene	CE087	M	0.014	mg/kg	0.027	< 0.014	1.09	1.69	0.085
Anthracene	CE087	U	0.017	mg/kg	< 0.017	< 0.017	< 0.017	0.303	0.028
Fluoranthene	CE087	M	0.017	mg/kg	0.037	< 0.017	0.240	2.65	0.228
Pyrene	CE087	M	0.016	mg/kg	0.032	< 0.016	0.259	2.45	0.204
Benzo(a)anthracene	CE087	U	0.012	mg/kg	0.024	< 0.012	0.089	1.19	0.110
Chrysene	CE087	M	0.028	mg/kg	< 0.028	< 0.028	0.368	1.20	0.106
Benzo(b)fluoranthene	CE087	M	0.02	mg/kg	0.023	< 0.020	0.134	1.41	0.130
Benzo(k)fluoranthene	CE087	M	0.025	mg/kg	< 0.025	< 0.025	< 0.025	0.506	0.051
Benzo(a)pyrene	CE087	U	0.019	mg/kg	< 0.019	< 0.019	0.082	1.23	0.112
Indeno(1,2,3-cd)pyrene	CE087	M	0.019	mg/kg	< 0.019	< 0.019	< 0.019	0.834	0.091
Dibenzo(a,h)anthracene	CE087	M	0.017	mg/kg	< 0.017	< 0.017	< 0.017	0.178	0.021
Benzo(g,h,i)perylene	CE087	M	0.019	mg/kg	< 0.019	< 0.019	0.063	0.804	0.092
Total PAH(16)	CE087	N	0.28	mg/kg	< 0.280	< 0.280	3.18	15.0	1.29
BTEX									
Benzene	CE267	U	0.001	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	CE267	U	0.001	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	CE267	U	0.001	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MTBE	CE267	N	0.002	mg/kg	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Total BTEX	CE267	N	0.007	mg/kg	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007
m,p-Xylene	CE267	U	0.002	mg/kg	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
oXylenes	CE267	U	0.002	mg/kg	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Total Petroleum Hydrocarbons									
>C5-C6 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C6-C8 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

SOILS

Lab Number					63067	63068	63069	63070	63071
Client Reference					1	1	1	1	1
Sample ID					TP103	TP103	TP103	TP104	TP105
Depth (m)					0.50	0.65	1.00	0.30	0.50
Sampling Date					12/08/2025	12/08/2025	12/08/2025	12/08/2025	12/08/2025
Test	Method	Accred	LoD	Units					
>C8-C10 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C10-C12 Aliphatic (EH_2D_AL)	CE250	N	1	mg/kg	< 1.0	< 1.0	1.2	< 1.0	< 1.0
>C12-C16 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	< 0.5	< 0.5	3.6	< 0.5	< 0.5
>C16-C21 Aliphatic (EH_2D_AL)	CE250	N	0.7	mg/kg	< 0.7	< 0.7	4.4	< 0.7	< 0.7
>C21-C35 Aliphatic (EH_2D_AL)	CE250	N	4	mg/kg	< 4.0	< 4.0	6.8	< 4.0	< 4.0
>C35-C40 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
>C5-C7 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C7-C8 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C8-C10 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C10-C12 Aromatic (EH_2D_AR)	CE250	N	0.6	mg/kg	< 0.6	< 0.6	2.4	< 0.6	< 0.6
>C12-C16 Aromatic (EH_2D_AR)	CE250	N	1	mg/kg	< 1.0	< 1.0	8.0	< 1.0	< 1.0
>C16-C21 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	< 2.0	< 2.0	9.0	< 2.0	< 2.0
>C21-C35 Aromatic (EH_2D_AR)	CE250	N	4.5	mg/kg	< 4.5	< 4.5	19.5	< 4.5	< 4.5
>C35-C40 Aromatic (EH_2D_AR)	CE250	N	1.5	mg/kg	< 1.5	< 1.5	3.8	< 1.5	< 1.5
>C5-C10 Total (HS_1D_Total)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C10-C40 Total (EH_2D_Total)	CE250	N	11.5	mg/kg	< 11.5	< 11.5	58.9	< 11.5	< 11.5
Total Hydrocabons C5-C40 (HS_1D+EH_2D_Total)	CE250	N	11.5	mg/kg	< 11.5	< 11.5	58.9	< 11.5	< 11.5
Wet Chem									
pH	CE004	M	0.1	pH units	6.5	6.2	6.6	8.5	8.2

SOILS

Lab Number					63072	63073	63074	63075	63080
Client Reference					1	1	1	1	1
Sample ID					TP106	TP106	TP107	TP107	TP108
Depth (m)					0.40	0.55	0.50	0.90	0.50
Sampling Date					12/08/2025	12/08/2025	12/08/2025	12/08/2025	12/08/2025
Test	Method	Accred	LoD	Units					
Asbestos									
Asbestos Identification	SUBCON	SU	0	-	NAD	n/t	NAD	n/t	NAD
Metals									
Acid Soluble Sulphate (SO4)	CE062	M	0.01	%	0.07	n/t	0.11	n/t	0.28
Water Soluble Boron	CE063	N	0.5	mg/kg	< 0.50	n/t	< 0.50	n/t	< 0.50
Arsenic	CE264	U	1.8	mg/kg	11.9	n/t	11.1	n/t	26.3
Barium	CE264	U	1.9	mg/kg	93.5	n/t	186	n/t	322
Beryllium	CE264	M	0.2	mg/kg	0.8	n/t	1.0	n/t	1.7
Cadmium	CE264	M	1.6	mg/kg	< 1.6	n/t	< 1.6	n/t	2.1
Chromium	CE264	U	2	mg/kg	47.1	n/t	46.2	n/t	1320
Copper	CE264	M	1.6	mg/kg	26.3	n/t	51.5	n/t	90.4
Lead	CE264	U	2.3	mg/kg	1040	n/t	1490	n/t	1640
Mercury	CE264	U	0.7	mg/kg	< 0.7	n/t	< 0.7	n/t	< 0.7
Molybdenum	CE264	U	1.6	mg/kg	< 1.6	n/t	1.8	n/t	5.8
Nickel	CE264	M	2.1	mg/kg	19.0	n/t	21.8	n/t	37.8
Selenium	CE264	U	3	mg/kg	< 3.0	n/t	< 3.0	n/t	< 3.0
Thallium	CE264	N	6	mg/kg	< 6.0	n/t	< 6.0	n/t	< 6.0
Vanadium	CE264	N	1.8	mg/kg	63.6	n/t	49.6	n/t	60.4
Zinc	CE264	M	4	mg/kg	70.4	n/t	82.1	n/t	250
Colourimetric									
Nitrate as N	CE261	U	1	mg/l	n/t	9.30	n/t	6.60	n/t
Nitrate as N	CE261	U	2	mg/kg	9.20	n/t	32.2	n/t	< 2.00
Water Soluble Chromium VI	CE263	N	0.04	mg/kg	< 0.040	n/t	0.100	n/t	1.36
Water Soluble Sulphate	CE261	U	1.8	mg/l	157	n/t	161	n/t	874
Total Cyanide	CE077	N	1	mg/kg	< 1.0	n/t	< 1.0	n/t	g < 1.0
Free Cyanide	CE077	N	1	mg/kg	< 1.0	n/t	< 1.0	n/t	g < 1.0
Complex Cyanide	CE077	N	1	mg/kg	< 1.0	n/t	< 1.0	n/t	g < 1.0
Total Sulphide	CE284	N	4	mg/kg	g < 4	n/t	g < 4	n/t	fg < 4
Combustion									
Moisture Content	CE001	N	0.1	%	15.8	n/t	15.9	n/t	17.0
Soil Organic Matter	CE192	N	0.1	%	4.81	n/t	4.03	n/t	7.84

SOILS

Lab Number					63072	63073	63074	63075	63080
Client Reference					1	1	1	1	1
Sample ID					TP106	TP106	TP107	TP107	TP108
Depth (m)					0.40	0.55	0.50	0.90	0.50
Sampling Date					12/08/2025	12/08/2025	12/08/2025	12/08/2025	12/08/2025
Test	Method	Accred	LoD	Units					
Organics									
Elemental Sulphur	CE034	M	10	mg/kg	< 10.0	n/t	< 10.0	n/t	84.2
Polyaromatic hydrocarbons									
Naphthalene	CE087	M	0.016	mg/kg	0.035	n/t	0.129	n/t	0.113
Acenaphthylene	CE087	M	0.015	mg/kg	< 0.015	n/t	0.089	n/t	0.063
Acenaphthene	CE087	M	0.013	mg/kg	< 0.013	n/t	0.506	n/t	0.085
Fluorene	CE087	U	0.013	mg/kg	< 0.013	n/t	0.406	n/t	0.065
Phenanthrene	CE087	M	0.014	mg/kg	0.105	n/t	5.78	n/t	1.04
Anthracene	CE087	U	0.017	mg/kg	< 0.017	n/t	1.49	n/t	0.199
Fluoranthene	CE087	M	0.017	mg/kg	0.033	n/t	12.1	n/t	2.88
Pyrene	CE087	M	0.016	mg/kg	0.031	n/t	9.94	n/t	2.48
Benzo(a)anthracene	CE087	U	0.012	mg/kg	0.018	n/t	4.66	n/t	1.43
Chrysene	CE087	M	0.028	mg/kg	0.030	n/t	4.19	n/t	1.31
Benzo(b)fluoranthene	CE087	M	0.02	mg/kg	0.022	n/t	4.86	n/t	2.15
Benzo(k)fluoranthene	CE087	M	0.025	mg/kg	< 0.025	n/t	2.09	n/t	0.732
Benzo(a)pyrene	CE087	U	0.019	mg/kg	< 0.019	n/t	4.44	n/t	1.61
Indeno(1,2,3-cd)pyrene	CE087	M	0.019	mg/kg	< 0.019	n/t	3.16	n/t	1.55
Dibenzo(a,h)anthracene	CE087	M	0.017	mg/kg	< 0.017	n/t	0.588	n/t	0.285
Benzo(g,h,i)perylene	CE087	M	0.019	mg/kg	< 0.019	n/t	2.82	n/t	1.36
Total PAH(16)	CE087	N	0.28	mg/kg	< 0.280	n/t	57.2	n/t	17.3
BTEX									
Benzene	CE267	U	0.001	mg/kg	< 0.001	n/t	< 0.001	n/t	g < 0.001
Toluene	CE267	U	0.001	mg/kg	< 0.001	n/t	< 0.001	n/t	g < 0.001
Ethylbenzene	CE267	U	0.001	mg/kg	< 0.001	n/t	< 0.001	n/t	g < 0.001
MTBE	CE267	N	0.002	mg/kg	< 0.002	n/t	< 0.002	n/t	g < 0.002
Total BTEX	CE267	N	0.007	mg/kg	< 0.007	n/t	< 0.007	n/t	g < 0.007
m,p-Xylene	CE267	U	0.002	mg/kg	< 0.002	n/t	< 0.002	n/t	g < 0.002
oXylenes	CE267	U	0.002	mg/kg	< 0.002	n/t	< 0.002	n/t	g < 0.002
Total Petroleum Hydrocarbons									
>C5-C6 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	n/t	< 0.10	n/t	g < 0.10
>C6-C8 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	n/t	< 0.10	n/t	g < 0.10

SOILS

Lab Number					63072	63073	63074	63075	63080
Client Reference					1	1	1	1	1
Sample ID					TP106	TP106	TP107	TP107	TP108
Depth (m)					0.40	0.55	0.50	0.90	0.50
Sampling Date					12/08/2025	12/08/2025	12/08/2025	12/08/2025	12/08/2025
Test	Method	Accred	LoD	Units					
>C8-C10 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	n/t	< 0.10	n/t	g < 0.10
>C10-C12 Aliphatic (EH_2D_AL)	CE250	N	1	mg/kg	< 1.0	n/t	< 1.0	n/t	1.1
>C12-C16 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	< 0.5	n/t	0.9	n/t	0.9
>C16-C21 Aliphatic (EH_2D_AL)	CE250	N	0.7	mg/kg	< 0.7	n/t	3.1	n/t	< 0.7
>C21-C35 Aliphatic (EH_2D_AL)	CE250	N	4	mg/kg	< 4.0	n/t	< 4.0	n/t	14.1
>C35-C40 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	< 0.5	n/t	< 0.5	n/t	2.5
>C5-C7 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	n/t	< 0.010	n/t	g < 0.010
>C7-C8 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	n/t	< 0.010	n/t	g < 0.010
>C8-C10 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	n/t	< 0.010	n/t	g < 0.010
>C10-C12 Aromatic (EH_2D_AR)	CE250	N	0.6	mg/kg	< 0.6	n/t	5.3	n/t	4.4
>C12-C16 Aromatic (EH_2D_AR)	CE250	N	1	mg/kg	< 1.0	n/t	49.1	n/t	10.8
>C16-C21 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	< 2.0	n/t	281	n/t	8.8
>C21-C35 Aromatic (EH_2D_AR)	CE250	N	4.5	mg/kg	< 4.5	n/t	310	n/t	57.4
>C35-C40 Aromatic (EH_2D_AR)	CE250	N	1.5	mg/kg	< 1.5	n/t	51.7	n/t	8.7
>C5-C10 Total (HS_1D_Total)	CE267	N	0.1	mg/kg	< 0.10	n/t	< 0.10	n/t	g < 0.10
>C10-C40 Total (EH_2D_Total)	CE250	N	11.5	mg/kg	< 11.5	n/t	703	n/t	109
Total Hydrocabons C5-C40 (HS_1D+EH_2D_Total)	CE250	N	11.5	mg/kg	< 11.5	n/t	703	n/t	109
Wet Chem									
pH	CE004	M	0.1	pH units	7.9	n/t	8.5	n/t	7.9

LEACHATE

Lab Number					63063	63065	63073	63075
Client Reference					1	1	1	1
Sample ID					TP101	TP102	TP106	TP107
Depth (m)					1.30	1.40	0.55	0.90
Sampling Date					12/08/2025	12/08/2025	12/08/2025	12/08/2025
Test	Method	Accred	LoD	Units				
Metals								
Arsenic Leachate	CE265	U	0.1	µg/l	2.58	5.60	0.28	1.34
Sulphur Leachate	CE265	U	0.8	mg/l	< 0.80	< 0.80	8.32	0.94
Barium Leachate	CE265	U	0.9	µg/l	10.3	16.9	21.1	7.11
Boron Leachate	CE265	N	4	µg/l	12.7	12.5	12.9	12.8
Chromium Leachate	CE265	U	0.5	µg/l	2.42	7.57	0.98	2.87
Copper Leachate	CE265	U	0.5	µg/l	9.88	12.9	1.16	3.57
Lead Leachate	CE265	U	0.6	µg/l	4.98	29.0	< 0.60	8.94
Mercury Leachate	CE265	N	0.05	µg/l	< 0.050	< 0.050	< 0.050	< 0.050
Nickel Leachate	CE265	U	0.4	µg/l	0.84	3.13	< 0.40	0.45
Selenium Leachate	CE265	U	1.1	µg/l	< 1.1	< 1.1	< 1.1	< 1.1
Vanadium Leachate	CE265	U	0.5	µg/l	12.4	13.5	< 0.50	4.25
Zinc Leachate	CE265	U	3.5	µg/l	11.4	20.2	< 3.5	< 3.5
Colourimetric								
Chromium VI	CE259	U	0.0015	mg/l	< 0.0015	< 0.0015	< 0.0015	< 0.0015
Sulphate	CE257	U	0.3	mg/l	10.0	10.0	10.0	10.0
Total Cyanide	CE147	N	5	µg/l	< 5.0	< 5.0	< 5.0	< 5.0
Free Cyanide	CE147	N	5	µg/l	< 5.0	< 5.0	< 5.0	< 5.0
Complex Cyanide	CE147	N	5	µg/l	< 5.0	< 5.0	< 5.0	< 5.0
Polyaromatic hydrocarbons								
Naphthalene	CE051	N	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	CE051	N	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	CE051	N	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	CE051	N	0.1	µg/l	0.12	< 0.10	< 0.10	< 0.10
Phenanthrene	CE051	N	0.1	µg/l	0.60	0.13	< 0.10	< 0.10
Anthracene	CE051	N	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	CE051	N	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	CE051	N	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	CE051	N	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	CE051	N	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(b)fluoranthene	CE051	N	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10

LEACHATE

Lab Number					63063	63065	63073	63075
Client Reference					1	1	1	1
Sample ID					TP101	TP102	TP106	TP107
Depth (m)					1.30	1.40	0.55	0.90
Sampling Date					12/08/2025	12/08/2025	12/08/2025	12/08/2025
Test	Method	Accred	LoD	Units				
Benzo(k)fluoranthene	CE051	N	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	CE051	N	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	CE051	N	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10
Dibenzo(a,h)anthracene	CE051	N	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(g,h,i)perylene	CE051	N	0.1	µg/l	< 0.10	< 0.10	< 0.10	< 0.10
Total PAH(16)	CE051	N	1.6	µg/l	< 1.60	< 1.60	< 1.60	< 1.60
BTEX								
Benzene	CE266	U	0.001	mg/l	< 0.00	< 0.00	< 0.00	< 0.00
Benzene	CE266	U	1	µg/l	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	CE266	U	0.001	mg/l	< 0.00	< 0.00	< 0.00	< 0.00
Toluene	CE266	U	1	µg/l	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	CE266	U	0.001	mg/l	< 0.00	< 0.00	< 0.00	< 0.00
Ethylbenzene	CE266	U	1	µg/l	< 1.00	< 1.00	< 1.00	< 1.00
Xylenes	CE266	U	0	mg/l	0.00	0.00	0.00	0.00
Xylenes	CE266	U	1	µg/l	< 1.00	< 1.00	< 1.00	< 1.00
MTBE	CE266	U	0.001	mg/l	< 0.00	< 0.00	< 0.00	< 0.00
MTBE	CE266	U	1	µg/l	< 1.00	< 1.00	< 1.00	< 1.00
Total BTEX	CE266	N	0.002	mg/l	< 0.00	< 0.00	< 0.00	< 0.00
m,p-Xylene	CE266	U	0.001	mg/l	< 0.00	< 0.00	< 0.00	< 0.00
m,p-Xylene	CE266	U	1	µg/l	< 1.00	< 1.00	< 1.00	< 1.00
oXylenes	CE266	U	0.001	mg/l	< 0.00	< 0.00	< 0.00	< 0.00
oXylenes	CE266	U	1	µg/l	< 1.00	< 1.00	< 1.00	< 1.00
Total Petroleum Hydrocarbons								
>C5-C6 Aliphatic (HS_1D_AL)	CE266	N	1	µg/l	< 1.00	< 1.00	< 1.00	< 1.00
>C5-C7 Aliphatic (HS_1D_AL)	CE266	N	1	µg/l	< 1.00	n/t	n/t	n/t
>C6-C8 Aliphatic (HS_1D_AL)	CE266	N	1	µg/l	< 1.00	< 1.00	< 1.00	< 1.00
>C8-C10 Aliphatic (HS_1D_AL)	CE266	N	1	µg/l	< 1.00	< 1.00	< 1.00	< 1.00
>C10-C12 Aliphatic (EH_2D_AL)	CE250	N	1	µg/l	< 1.0	< 1.0	< 1.0	< 1.0
>C12-C16 Aliphatic (EH_2D_AL)	CE250	N	1	µg/l	< 1.0	< 1.0	< 1.0	< 1.0
>C16-C21 Aliphatic (EH_2D_AL)	CE250	N	1	µg/l	< 1.0	< 1.0	< 1.0	< 1.0
>C21-C35 Aliphatic (EH_2D_AL)	CE250	N	1	µg/l	< 1.0	< 1.0	< 1.0	< 1.0

LEACHATE

Lab Number					63063	63065	63073	63075
Client Reference					1	1	1	1
Sample ID					TP101	TP102	TP106	TP107
Depth (m)					1.30	1.40	0.55	0.90
Sampling Date					12/08/2025	12/08/2025	12/08/2025	12/08/2025
Test	Method	Accred	LoD	Units				
>C35-C44 Aliphatic (EH_2D_AL)	CE250	N	1	µg/l	< 1.0	< 1.0	< 1.0	< 1.0
>C5-C7 Aromatic (HS_1D_AR)	CE266	N	1	µg/l	< 1.00	< 1.00	< 1.00	< 1.00
>C7-C8 Aromatic (HS_1D_AR)	CE266	N	1	µg/l	< 1.00	< 1.00	< 1.00	< 1.00
>C8-C10 Aromatic (HS_1D_AR)	CE266	N	1	µg/l	< 1.00	< 1.00	< 1.00	< 1.00
>C10-C12 Aromatic (EH_2D_AR)	CE250	N	1	µg/l	< 1.0	< 1.0	< 1.0	< 1.0
>C12-C16 Aromatic (EH_2D_AR)	CE250	N	1	µg/l	< 1.0	< 1.0	< 1.0	< 1.0
>C16-C21 Aromatic (EH_2D_AR)	CE250	N	1	µg/l	< 1.0	< 1.0	< 1.0	< 1.0
>C21-C35 Aromatic (EH_2D_AR)	CE250	N	1	µg/l	< 1.0	< 1.0	< 1.0	< 1.0
>C35-C44 Aromatic (EH_2D_AR)	CE250	N	1	µg/l	< 1.0	< 1.0	< 1.0	< 1.0
Wet Chem								
pH (10:1 extract)	CE213	U	0.1	pH units	7.8	7.6	7.7	7.6

METHOD DETAILS

METHOD	TESTNAME	METHOD SUMMARY	ANALYSIS BASIS
CE266	VPH in Leachate	HS-GCFID	As submitted sample
CE267	VPH in Soil	HS-GCFID	As submitted sample
CE250	GCXGC in Leachate	DCM Extraction and GCxGC-FID	As submitted sample
CE250	GCXGC in Soil	DCM Extraction and GCxGC-FID	As submitted sample
SUBCON	Asbestos Soil	HSG248	Air Dried Sample
CE062	Acid Soluble Sulphate in Soils	HCl Extract and ICPOES	Air dried sample
CE063	Water soluble boron	ICPOES	Air dried sample
CE265	Dissolved metals by ICP in Leachate	ICPMS	As submitted sample
CE264	Metals by ICP in Soil	ICPOES	Air dried sample
CE266	BTEX in Leachate	Analysis by HSGCFID	As submitted sample
CE267	BTEX in Soils	Analysis by HSGCFID	As submitted sample
CE261	Anions by Discrete Analyser in Soils	Gallery	Air dried sample
CE263	ChromiumVI by Discrete Analyser in Soil	Gallery	Air dried sample
CE259	ChromiumVI by Discrete Analyser in Leach	Gallery	As submitted sample
CE257	Anions by Discrete Analyser in Leachate	Gallery	As submitted sample
CE051	PAH in Leachate	DCM Extraction and GCMS	As submitted sample
CE087	PAH in Soil	DCM Extraction and GCMS	As submitted sample
CE034	Elemental Sulphur	HPLC UV	Air dried sample
CE147	Cyanides in Leachate	Continuous Flow Analyser	As submitted sample
CE077	Cyanides in Soils	Continuous Flow Analyser	As submitted sample
CE284	Sulphide By DA in Soil	Gallery Discrete Analyser	Air dried sample

REPORT INFORMATION

Report No.:25-07968, issue number 1

Key

U	ISO17025 Accredited Result
M	ISO17025 and MCERTS Accredited Result
N	Do not currently hold accreditation
^	MCERTS accreditation not applicable for sample matrix
*	ISO17025 accreditation not applicable for sample matrix
S	Subcontracted
I/S	Insufficient Sample
U/S	Unsuitable sample
N/T	Not tested
<	Means "less than"
>	Means "greater than"

LOD refers to limit of detection, except in the case of pH soils and pH waters where it means limit of discrimination.

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

All testing carried out at Unit 6 Parkhead, Stanley, DH9 7YB, except for subcontracted testing.

The results relate only to the sample received.

Unless otherwise stated, sample information has been provided by the client. This may affect the validity of the results.

Moisture Content Calculated on a Wet Weight basis (at 30°C)

Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling.

Sampling was undertaken by Chemtech Environmental Limited and is outside the UKAS accreditation scope.

Methods, procedures and performance data are available on request.

Results reported herein relate only to the material supplied to the laboratory.

BTEX compounds are identified by retention time only and may include interference from co-eluting compounds.

For soils and solids, all results are reported on a dry basis (30°C). Samples dried at no more than 30°C in a drying cabinet.

For soils and solids, analytical results are inclusive of stones, where applicable.

'Client Reference', 'Sample ID', 'Sample Location', 'Sample Type', 'Depth', 'Sample Date' and 'Sample Time' information is provided by the customer

Sample Retention and Disposal

All soil samples will be retained for a period of 4 weeks from the point of receipt

All water samples will be retained for a period of 2 weeks from the point of Reporting

Charges may apply to extended sample storage

TPH Classification - HWOL Acronym System

HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
2D	GC-GC - Double coil gas chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry

Unless specifically identified (noted as "(B)" in analyte name) all internal analysis performed at Durham site

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