



Millwood SEN, Radcliffe

Site Completion Report

Job Number
LKC251493

Report Date
7th September 2026

Client
Kier Construction Ltd



www.thelkgroup.com

Ground Investigation | Land Remediation | Project Management



LK CONSULT

DOCUMENT QUALITY ASSURANCE

Site Address	Millwood SEN, School St, Radcliffe, Manchester M26 3BW
Report Title	Site Completion Report
Job Number	LKC251493
Client	Kier Construction Ltd

Revision	0	Date of Issue	07/09/2026
Document Ref:	LKC251493-SCR-Millwood SEN, Radcliffe R0		
Status	Final		
Written By	Michael Berry		
Approved By	Peter Dunn		

DISCLAIMER

This report has been prepared by LK Consult Ltd (LKC) who have exercised such professional skill, care and diligence as may reasonably be expected of a properly qualified and competent consultant, experienced in preparing reports of a similar scope.

However, to the extent that the report is based or relies upon information contained in records, reports or other materials provided to LKC, which have not been independently produced or verified, LKC gives no warranty, representation, or assurance as to the accuracy or completeness of such information.

This report is issued on the condition that LKC will not be held liable for any loss arising from ground conditions between sampling points (i.e., boreholes/trial pits/hand augers/surface samples) which have not been shown by the sampling points or related testing carried out during the investigation, nor for any loss arising from conditions below the maximum depth of the investigation. Opinions on such conditions, where given, are for general guidance only.

This report is prepared solely for the benefit of the client named above. It may not be relied upon by or submitted to a third party for their reliance for the purposes of valuation, mortgage, insurance, and regulatory approval until all invoices have been settled in full.

Those using this information in subsequent assessments or evaluations do so at their own risk.

TABLE OF CONTENTS

1.	Introduction.....	3
1.1.	Summary of Previous Work	3
1.2.	Summary of Required Validation Work.....	3
2.	Imported Material for Soft Landscaped Areas	4
2.1.	Topsoil Sampling Methodology.....	4
2.2.	Subsoil Sampling Methodology	4
2.3.	Soil Risk Assessment	4
2.4.	Depth of Cover System.....	6
3.	Service Entry Pipes.....	8
4.	Unexpected Contamination	8
5.	Conclusions	8

Figures

Figure 1 – Site Location and Boundary Plan

Proposed Site Plan (2128.32.1205) by Bradshaw Gass & Hope LLP

Appendices

Appendix A – Photographs of Completed Site

Appendix B – Soil Analysis Certificates

Appendix C – Generic Assessment Criteria

Appendix D – Membrane Proof of Provenance

Appendix E – Validation Pit Photographs

Appendix F – New Supply Pipe Installation Photographs & Certificate

Appendix G – References

1. Introduction

LK Consult Ltd (LKC) has been commissioned to provide a Site Completion Report for Millwood SEN (70195). The development comprised erection of new school facilities including classrooms and play areas.

The aim of the Completion Report will be to demonstrate to the Local Authority that the site has been suitably remediated in line with the Remediation Statement and in accordance with the National Planning Policy Framework (NPPF)¹, where the site is 'suitable for use' for the proposed development.

The Completion Report should be sufficient to satisfy Condition 5 of the planning permission. Details are provided in the following sections.

A summary of the site details is presented in Table 1-1. Figure 1 indicates the site location and boundary plan. The proposed site plan is shown on drawing 2128.32.1205 (August 2023).

Location	Western end of School Street, to the rear of Millwood School building, Radcliffe, Manchester. Centred at approximate National Grid Reference 377850E 407120N.
Area	2.00 hectares.
Proposed Development	Erection of an extension to contain classrooms, multi-purpose hall and support areas; Landscaping works to include dedicated play areas, railings and external pagoda and additional car parking on the existing school site.

Table 1-1: Summary of site details.

1.1. Summary of Previous Work

The following reports have been undertaken for the site:

- Geo-Environmental Appraisal, undertaken by Encia Consulting Ltd (Ref: 7028/1, dated 20th January 2006).
- Ground Investigation Report, undertaken by Atkins (Ref: 5086974.077.32803, dated February 2010).
- Environmental Investigation and Detailed Quantitative Risk Assessment, undertaken by LKC (ref. CL 1720-02 R0, dated November 2010).
- Phase 2 Geo-Environmental Site Assessment, undertaken by E3P (IMS Ref: QR012-3, dated February 2019).
- Phase 2 Environmental Report, undertaken by Rogers Geotechnical Services Ltd (Ref: C2425/22/E/3709, dated 23rd March 2022).
- Desk Based Coal Mining Risk Assessment (CMRA), undertaken by LKC (ref. LKC 23 1383-A1-CMRA, dated August 2023).
- Phase 2 Geo-Environmental Investigation, Risk Assessment and Remediation Strategy, undertaken by LKC (ref: LKC 23 1383-B2-GI-Millwood School R0, dated September 2023).

1.2. Summary of Required Validation Work

The requirement for remedial works across the site arose as a result of previous site investigations and risk assessments entitled '*Phase 2 Geo-Environmental Investigation, Risk Assessment and Remediation Strategy*', undertaken by LKC (ref: LKC 23 1383-B2-GI-Millwood School R0, dated September 2023). This report should be read in conjunction with this validation report. The remedial requirements included the following:

- 600mm of suitable clean environmental cover soils in soft landscaped and play areas.
- Potable water pipeline assessment and potential barrier pipe.

Selected photographs of the completed site are presented in Appendix A.

2. Imported Material for Soft Landscaped Areas

2.1. Topsoil Sampling Methodology

Approximately 350m³ of topsoil was imported to site from Marchington Stone, Shire Hill Quarry, Sheffield Rd, Glossop SK13 7PU. The imported topsoil was sampled in line with the rates agreed in the remediation strategy.

To comply with the agreed sampling rate for remediated source of 1 sample per 50m³ or minimum 3no. samples per source, LKC have collected 7no. samples. Initially, 3no. samples were collected from the source on 19th June 2026 (ref: TS201-TS203). A further 4no. samples (ref: TS204 to TS207) were collected when the material had been imported to site.

3no. samples of topsoil (TS101-TS103) from an alternative source are referenced within the Certificates of Analysis in Appendix B. This soil was not imported to site, and these samples can be discounted.

To confirm the material was chemically suitable, the samples were tested for soil organic matter (SOM), metals (CLEA metal suite), Polycyclic Aromatic Hydrocarbons (EPA 16 PAHs), Total Petroleum Hydrocarbons (TPH CWC) and asbestos.

Standard sampling protocol and preservation of samples was undertaken as described in the EA guidance on site investigation².

Soil samples of approximately 500g were recovered in amber jars and plastic tubs. All the samples were sent to DETS laboratory for chemical testing.

Many of the contamination tests are UKAS or MCERTS accredited and further details are given in the Certificate of Analysis presented in Appendix B.

2.2. Subsoil Sampling Methodology

Approximately 750m³ of subsoil was imported to site from Chorley Sand, Wigan Ln, Heath Charnock, Adlington, Chorley PR7 4JT.

To comply with the agreed sampling rate for greenfield source of 1 sample per 50m³ or minimum 3no. samples per source, LKC have collected 15no. samples in total. Initially, 3no. samples were collected from the source on 28th May 2026 (ref: Subsoil SS101-SS103). A further 12 no. samples (ref: SS104-SS115) were collected once the material had been imported to site.

To confirm the material was chemically suitable, the samples were tested for soil organic matter (SOM), metals (CLEA metal suite), Polycyclic Aromatic Hydrocarbons (EPA 16 PAHs), Total Petroleum Hydrocarbons (TPH CWC) and asbestos.

Standard sampling protocol and preservation of samples was undertaken as described in the EA guidance on site investigation³.

Soil samples of approximately 500g were recovered in amber jars and plastic tubs. All the samples were sent to DETS laboratory for chemical testing.

Many of the contamination tests are UKAS or MCERTS accredited and further details are given in the Certificate of Analysis presented in Appendix B.

2.3. Soil Risk Assessment

With regards to the soil validation screening values, LKC will use the following hierarchy:

- Category 4 Screening Levels (C4SLs) ^{4, 5}.
- LQM Suitable 4 Use Levels (S4ULs) ^{6, 7, 8, 9}.

The proposed development is for a new SEN school with soft landscaping. LKC considers comparing the results with the POS_{resi} criteria to be appropriate, as this criterion is based on a child using the area sporadically through the year (170-day exposure) close to home.

All criteria have been generated using the CLEA V1.06 model¹⁰ based either on 1%, 2.5% and 6% Soil Organic matter (SOM). Results will be compared to the nearest appropriate SOM.

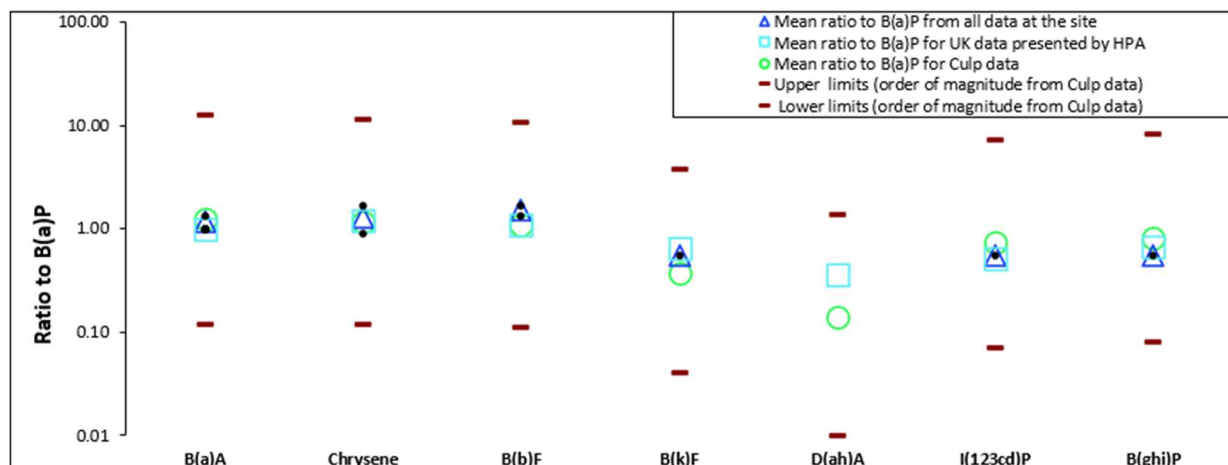
A summary of the Generic Assessment Criteria Values used in this assessment is provided in Appendix C.

B(a)P as Surrogate Marker

LKC consider the main risk drivers for PAHs are benzo(a)pyrene (B(a)P) and naphthalene. This is due to B(a)P possibly being a carcinogen and the most toxic of the PAHs^{11,12} and naphthalene the most volatile and soluble¹³. The C4SLs indicate B(a)P as a surrogate marker for carcinogenic PAHs, if it falls within appropriate limits, since the risk from other non-carcinogenic PAHs are considered negligible¹⁴. For B(a)P to be used as a surrogate marker it should follow the profile described by the HPA (2008)¹⁵ and CL:AIRE (2013). Naphthalene will be treated separately using the LQM S4ULs.

LKC undertook an assessment of the PAH data for the site with regards to using B(a)P as a surrogate marker for carcinogenic PAHs as per HPA and CL:AIRE guidelines. The primary toxicological study related to Culp *et al.*¹⁶, which was based on coal tar mixtures (>80,000mg/kg of total PAHs) fed in food to mice over a two-year carcinogenicity study.

Graph 2-1 summarises the study site data with respect to how the ratios of carcinogenic PAHs relate to B(a)P, within the confidence limits provided in the HPA document.



Graph 2-1: The ratio of PAH to B(a)P in soil for all available data at the site based 8 samples (where values were >LOD to allow the calculation of a ratio).

Notes:

B(a)P=Benzo(a)pyrene; D(ah)A=Dibenzo(ah)anthracene; B(a)A=Benzo(a)anthracene; B(b)F=Benzo(b)fluoranthene; B(k)F=Benzo(k)fluoranthene; I(123cd)P=Indeno(123cd)pyrene; B(ghi)P=Benzo(ghi)perylene.

All the data points that could be used to calculate ratios fall inside the upper or lower limits.

Based on this distribution of data LKC considers B(a)P can be used as a surrogate marker for carcinogenic PAHs and the C4SL criteria is suitable for this dataset.

2.3.1. Soil Results Comparison against Generic Assessment Criteria

All analysis sheets are presented in Appendix B. Results have been compared to the relevant assessment criteria and no elevated contaminants were identified in the imported topsoil or subsoil and the material is considered suitable for use within the capping layers.

Soil samples taken from both source and site were considered 'suitable for use' when compared to the relevant assessment criteria for topsoil and subsoil. No visual or olfactory evidence of contamination was identified during sampling on site or at source.

2.4. Depth of Cover System

In line with the Remediation Strategy the soft landscaping required 600mm clean cover soils over a demarcation membrane (LoTrak100). Levels in soft landscaping areas have been built up to the required level using clean soils in line with the remediation strategy.

LKC attended site on the 7th August 2026 to inspect the capping layer construction and depth for the soft landscaped area.

The pits were undertaken at regular intervals in the soft landscaped areas. Plate 2-1 shows the locations of the pits.



Plate 2-1: Validation pit locations.

Table 2-1 summarises the depths of cover soils within the soft landscaped areas.

Location	Topsoil Depth (mm)	Subsoil Depth (mm)	Cover Soils Depth (mm)	Required Depth (mm)	Membrane Present (✓ / x)	Compliance (✓ / x)
Pit 1*	250	300	550	600	✓	✓
Pit 2*	210	350	570	600	✓	✓
Pit 3	150	500	680	600	✓	✓
Pit 4	150	450	650	600	✓	✓
Pit 5	120	530	650	600	✓	✓
Pit 6	150	430	600	600	✓	✓
Pit 7	150	450	600	600	✓	✓
Pit 8	200	450	650	600	✓	✓
Pit 9	170	430	650	600	✓	✓
Pit 10	200	480	660	600	✓	✓
Pit 11	200	400	600	600	✓	✓
Pit 12	300	300	600	600	✓	✓

Table 2-1: Summary of cover system depths.

*Full 600mm cover was not possible in Pit 1 and Pit 2. The soil is underlain by a membrane and this soft landscaping is not expected to receive extensive use by the receptors. Once the area is turfed an additional 20mm of cover is expected. Therefore, the clean cover above the membrane is still considered protective of future site users.

Geotextile membrane proof of provenance is presented in Appendix D. Photographs of the depth validation pits are provided in Appendix E.

3. Service Entry Pipes

LKC understands that Kier Construction Ltd have installed barrier pipe at the site and the installation has been signed off by United Utilities. The installation certificates and photographs are presented in Appendix F.

4. Unexpected Contamination

LKC understands that no unexpected contamination was encountered during development works.

5. Conclusions

LKC consider that the work onsite to date has been validated in accordance with the agreed Remediation Strategy.

Based on the above information LKC considers the Millwood SEN development site is 'suitable for use' for in line with the proposed development.

LKC considers there is sufficient information to discharge the outstanding planning Condition 5 by Bury Council.

Figures



Client: Kier Construction Ltd				Title: Site Location & Boundary Plan		 LK CONSULT	
Site: Millwood SEN School, Radcliffe				Scale (see scale bar): 1:25,000 & 1:1,000 @ A4			
Job No.: LKC261493	Drawn By: MB	Checked By: PD	Drawn: Aug 2026	Figure: 1	Revision:		

Appendix A – Photographs of Completed Site



Photographs 1-4: Selected photographs of completed site.

Appendix B – Soil Analysis Certificates

Certificate of Analysis

Certificate Number 26-12737

Issued: 22-Jun-26

Client LK Consult Limited
Unit 29
Eton Business Park
Eton Hill Road
Radcliffe
Manchester
M26 2ZS

Our Reference 26-12737

Client Reference ~ LKC251493

Order No ~ PO-C003029

Contract Title ~ Millwood sen School Radcliffe

Description 6 Soil samples.

Date Received 28-May-26

Date Started 28-May-26

Date Completed 22-Jun-26

Test Procedures Identified by prefix DETSn (details on request).

Notes 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.

Approved By



Reyhan Irfan
Operations Manager



Summary of Chemical Analysis

Soil Samples

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Lab No	2693309	2693310	2693311	2693312	2693313	2693314
Sample ID ~	TS101	TS102	TS103	SS101	SS102	SS103
Depth ~						
Other ID ~						
Sample Type ~	ES	ES	ES	ES	ES	ES
Sampling Date ~	27/05/2026	27/05/2026	27/05/2026	27/05/2026	27/05/2026	27/05/2026
Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Preparation									
Moisture Content	DETSC 1004	0.1	%	18	19	18	11	11	11
Metals									
Arsenic	DETSC 2301#	0.2	mg/kg	22	12	9.9	4.4	4.5	3.6
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.7	0.5	0.6	0.4	0.5	0.4
Cadmium	DETSC 2301#	0.1	mg/kg	0.3	0.3	0.3	< 0.1	< 0.1	< 0.1
Chromium	DETSC 2301#	0.15	mg/kg	16	15	15	11	11	8.6
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	42	40	36	15	17	14
Lead	DETSC 2301#	0.3	mg/kg	83	920	68	11	12	7.7
Mercury	DETSC 2325#	0.05	mg/kg	0.32	0.26	0.18	< 0.05	< 0.05	< 0.05
Nickel	DETSC 2301#	1	mg/kg	15	13	14	11	12	9.2
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	DETSC 2301#	0.8	mg/kg	21	21	18	13	14	11
Zinc	DETSC 2301#	1	mg/kg	83	82	69	27	32	24
Inorganics									
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				0.91	1.6	0.97
pH	DETSC 2008#		pH	8.1	8.1	8.0	9.2	9.4	9.3
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.3	0.3	0.3	< 0.1	< 0.1	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	0.2	0.2	0.2	< 0.1	< 0.1	< 0.1
Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l	130	120	120	330	360	370
Petroleum Hydrocarbons									
Aliphatic C5-C6: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12: EH_CU_1D_AL	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	23	< 1.5
Aliphatic C12-C16: EH_CU_1D_AL	DETSC 3072#	1.2	mg/kg	2.0	< 1.2	< 1.2	< 1.2	5.6	< 1.2
Aliphatic C16-C21: EH_CU_1D_AL	DETSC 3072#	1.5	mg/kg	4.1	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35: EH_CU_1D_AL	DETSC 3072#	3.4	mg/kg	30	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C35-C40: EH_CU_1D_AL	DETSC 3072*	3.4	mg/kg	8.7	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C10-C44: EH_CU_1D_AL	DETSC 3072*	10	mg/kg	54	< 10	< 10	< 10	29	< 10
Aliphatic C5-C40: EH_CU+HS_1D_AL	DETSC 3072*	10	mg/kg	45	< 10	< 10	< 10	28	< 10
Aliphatic C5-C44: EH_CU+HS_1D_AL	DETSC 3072*	10	mg/kg	54	< 10	< 10	< 10	29	< 10
Aromatic C5-C7: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12: EH_CU_1D_AR	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16: EH_CU_1D_AR	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21: EH_CU_1D_AR	DETSC 3072#	0.6	mg/kg	4.1	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Aromatic C21-C35: EH_CU_1D_AR	DETSC 3072#	1.4	mg/kg	96	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Aromatic C35-C40: EH_CU_1D_AR	DETSC 3072*	1.4	mg/kg	27	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Aromatic C10-C44: EH_CU_1D_AR	DETSC 3072*	10	mg/kg	150	< 10	< 10	< 10	< 10	< 10

Summary of Chemical Analysis

Soil Samples

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Lab No	2693309	2693310	2693311	2693312	2693313	2693314
Sample ID ~	TS101	TS102	TS103	SS101	SS102	SS103
Depth ~						
Other ID ~						
Sample Type ~	ES	ES	ES	ES	ES	ES
Sampling Date ~	27/05/2026	27/05/2026	27/05/2026	27/05/2026	27/05/2026	27/05/2026
Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Aromatic C5-C40: EH_CU+HS_1D_AR	DETSC 3072*	10	mg/kg	130	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C44: EH_CU+HS_1D_AR	DETSC 3072*	10	mg/kg	150	< 10	< 10	< 10	< 10	< 10
TPH Ali/Aro C5-C40: EH_CU+HS_1D_Total	DETSC 3072*	10	mg/kg	170	< 10	< 10	< 10	28	< 10
TPH Ali/Aro C5-C44: EH_CU+HS_1D_Total	DETSC 3072*	10	mg/kg	200	< 10	< 10	< 10	29	< 10
Ali/Aro C10-C44: EH_CU_1D_Total	DETSC 3072*	10	mg/kg	200	< 10	< 10	< 10	29	< 10
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
m+p Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
o Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3321	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PAHs									
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.03	0.04	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.20	0.24	0.18	0.04	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	0.03	0.05	0.04	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.31	0.45	0.38	0.04	< 0.03	0.03
Pyrene	DETSC 3303#	0.03	mg/kg	0.30	0.44	0.37	< 0.03	< 0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.08	0.13	0.12	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	0.09	0.22	0.14	< 0.03	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.11	0.25	0.20	< 0.03	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.04	0.08	0.07	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.08	0.18	0.15	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.04	0.08	0.08	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.05	0.08	0.09	< 0.03	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	1.3	2.2	1.8	< 0.10	< 0.10	< 0.10
Phenols									
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	1.0	1.0	1.2	< 0.3	< 0.3	< 0.3

Topsoil Analytical Report

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Lab No	2693309
Sample ID ~	TS101
Depth ~	
Other ID ~	
Sample Type ~	ES
Sampling Date ~	27/05/2026
Sampling Time ~	n/s

Parameter	Method	Result	Compliant with multi purpose range?	Compliant with specific purpose range? (Y/N)				
			(Y/N)	Acid.	Calc	Low F.	Low F. acidic	Low F. calc.
Texture								
Clay content %	\$	6	See Figure 1 on Textural class sheet					
Silt content %	\$	25						
Sand content %	\$	69						
Soil texture – (see figure 1)	\$	Sandy Loam						
Soil organic matter content % (varying with clay content)								
Clay 5-20%	DETSC 2002#	5	Y	Y	Y	Y	Y	Y
Clay 20-35%	DETSC 2002#		N/A	N/A	N/A	N/A	N/A	N/A
Maximum coarse fragment - Content % m/m								
>2 mm	\$	13	Y	Y	Y	Y	Y	Y
>20 mm	\$	0	Y	Y	Y	Y	Y	Y
>50 mm	\$	0	Y	Y	Y	Y	Y	Y
Soil pH value	DETSC 2008#	8.1	Y	N	Y	Y	N	Y
Carbonate (Calcareous only) %	DETSC 2005	0	N/A	N/A	N	N/A	N/A	N
Available plant nutrient content								
Total Nitrogen %	DETSC 2121*	0.03	N	N	N	N/A	N/A	N/A
Extractable phosphate mg/l	DETSC 2310*	67.5	Y	Y	Y	N	N	N
Extractable potassium mg/l	DETSC 2309*	150	Y	Y	Y	N/A	N/A	N/A
Extractable magnesium mg/l	DETSC 2309*	93.8	Y	Y	Y	N/A	N/A	N/A
Carbon: Nitrogen ratio		96.67	N	N	N	N	N	N
Electrical Conductivity	DETSC 2009*	2200	Y	N/A	N/A	N/A	N/A	N/A
Phytotoxic contaminants (by soil pH) mg/kgDS								
Zinc (Nitric acid extract)	DETSC 2308*	102.5	Y	Y	Y	Y	Y	Y
Copper (Nitric acid extract)	DETSC 2308*	48.8	Y	Y	Y	Y	Y	Y
Nickel (Nitric acid extract)	DETSC 2308*	20	Y	Y	Y	Y	Y	Y
Visible contaminants % m/m								
>2 mm	*	0	Y	Y	Y	Y	Y	Y
...of which plastics	*	0	Y	Y	Y	Y	Y	Y
...man made sharps	*	0	Y	Y	Y	Y	Y	Y
Additional analytical certificate(s) for particle size distribution analysis are appended.								
# - MCERTS (accred. only implied if report carries the MCERTS logo). * - unaccredited test. \$ - completed by approved subcontractor.								

Textural Class

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Results: Proportion in class (%)

Clay	Silt	Sand	Help messages
6	25	69	

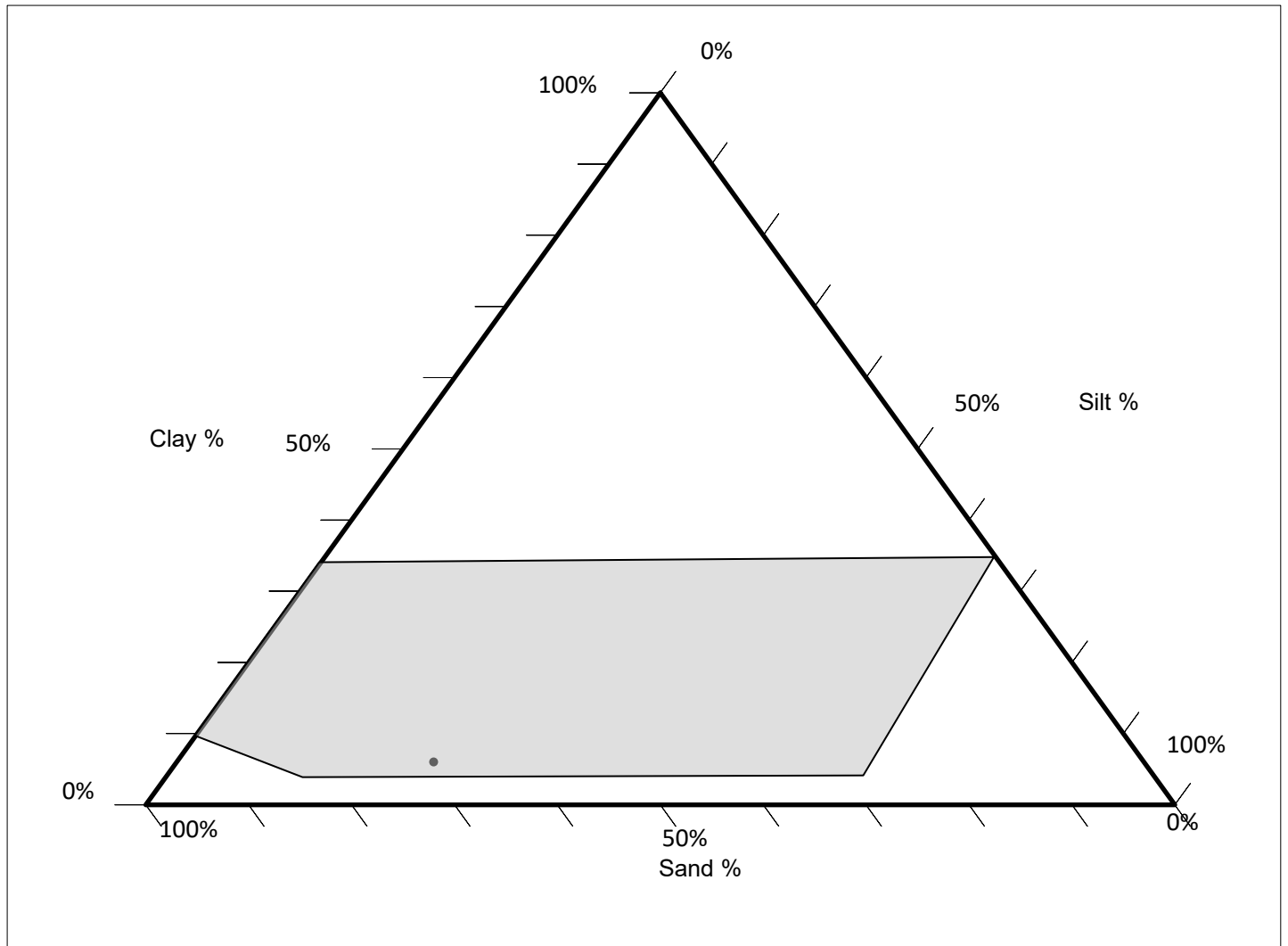


Figure 1

The textural class is required to be in the shaded area.

Results are shown by the grey point in the chart

Plotting parameters			Help messages
Printer correction:	1.1		
Tick interval (0 - 0.5):	0.1		
Tick length (0 - 0.2):	0.03		
Plot lines? (Y or N):	n		

Topsoil Analytical Report

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Lab No	2693310
Sample ID ~	TS102
Depth ~	
Other ID ~	
Sample Type ~	ES
Sampling Date ~	27/05/2026
Sampling Time ~	n/s

Parameter	Method	Result	Compliant with multi purpose range?	Compliant with specific purpose range? (Y/N)				
			(Y/N)	Acid.	Calc	Low F.	Low F. acidic	Low F. calc.
Texture								
Clay content %	\$	5	See Figure 1 on Textural class sheet					
Silt content %	\$	21						
Sand content %	\$	74						
Soil texture – (see figure 1)	\$	Loamy Sand						
Soil organic matter content % (varying with clay content)								
Clay 5-20%	DETSC 2002#	3.9	Y	Y	Y	Y	Y	Y
Clay 20-35%	DETSC 2002#		N/A	N/A	N/A	N/A	N/A	N/A
Maximum coarse fragment - Content % m/m								
>2 mm	\$	18	Y	Y	Y	Y	Y	Y
>20 mm	\$	9	Y	Y	Y	Y	Y	Y
>50 mm	\$	0	Y	Y	Y	Y	Y	Y
Soil pH value	DETSC 2008#	8.1	Y	N	Y	Y	N	Y
Carbonate (Calcareous only) %	DETSC 2005	0	N/A	N/A	N	N/A	N/A	N
Available plant nutrient content								
Total Nitrogen %	DETSC 2121*	0.04	N	N	N	N/A	N/A	N/A
Extractable phosphate mg/l	DETSC 2310*	101.2	Y	Y	Y	N	N	N
Extractable potassium mg/l	DETSC 2309*	106.2	N	N	N	N/A	N/A	N/A
Extractable magnesium mg/l	DETSC 2309*	68.8	Y	Y	Y	N/A	N/A	N/A
Carbon: Nitrogen ratio		56.55	N	N	N	N	N	N
Electrical Conductivity	DETSC 2009*	2200	Y	N/A	N/A	N/A	N/A	N/A
Phytotoxic contaminants (by soil pH) mg/kgDS								
Zinc (Nitric acid extract)	DETSC 2308*	90	Y	Y	Y	Y	Y	Y
Copper (Nitric acid extract)	DETSC 2308*	45	Y	Y	Y	Y	Y	Y
Nickel (Nitric acid extract)	DETSC 2308*	16.2	Y	Y	Y	Y	Y	Y
Visible contaminants % m/m								
>2 mm	*	0	Y	Y	Y	Y	Y	Y
...of which plastics	*	0	Y	Y	Y	Y	Y	Y
...man made sharps	*	0	Y	Y	Y	Y	Y	Y
Additional analytical certificate(s) for particle size distribution analysis are appended.								
# - MCERTS (accred. only implied if report carries the MCERTS logo). * - unaccredited test. \$ - completed by approved subcontractor.								

Textural Class

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Results: Proportion in class (%)

Clay	Silt	Sand	Help messages
5	21	74	

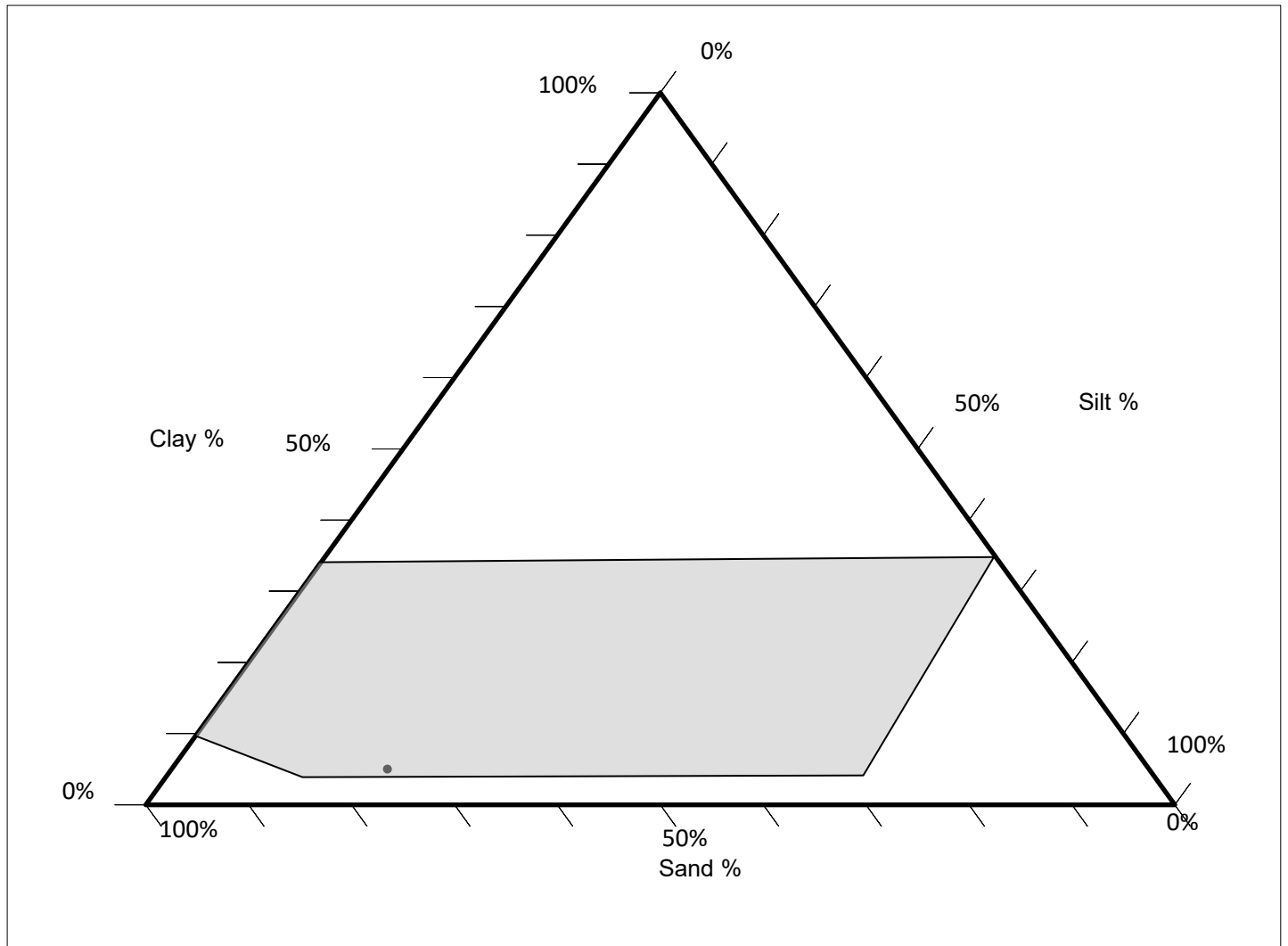


Figure 1

The textural class is required to be in the shaded area.

Results are shown by the grey point in the chart

Plotting parameters		Help messages
Printer correction:	1.1	
Tick interval (0 - 0.5):	0.1	
Tick length (0 - 0.2):	0.03	
Plot lines? (Y or N):	n	

Topsoil Analytical Report

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Lab No	2693311
Sample ID ~	TS103
Depth ~	
Other ID ~	
Sample Type ~	ES
Sampling Date ~	27/05/2026
Sampling Time ~	n/s

Parameter	Method	Result	Compliant with multi purpose range?	Compliant with specific purpose range? (Y/N)				
			(Y/N)	Acid.	Calc	Low F.	Low F. acidic	Low F. calc.
Texture								
Clay content %	\$	7	See Figure 1 on Textural class sheet					
Silt content %	\$	24						
Sand content %	\$	69						
Soil texture – (see figure 1)	\$	Sandy Loam						
Soil organic matter content % (varying with clay content)								
Clay 5-20%	DETSC 2002#	4.7	Y	Y	Y	Y	Y	Y
Clay 20-35%	DETSC 2002#		N/A	N/A	N/A	N/A	N/A	N/A
Maximum coarse fragment - Content % m/m								
>2 mm	\$	12	Y	Y	Y	Y	Y	Y
>20 mm	\$	0	Y	Y	Y	Y	Y	Y
>50 mm	\$	0	Y	Y	Y	Y	Y	Y
Soil pH value	DETSC 2008#	8	Y	N	Y	Y	N	Y
Carbonate (Calcareous only) %	DETSC 2005	0	N/A	N/A	N	N/A	N/A	N
Available plant nutrient content								
Total Nitrogen %	DETSC 2121*	0.05	N	N	N	N/A	N/A	N/A
Extractable phosphate mg/l	DETSC 2310*	110	Y	Y	Y	N	N	N
Extractable potassium mg/l	DETSC 2309*	121.8	Y	Y	Y	N/A	N/A	N/A
Extractable magnesium mg/l	DETSC 2309*	78.6	Y	Y	Y	N/A	N/A	N/A
Carbon: Nitrogen ratio		54.52	N	N	N	N	N	N
Electrical Conductivity	DETSC 2009*	2200	Y	N/A	N/A	N/A	N/A	N/A
Phytotoxic contaminants (by soil pH) mg/kgDS								
Zinc (Nitric acid extract)	DETSC 2308*	86.5	Y	Y	Y	Y	Y	Y
Copper (Nitric acid extract)	DETSC 2308*	41.9	Y	Y	Y	Y	Y	Y
Nickel (Nitric acid extract)	DETSC 2308*	18.3	Y	Y	Y	Y	Y	Y
Visible contaminants % m/m								
>2 mm	*	0	Y	Y	Y	Y	Y	Y
...of which plastics	*	0	Y	Y	Y	Y	Y	Y
...man made sharps	*	0	Y	Y	Y	Y	Y	Y
Additional analytical certificate(s) for particle size distribution analysis are appended.								
# - MCERTS (accred. only implied if report carries the MCERTS logo). * - unaccredited test. \$ - completed by approved subcontractor.								

Textural Class

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Results: Proportion in class (%)			Help messages
Clay	Silt	Sand	
7	24	69	

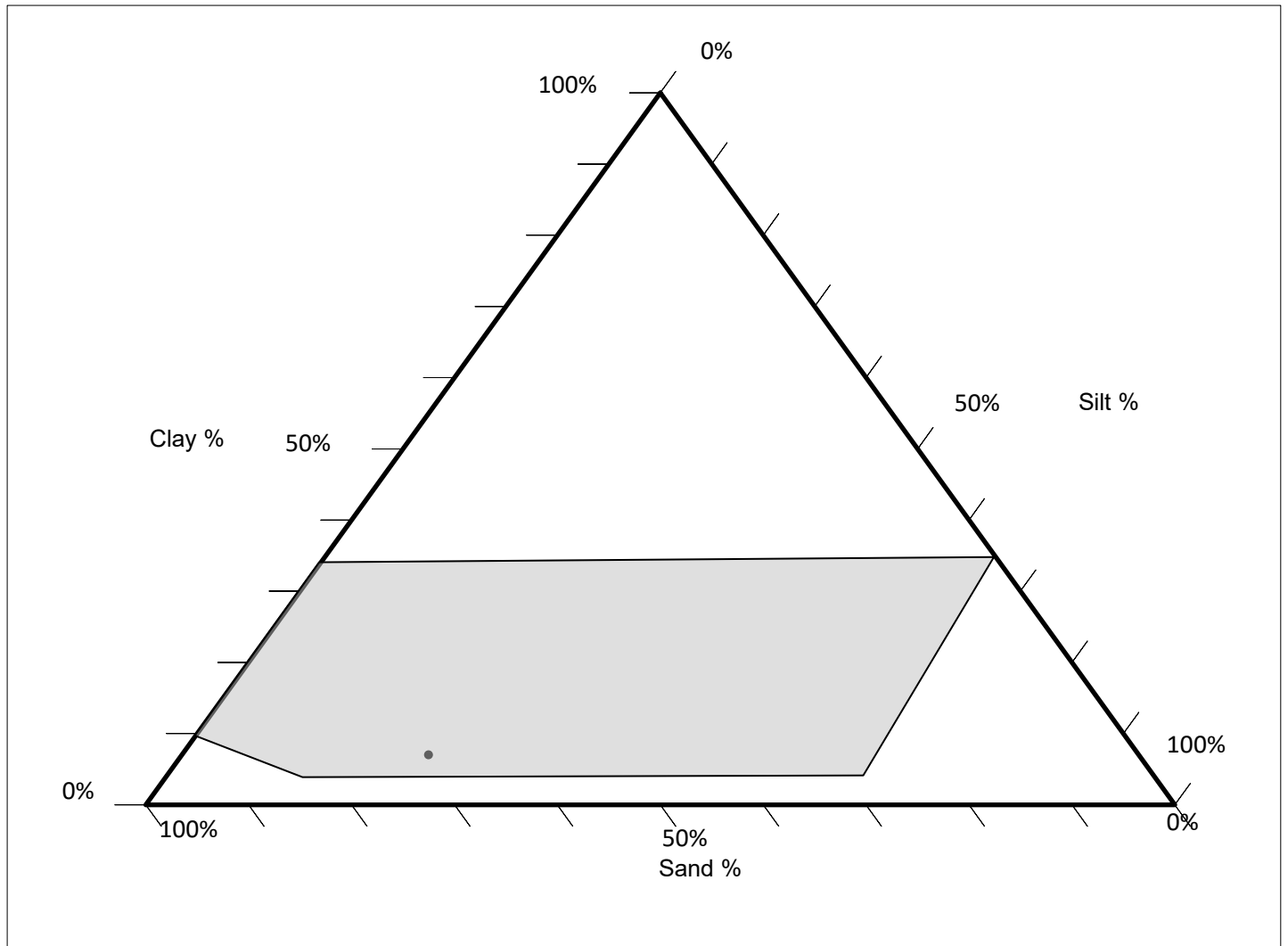


Figure 1
The textural class is required to be in the shaded area.
Results are shown by the grey point in the chart

Plotting parameters		Help messages
Printer correction:	1.1	
Tick interval (0 - 0.5):	0.1	
Tick length (0 - 0.2):	0.03	
Plot lines? (Y or N):	n	

Subsoil Analytical Report

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Lab No	2693312
Sample ID ~	SS101
Depth ~	
Other ID ~	
Sample Type ~	ES
Sampling Date ~	27/05/2026
Sampling Time ~	n/s

Parameter	Method	Result	Compliant with multi purpose range?	Compliant with specific purpose range? (Y/N)	
			(Y/N)	Acid.	Calc.
Texture					
Clay content %	\$	7	See Figure 1 on Textural Class sheet		
Silt content %	\$	21			
Sand content %	\$	72			
Soil texture – (see figure 1)	\$	Sandy Loam			
Mass loss on ignition		0.91	Y	N	Y
Maximum coarse fragment - Content % m/m					
>2 mm	\$	8	Y	Y	Y
>20 mm	\$	0	Y	Y	Y
>75 mm	\$	0	Y	Y	Y
Soil pH value	DETSC 2008#	9.2	N	N	N
Carbonate (Calcareous only) %	DETSC 2005	0	N/A	N/A	N
Exchangeable Sodium (%)	*	0	Y	Y	Y
Electrical Conductivity	DETSC 2009*	2200	Y	N/A	N/A
Phytotoxic contaminants (by soil pH) mg/kgDS					
Zinc (Nitric acid extract)	DETSC 2308*	33.4	Y	Y	Y
Copper (Nitric acid extract)	DETSC 2308*	18.1	Y	Y	Y
Nickel (Nitric acid extract)	DETSC 2308*	15.3	Y	Y	Y
Visible contaminants % m/m					
>2 mm	*	0	Y	Y	Y
...of which plastics	*	0	Y	Y	Y
...man made sharps	*	0	Y	Y	Y
Additional analytical certificate(s) for particle size distribution analysis are appended.					
# - MCERTS (accred. only implied if report carries the MCERTS logo). * - unaccredited test. \$ - completed by approved subcontractor.					

Textural Class

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Results: Proportion in class (%)

Clay	Silt	Sand	Help messages
7	21	72	

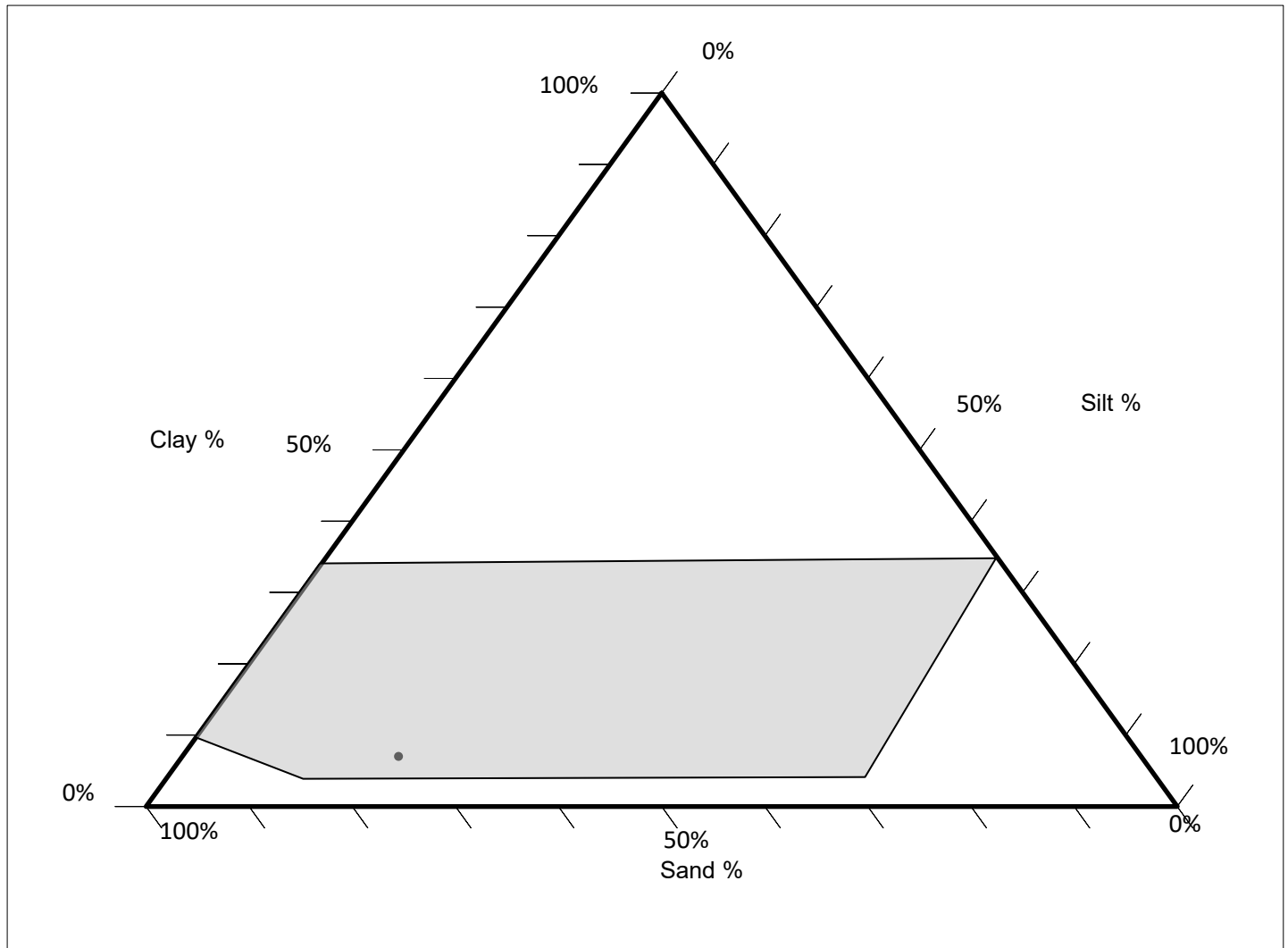


Figure 1

The textural class is required to be in the shaded area.

Results are shown by the grey point in the chart

Plotting parameters			Help messages
Printer correction:	1.1		
Tick interval (0 - 0.5):	0.1		
Tick length (0 - 0.2):	0.03		
Plot lines? (Y or N):	n		

Subsoil Analytical Report

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Lab No	2693313
Sample ID ~	SS102
Depth ~	
Other ID ~	
Sample Type ~	ES
Sampling Date ~	27/05/2026
Sampling Time ~	n/s

Parameter	Method	Result	Compliant with multi purpose range?	Compliant with specific purpose range? (Y/N)	
			(Y/N)	Acid.	Calc
Texture					
Clay content %	\$	7	See Figure 1 on Textural Class sheet	N	Y
Silt content %	\$	20			
Sand content %	\$	73			
Soil texture – (see figure 1)	\$	Sandy Loam			
Mass loss on ignition		1.6	Y	N	Y
Maximum coarse fragment - Content % m/m					
>2 mm	\$	3	Y	Y	Y
>20 mm	\$	0	Y	Y	Y
>75 mm	\$	0	Y	Y	Y
Soil pH value	DETSC 2008#	9.4	N	N	N
Carbonate (Calcareous only) %	DETSC 2005	0	N/A	N/A	N
Exchangeable Sodium (%)	*	0	Y	Y	Y
Electrical Conductivity	DETSC 2009*	2200	Y	N/A	N/A
Phytotoxic contaminants (by soil pH) mg/kgDS					
Zinc (Nitric acid extract)	DETSC 2308*	39.7	Y	Y	Y
Copper (Nitric acid extract)	DETSC 2308*	23.5	Y	Y	Y
Nickel (Nitric acid extract)	DETSC 2308*	17.6	Y	Y	Y
Visible contaminants % m/m					
>2 mm	*	0	Y	Y	Y
...of which plastics	*	0	Y	Y	Y
...man made sharps	*	0	Y	Y	Y
Additional analytical certificate(s) for particle size distribution analysis are appended.					
# - MCERTS (accred. only implied if report carries the MCERTS logo). * - unaccredited test. \$ - completed by approved subcontractor.					

Textural Class

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Results: Proportion in class (%)			
Clay	Silt	Sand	Help messages
7	20	73	

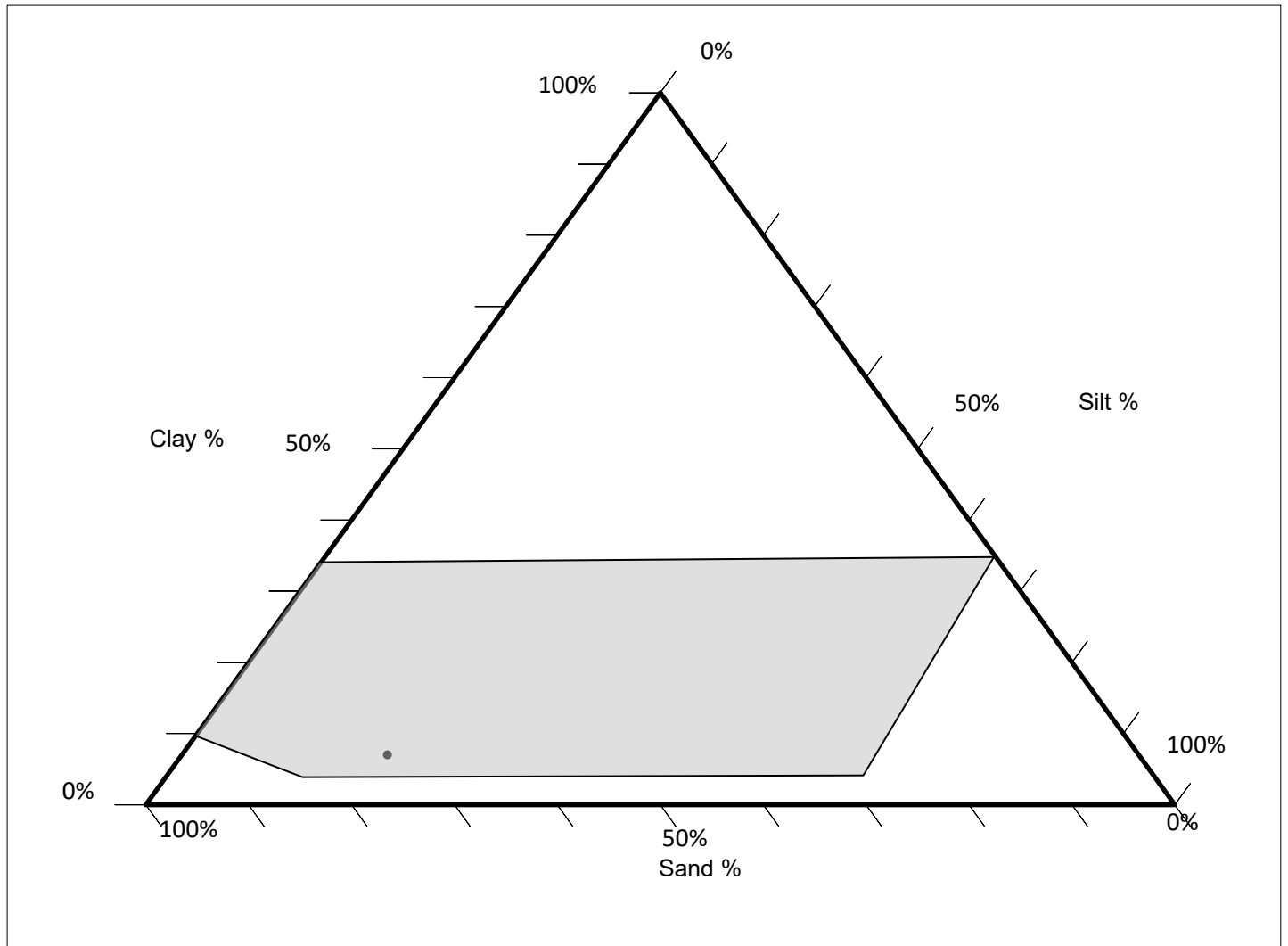


Figure 1
The textural class is required to be in the shaded area.
Results are shown by the grey point in the chart

Plotting parameters		Help messages
Printer correction:	1.1	
Tick interval (0 - 0.5):	0.1	
Tick length (0 - 0.2):	0.03	
Plot lines? (Y or N):	n	

Subsoil Analytical Report

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Lab No	2693314
Sample ID ~	SS103
Depth ~	
Other ID ~	
Sample Type ~	ES
Sampling Date ~	27/05/2026
Sampling Time ~	n/s

Parameter	Method	Result	Compliant with multi purpose range?	Compliant with specific purpose range? (Y/N)	
			(Y/N)	Acid.	Calc
Texture					
Clay content %	\$	3	See Figure 1 on Textural Class sheet	N	Y
Silt content %	\$	23			
Sand content %	\$	74			
Soil texture – (see figure 1)	\$	Loamy Sand			
Mass loss on ignition		0.97	Y	N	Y
Maximum coarse fragment - Content % m/m					
>2 mm	\$	4	Y	Y	Y
>20 mm	\$	0	Y	Y	Y
>75 mm	\$	0	Y	Y	Y
Soil pH value	DETSC 2008#	9.3	N	N	N
Carbonate (Calcareous only) %	DETSC 2005	0	N/A	N/A	N
Exchangeable Sodium (%)	*	0	Y	Y	Y
Electrical Conductivity	DETSC 2009*	2200	Y	N/A	N/A
Phytotoxic contaminants (by soil pH) mg/kgDS					
Zinc (Nitric acid extract)	DETSC 2308*	33.8	Y	Y	Y
Copper (Nitric acid extract)	DETSC 2308*	19.1	Y	Y	Y
Nickel (Nitric acid extract)	DETSC 2308*	16.2	Y	Y	Y
Visible contaminants % m/m					
>2 mm	*	0	Y	Y	Y
...of which plastics	*	0	Y	Y	Y
...man made sharps	*	0	Y	Y	Y
Additional analytical certificate(s) for particle size distribution analysis are appended.					
# - MCERTS (accred. only implied if report carries the MCERTS logo). * - unaccredited test. \$ - completed by approved subcontractor.					

Textural Class

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Results: Proportion in class (%)			
Clay	Silt	Sand	Help messages
3	23	74	

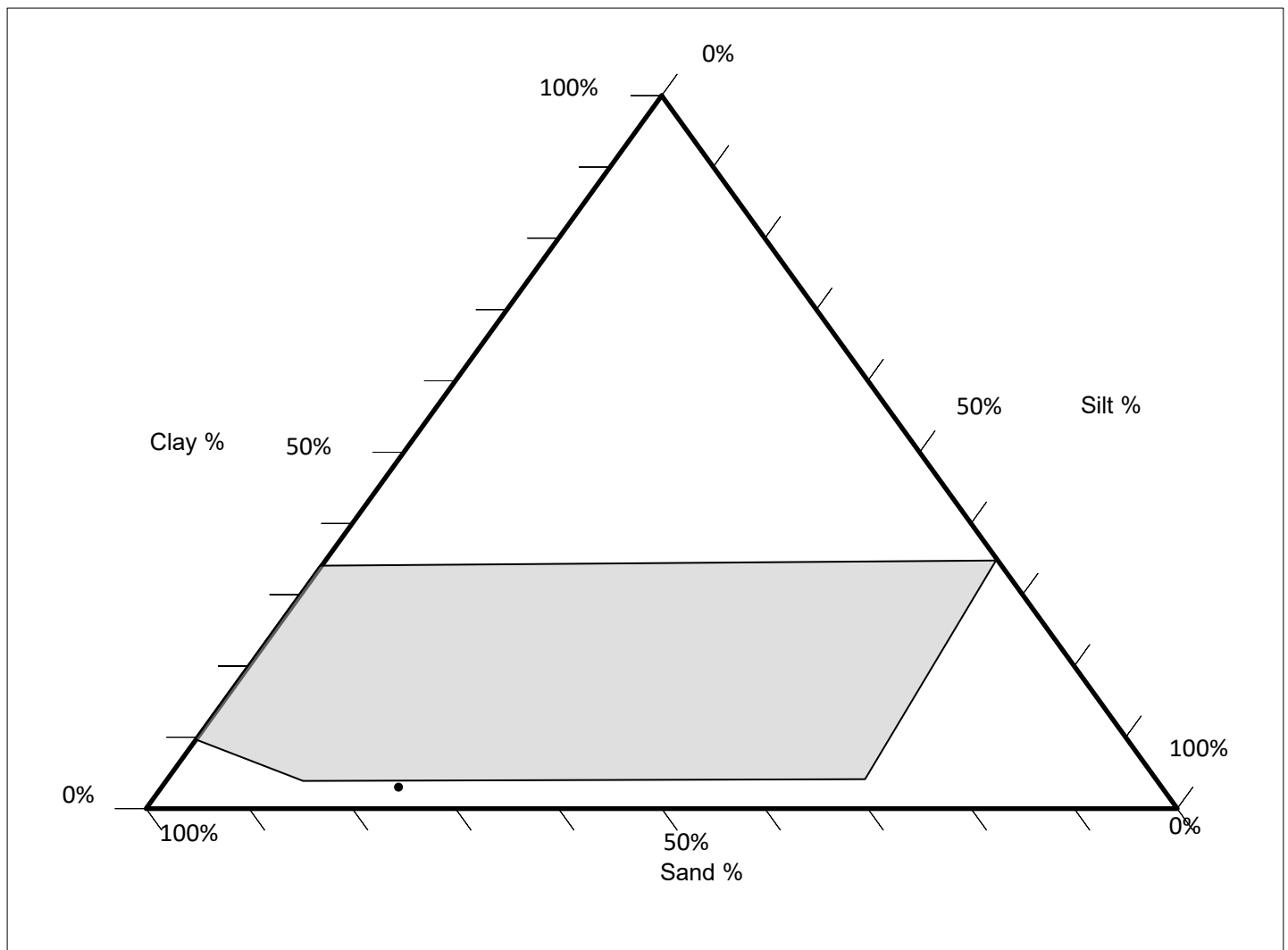


Figure 1

The textural class is required to be in the shaded area.

Results are shown by the grey point in the chart

Plotting parameters			Help messages
Printer correction:	1.1		
Tick interval (0 - 0.5):	0.1		
Tick length (0 - 0.2):	0.03		
Plot lines? (Y or N):	n		

Subsoil

Threshold Values

Parameter	Multipurpose subsoil	Specific purpose subsoil	
		Acidic	Calcareous
Soil texture <2mm fraction % m/m			
Clay content %	5 to 30		
Silt content %	0 to 65		
Sand content %	20 to 90		
Maximum coarse fraction % m/m			
>2mm	40		
>20mm	20		
>75mm	0		
Mass loss on Ignition %	Maximum 2%		
Soil pH	5.5 to 8.5	3.5 to 5.5	7.5 to 8.5
Carbonate % m/m	-	-	>1
Exchangeable sodium percentage (ESP) %	<15		
Electrical conductivity $\mu\text{S.cm}^{-1}$	Value to be measured and recorded		
Multi purpose and specific purpose topsoils			
Potentially phytotoxic elements (mg/kg dry basis)	Soil pH <6.0	Soil pH 6.0 to 7.0	Soil pH >7.0
Zn (Nitric acid extractable)	<200	<200	<300
Cu (Nitric acid extractable)	<100	<135	<200
Ni (Nitric acid extractable)	<60	<75	<110
Other contaminants % m/m (air-dried soil)			
>2mm	<0.5		
of which plastics	<0.25		

Summary of Asbestos Analysis

Soil Samples

Our Ref 26-12737

Client Ref ~ LKC251493

Contract Title ~ Millwood sen School Radcliffe

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2693309	TS101	SOIL	NAD	none	Michael Kay
2693310	TS102	SOIL	NAD	none	Michael Kay
2693311	TS103	SOIL	NAD	none	Michael Kay
2693312	SS101	SOIL	NAD	none	Michael Kay
2693313	SS102	SOIL	NAD	none	Michael Kay
2693314	SS103	SOIL	NAD	none	Michael Kay

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

Information in Support of the Analytical Results

Our Ref 26-12737
 Client Ref ~ LKC251493
 Contract ~ Millwood sen School Radcliffe

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2693309	TS101 SOIL	27/05/26	GJ 250ml, GJ 60ml, PT 1L		
2693310	TS102 SOIL	27/05/26	GJ 250ml, GJ 60ml, PT 1L		
2693311	TS103 SOIL	27/05/26	GJ 250ml, GJ 60ml, PT 1L		
2693312	SS101 SOIL	27/05/26	GJ 250ml, GJ 60ml, PT 1L		
2693313	SS102 SOIL	27/05/26	GJ 250ml, GJ 60ml, PT 1L		
2693314	SS103 SOIL	27/05/26	GJ 250ml, GJ 60ml, PT 1L		

Key: G-Glass P-Plastic J-Jar T-Tub

Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 250µm sieve

Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.

The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Information in Support of the Analytical Results

List of HWOL Acronyms and Operators

Acronym	Description
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
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

Det

Aliphatic C5-C6

Acronym

HS_1D_AL

Certificate of Analysis

Certificate Number 26-19604

Issued: 25-Aug-26

Client LK Consult Limited
Unit 29
Eton Business Park
Eton Hill Road
Radcliffe
Manchester
M26 2ZS

Our Reference 26-19604

Client Reference ~ LKC251493

Order No ~ PO-C003393

Contract Title ~ Millwood SEN School, Radcliffe

Description 16 Soil samples.

Date Received 07-Aug-26

Date Started 07-Aug-26

Date Completed 25-Aug-26

Test Procedures Identified by prefix DETSn (details on request).

Notes 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.

Approved By



Louise Cook
Contracts Manager



2139

Summary of Chemical Analysis

Soil Samples

Our Ref 26-19604

Client Ref ~ LKC251493

Contract Title ~ Millwood SEN School, Radcliffe

Lab No	2731907	2731908	2731909	2731910	2731911	2731912
Sample ID ~	TS204	TS205	TS206	TS207	SS104	SS105
Depth ~						
Other ID ~						
Sample Type ~	ES	ES	ES	ES	ES	ES
Sampling Date ~	06/08/2026	06/08/2026	06/08/2026	06/08/2026	06/08/2026	06/08/2026
Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Preparation									
Moisture Content	DETSC 1004	0.1	%	13	10	13	15	9.0	7.7
Metals									
Arsenic	DETSC 2301#	0.2	mg/kg	3.6	3.4	3.3	2.3	4.0	3.3
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	1.7	2.0	2.2	1.9	0.3	< 0.2
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	0.8	0.1	0.1	0.1	< 0.1
Chromium	DETSC 2301#	0.15	mg/kg	7.0	7.6	7.0	4.9	10	7.3
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	15	15	14	12	17	11
Lead	DETSC 2301#	0.3	mg/kg	16	19	12	10	6.7	2.4
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	DETSC 2301#	1	mg/kg	8.1	7.5	7.9	5.8	11	8.2
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	DETSC 2301#	0.8	mg/kg	11	12	11	9.0	14	10
Zinc	DETSC 2301#	1	mg/kg	48	110	37	28	29	17
Inorganics									
pH	DETSC 2008#		pH	8.5	8.3	9.0	8.3	8.4	8.3
Cyanide, Total	DETSC 2130#	0.1	mg/kg	< 0.1	0.9	0.9	1.0	1.0	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	0.8	0.8	0.9	0.9	< 0.1
Organic matter	DETSC 2002#	0.1	%	5.9	8.8	6.2	11	2.7	3.1
Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l	53	77	53	64	160	71
Petroleum Hydrocarbons									
Aliphatic C5-C6: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12: EH_CU_1D_AL	DETSC 3072#	1.5	mg/kg	22	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16: EH_CU_1D_AL	DETSC 3072#	1.2	mg/kg	4.9	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21: EH_CU_1D_AL	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35: EH_CU_1D_AL	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C35-C40: EH_CU_1D_AL	DETSC 3072*	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C10-C44: EH_CU_1D_AL	DETSC 3072*	10	mg/kg	26	< 10	< 10	< 10	< 10	< 10
Aliphatic C5-C40: EH_CU+HS_1D_AL	DETSC 3072*	10	mg/kg	26	< 10	< 10	< 10	< 10	< 10
Aliphatic C5-C44: EH_CU+HS_1D_AL	DETSC 3072*	10	mg/kg	26	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C7: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12: EH_CU_1D_AR	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16: EH_CU_1D_AR	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21: EH_CU_1D_AR	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Aromatic C21-C35: EH_CU_1D_AR	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Aromatic C35-C40: EH_CU_1D_AR	DETSC 3072*	1.4	mg/kg	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4

Summary of Chemical Analysis

Soil Samples

Our Ref 26-19604

Client Ref ~ LKC251493

Contract Title ~ Millwood SEN School, Radcliffe

Lab No	2731907	2731908	2731909	2731910	2731911	2731912
Sample ID ~	TS204	TS205	TS206	TS207	SS104	SS105
Depth ~						
Other ID ~						
Sample Type ~	ES	ES	ES	ES	ES	ES
Sampling Date ~	06/08/2026	06/08/2026	06/08/2026	06/08/2026	06/08/2026	06/08/2026
Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Aromatic C10-C44: EH_CU_1D_AR	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C40: EH_CU+HS_1D_AR	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C44: EH_CU+HS_1D_AR	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
TPH Ali/Aro C5-C40: EH_CU+HS_1D_Total	DETSC 3072*	10	mg/kg	26	< 10	< 10	< 10	< 10	< 10
TPH Ali/Aro C5-C44: EH_CU+HS_1D_Total	DETSC 3072*	10	mg/kg	26	< 10	< 10	< 10	< 10	< 10
Ali/Aro C10-C44: EH_CU_1D_Total	DETSC 3072*	10	mg/kg	26	< 10	< 10	< 10	< 10	< 10
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
m+p Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
o Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3321	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PAHs									
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.04	0.11	0.04	0.03	< 0.03	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.09	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.04	< 0.03	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.03	< 0.03	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	0.35	< 0.10	< 0.10	< 0.10	< 0.10
Phenols									
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	0.8	0.9	1.0	0.9	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref 26-19604

Client Ref ~ LKC251493

Contract Title ~ Millwood SEN School, Radcliffe

Lab No	2731913	2731914	2731915	2731916	2731917	2731918
Sample ID ~	SS106	SS107	SS108	SS109	SS110	SS111
Depth ~						
Other ID ~						
Sample Type ~	ES	ES	ES	ES	ES	ES
Sampling Date ~	06/08/2026	06/08/2026	06/08/2026	06/08/2026	06/08/2026	06/08/2026
Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Preparation									
Moisture Content	DETSC 1004	0.1	%	7.5	7.1	8.2	8.0	9.8	8.1
Metals									
Arsenic	DETSC 2301#	0.2	mg/kg	3.2	3.2	3.7	4.0	3.7	3.6
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.4	0.2	0.3	0.5	0.6	0.5
Cadmium	DETSC 2301#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	0.1	0.1	< 0.1
Chromium	DETSC 2301#	0.15	mg/kg	8.1	8.7	9.3	9.1	9.6	9.8
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	17	12	14	14	14	15
Lead	DETSC 2301#	0.3	mg/kg	3.8	3.8	5.3	8.2	10	8.4
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	DETSC 2301#	1	mg/kg	8.7	9.9	10	11	11	11
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	DETSC 2301#	0.8	mg/kg	11	11	12	12	13	13
Zinc	DETSC 2301#	1	mg/kg	29	22	24	28	30	27
Inorganics									
pH	DETSC 2008#		pH	8.1	8.0	8.8	8.7	8.1	8.5
Cyanide, Total	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	0.2	0.2	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	0.2	0.2	0.1
Organic matter	DETSC 2002#	0.1	%	1.3	1.8	1.9	1.4	1.9	2.1
Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l	140	99	99	250	200	280
Petroleum Hydrocarbons									
Aliphatic C5-C6: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12: EH_CU_1D_AL	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16: EH_CU_1D_AL	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21: EH_CU_1D_AL	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35: EH_CU_1D_AL	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C35-C40: EH_CU_1D_AL	DETSC 3072*	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C10-C44: EH_CU_1D_AL	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
Aliphatic C5-C40: EH_CU+HS_1D_AL	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
Aliphatic C5-C44: EH_CU+HS_1D_AL	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C7: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12: EH_CU_1D_AR	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16: EH_CU_1D_AR	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21: EH_CU_1D_AR	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Aromatic C21-C35: EH_CU_1D_AR	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Aromatic C35-C40: EH_CU_1D_AR	DETSC 3072*	1.4	mg/kg	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4

Summary of Chemical Analysis

Soil Samples

Our Ref 26-19604

Client Ref ~ LKC251493

Contract Title ~ Millwood SEN School, Radcliffe

Lab No	2731913	2731914	2731915	2731916	2731917	2731918
Sample ID ~	SS106	SS107	SS108	SS109	SS110	SS111
Depth ~						
Other ID ~						
Sample Type ~	ES	ES	ES	ES	ES	ES
Sampling Date ~	06/08/2026	06/08/2026	06/08/2026	06/08/2026	06/08/2026	06/08/2026
Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Aromatic C10-C44: EH_CU_1D_AR	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C40: EH_CU+HS_1D_AR	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C44: EH_CU+HS_1D_AR	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
TPH Ali/Aro C5-C40: EH_CU+HS_1D_Total	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
TPH Ali/Aro C5-C44: EH_CU+HS_1D_Total	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
Ali/Aro C10-C44: EH_CU_1D_Total	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
m+p Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
o Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3321	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PAHs									
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.03	0.03	0.04
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.05	0.05	0.06
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.05	0.05	0.06
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	< 0.10	< 0.10	0.13	0.11	0.16
Phenols									
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref 26-19604

Client Ref ~ LKC251493

Contract Title ~ Millwood SEN School, Radcliffe

Lab No	2731919	2731920	2731921	2731922
Sample ID ~	SS112	SS113	SS114	SS115
Depth ~				
Other ID ~				
Sample Type ~	ES	ES	ES	ES
Sampling Date ~	06/08/2026	06/08/2026	06/08/2026	06/08/2026
Sampling Time ~	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Preparation							
Moisture Content	DETSC 1004	0.1	%	8.0	8.4	8.2	8.4
Metals							
Arsenic	DETSC 2301#	0.2	mg/kg	4.3	4.0	3.5	4.6
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.6	0.6	0.3	0.5
Cadmium	DETSC 2301#	0.1	mg/kg	0.1	0.1	< 0.1	0.2
Chromium	DETSC 2301#	0.15	mg/kg	11	12	8.9	9.5
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	15	16	13	18
Lead	DETSC 2301#	0.3	mg/kg	9.5	15	7.3	9.9
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	DETSC 2301#	1	mg/kg	12	12	9.8	11
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	DETSC 2301#	0.8	mg/kg	14	14	12	13
Zinc	DETSC 2301#	1	mg/kg	29	30	25	30
Inorganics							
pH	DETSC 2008#		pH	8.5	8.4	8.4	8.2
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.1	< 0.1	< 0.1	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	0.1	< 0.1	< 0.1	0.1
Organic matter	DETSC 2002#	0.1	%	1.8	1.2	3.6	2.7
Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l	260	330	240	270
Petroleum Hydrocarbons							
Aliphatic C5-C6: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12: EH_CU_1D_AL	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16: EH_CU_1D_AL	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21: EH_CU_1D_AL	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35: EH_CU_1D_AL	DETSC 3072#	3.4	mg/kg	< 3.4	30	< 3.4	< 3.4
Aliphatic C35-C40: EH_CU_1D_AL	DETSC 3072*	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C10-C44: EH_CU_1D_AL	DETSC 3072*	10	mg/kg	< 10	30	< 10	< 10
Aliphatic C5-C40: EH_CU+HS_1D_AL	DETSC 3072*	10	mg/kg	< 10	30	< 10	< 10
Aliphatic C5-C44: EH_CU+HS_1D_AL	DETSC 3072*	10	mg/kg	< 10	30	< 10	< 10
Aromatic C5-C7: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12: EH_CU_1D_AR	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16: EH_CU_1D_AR	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21: EH_CU_1D_AR	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6
Aromatic C21-C35: EH_CU_1D_AR	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4	< 1.4
Aromatic C35-C40: EH_CU_1D_AR	DETSC 3072*	1.4	mg/kg	< 1.4	< 1.4	< 1.4	< 1.4

Summary of Chemical Analysis

Soil Samples

Our Ref 26-19604

Client Ref ~ LKC251493

Contract Title ~ Millwood SEN School, Radcliffe

Lab No	2731919	2731920	2731921	2731922
Sample ID ~	SS112	SS113	SS114	SS115
Depth ~				
Other ID ~				
Sample Type ~	ES	ES	ES	ES
Sampling Date ~	06/08/2026	06/08/2026	06/08/2026	06/08/2026
Sampling Time ~	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Aromatic C10-C44: EH_CU_1D_AR	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
Aromatic C5-C40: EH_CU+HS_1D_AR	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
Aromatic C5-C44: EH_CU+HS_1D_AR	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
TPH Ali/Aro C5-C40: EH_CU+HS_1D_Total	DETSC 3072*	10	mg/kg	< 10	30	< 10	< 10
TPH Ali/Aro C5-C44: EH_CU+HS_1D_Total	DETSC 3072*	10	mg/kg	< 10	30	< 10	< 10
Ali/Aro C10-C44: EH_CU_1D_Total	DETSC 3072*	10	mg/kg	< 10	30	< 10	< 10
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
m+p Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
o Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3321	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.06	0.12	0.03	0.04
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.09	0.19	0.05	0.06
Pyrene	DETSC 3303#	0.03	mg/kg	0.09	0.19	0.05	0.06
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.04	0.09	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	0.05	0.08	0.03	0.04
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.05	0.12	< 0.03	0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.09	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.38	1.0	0.13	0.24
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Asbestos Analysis

Soil Samples

Our Ref 26-19604

Client Ref ~ LKC251493

Contract Title ~ Millwood SEN School, Radcliffe

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2731907	TS204	SOIL	NAD	none	Michael Kay
2731908	TS205	SOIL	NAD	none	Michael Kay
2731909	TS206	SOIL	NAD	none	Michael Kay
2731910	TS207	SOIL	NAD	none	Michael Kay
2731911	SS104	SOIL	NAD	none	Michael Kay
2731912	SS105	SOIL	NAD	none	Michael Kay
2731913	SS106	SOIL	NAD	none	Michael Kay
2731914	SS107	SOIL	NAD	none	Michael Kay
2731915	SS108	SOIL	NAD	none	Michael Kay
2731916	SS109	SOIL	NAD	none	Michael Kay
2731917	SS110	SOIL	NAD	none	Michael Kay
2731918	SS111	SOIL	NAD	none	Michael Kay
2731919	SS112	SOIL	NAD	none	Michael Kay
2731920	SS113	SOIL	NAD	none	Michael Kay
2731921	SS114	SOIL	NAD	none	Michael Kay
2731922	SS115	SOIL	NAD	none	Michael Kay

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

Information in Support of the Analytical Results

Our Ref 26-19604
 Client Ref ~ LKC251493
 Contract ~ Millwood SEN School, Radcliffe

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2731907	TS204 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731908	TS205 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731909	TS206 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731910	TS207 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731911	SS104 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731912	SS105 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731913	SS106 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731914	SS107 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731915	SS108 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731916	SS109 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731917	SS110 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731918	SS111 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731919	SS112 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731920	SS113 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731921	SS114 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		
2731922	SS115 SOIL	06/08/26	GJ 250ml, GJ 60ml, PT 1L		

Key: G-Glass P-Plastic J-Jar T-Tub

Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 250µm sieve
 Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.
 The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
 Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Information in Support of the Analytical Results

List of HWOL Acronyms and Operators

Acronym	Description
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
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

Det	Acronym
Aliphatic C5-C6	HS_1D_AL
Aliphatic C6-C8	HS_1D_AL
Aliphatic C8-C10	HS_1D_AL
Aliphatic C10-C12	EH_CU_1D_AL
Aliphatic C12-C16	EH_CU_1D_AL
Aliphatic C16-C21	EH_CU_1D_AL
Aliphatic C21-C35	EH_CU_1D_AL
Aliphatic C35-C40	EH_CU_1D_AL
Aliphatic C10-C44	EH_CU_1D_AL
Aliphatic C5-C40	EH_CU+HS_1D_AL
Aliphatic C5-C44	EH_CU+HS_1D_AL
Aromatic C5-C7	HS_1D_AR
Aromatic C7-C8	HS_1D_AR
Aromatic C8-C10	HS_1D_AR
Aromatic C10-C12	EH_CU_1D_AR
Aromatic C12-C16	EH_CU_1D_AR
Aromatic C16-C21	EH_CU_1D_AR
Aromatic C21-C35	EH_CU_1D_AR
Aromatic C35-C40	EH_CU_1D_AR
Aromatic C10-C44	EH_CU_1D_AR
Aromatic C5-C40	EH_CU+HS_1D_AR
Aromatic C5-C44	EH_CU+HS_1D_AR
TPH Ali/Aro C5-C40	EH_CU+HS_1D_Total
TPH Ali/Aro C5-C44	EH_CU+HS_1D_Total
Ali/Aro C10-C44	EH_CU_1D_Total

Key:

~ Sample details are provided by the client and can affect the validity of the results

* -not accredited.

-MCERTS (accreditation only applies if report carries the MCERTS logo).

\$ -subcontracted.

n/s -not supplied.

I/S -insufficient sample.

U/S -unsuitable sample.

t/f -to follow.

nd -not detected.

End of Report Ver 26.05.23

Certificate of Analysis

Certificate Number 26-14957

Issued: 26-Jun-26

Client LK Consult Limited
Unit 29
Eton Business Park
Eton Hill Road
Radcliffe
Manchester
M26 2ZS

Our Reference 26-14957

Client Reference ~ LKC251493

Order No ~ PO-C003139

Contract Title ~ Millwood SEN School, Radcliffe

Description 3 Soil samples.

Date Received 19-Jun-26

Date Started 19-Jun-26

Date Completed 26-Jun-26

Test Procedures Identified by prefix DETSn (details on request).

Notes 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.

Approved By

A handwritten signature in black ink, appearing to read "R. Irfan".

Reyhan Irfan
Operations Manager



Summary of Chemical Analysis Soil Samples

Our Ref 26-14957

Client Ref ~ LKC251493

Contract Title ~ Millwood SEN School, Radcliffe

Lab No	2705436	2705437	2705438
Sample ID ~	TS201	TS202	TS203
Depth ~			
Other ID ~			
Sample Type ~	ES	ES	ES
Sampling Date ~	18/06/2026	18/06/2026	18/06/2026
Sampling Time ~	n/s	n/s	n/s

Test	Method	LOD	Units			
Preparation						
Moisture Content	DETSC 1004	0.1	%	15	15	13
Metals						
Arsenic	DETSC 2301#	0.2	mg/kg	2.6	2.7	2.7
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	1.4	1.6	1.6
Cadmium	DETSC 2301#	0.1	mg/kg	< 0.1	0.1	< 0.1
Chromium	DETSC 2301#	0.15	mg/kg	4.8	4.1	4.1
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	11	11	13
Lead	DETSC 2301#	0.3	mg/kg	12	15	14
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Nickel	DETSC 2301#	1	mg/kg	5.0	5.1	5.3
Selenium	DETSC 2301#	0.5	mg/kg	0.5	< 0.5	< 0.5
Vanadium	DETSC 2301#	0.8	mg/kg	9.3	11	9.1
Zinc	DETSC 2301#	1	mg/kg	35	39	38
Inorganics						
pH	DETSC 2008#		pH	8.3	8.4	8.4
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.6	0.5	0.7
Cyanide, Free	DETSC 2130#	0.1	mg/kg	0.5	0.4	0.6
Organic matter	DETSC 2002#	0.1	%	5.6	4.8	5.7
Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l	54	52	49
Petroleum Hydrocarbons						
Aliphatic C5-C6: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12: EH_CU_1D_AL	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16: EH_CU_1D_AL	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21: EH_CU_1D_AL	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35: EH_CU_1D_AL	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4
Aliphatic C35-C40: EH_CU_1D_AL	DETSC 3072*	3.4	mg/kg	< 3.4	< 3.4	< 3.4
Aliphatic C10-C44: EH_CU_1D_AL	DETSC 3072*	10	mg/kg	< 10	< 10	< 10
Aliphatic C5-C40: EH_CU+HS_1D_AL	DETSC 3072*	10	mg/kg	< 10	< 10	< 10
Aliphatic C5-C44: EH_CU+HS_1D_AL	DETSC 3072*	10	mg/kg	< 10	< 10	< 10
Aromatic C5-C7: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C7-C8: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C8-C10: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C10-C12: EH_CU_1D_AR	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9
Aromatic C12-C16: EH_CU_1D_AR	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aromatic C16-C21: EH_CU_1D_AR	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6
Aromatic C21-C35: EH_CU_1D_AR	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4
Aromatic C35-C40: EH_CU_1D_AR	DETSC 3072*	1.4	mg/kg	< 1.4	< 1.4	< 1.4
Aromatic C10-C44: EH_CU_1D_AR	DETSC 3072*	10	mg/kg	< 10	< 10	< 10

Summary of Chemical Analysis Soil Samples

Our Ref 26-14957

Client Ref ~ LKC251493

Contract Title ~ Millwood SEN School, Radcliffe

Lab No	2705436	2705437	2705438
Sample ID ~	TS201	TS202	TS203
Depth ~			
Other ID ~			
Sample Type ~	ES	ES	ES
Sampling Date ~	18/06/2026	18/06/2026	18/06/2026
Sampling Time ~	n/s	n/s	n/s

Test	Method	LOD	Units			
Aromatic C5-C40: EH_CU+HS_1D_AR	DETSC 3072*	10	mg/kg	< 10	< 10	< 10
Aromatic C5-C44: EH_CU+HS_1D_AR	DETSC 3072*	10	mg/kg	< 10	< 10	< 10
TPH Ali/Aro C5-C40: EH_CU+HS_1D_Total	DETSC 3072*	10	mg/kg	< 10	< 10	< 10
TPH Ali/Aro C5-C44: EH_CU+HS_1D_Total	DETSC 3072*	10	mg/kg	< 10	< 10	< 10
Ali/Aro C10-C44: EH_CU_1D_Total	DETSC 3072*	10	mg/kg	< 10	< 10	< 10
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01
m+p Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01
o Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3321	0.01	mg/kg	< 0.01	< 0.01	< 0.01
PAHs						
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	< 0.10	< 0.10
Phenols						
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	0.4	0.7	0.6

Summary of Asbestos Analysis Soil Samples

Our Ref 26-14957

Client Ref ~ LKC251493

Contract Title ~ Millwood SEN School, Radcliffe

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2705436	TS201	SOIL	NAD	none	Michael Kay
2705437	TS202	SOIL	NAD	none	Michael Kay
2705438	TS203	SOIL	NAD	none	Michael Kay

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

Information in Support of the Analytical Results

Our Ref 26-14957
 Client Ref ~ LKC251493
 Contract ~ Millwood SEN School, Radcliffe

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date		Containers Received	Holding time exceeded for tests	Incorrect container for tests
		Sampled ~				
2705436	TS201 SOIL	18/06/26		GJ 250ml, GJ 60ml, PT 1L		
2705437	TS202 SOIL	18/06/26		GJ 250ml, GJ 60ml, PT 1L		
2705438	TS203 SOIL	18/06/26		GJ 250ml, GJ 60ml, PT 1L		

Key: G-Glass P-Plastic J-Jar T-Tub

Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 250µm sieve
 Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.
 The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
 Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Information in Support of the Analytical Results

List of HWOL Acronyms and Operators

Acronym	Description
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
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

Det

Aliphatic C5-C6

Acronym

HS_1D_AL

Appendix C – Generic Assessment Criteria

Generic Assessment Criteria Values

Contaminant		SOM	Res +	Res -	Allot.	Comm.	POS _{resi}	POS _{park}	Source
Metals	Inorganic Arsenic	N/A	37	40	49	640	79	168	DEFRA C4SL
	Beryllium	N/A	1.7	1.7	35	12	2.2	63	LQM S4UL
	Boron	N/A	290	11,000	45	240,000	21,000	46,000	LQM S4UL
	Cadmium	N/A	26	149	4.9	410	220	880	DEFRA C4SL
	Chromium (III)	N/A	910	910	18,000	8,600	1,500	33,000	LQM S4UL
	Chromium (VI)	N/A	21.0	21.0	170.0	49	23.0	250	DEFRA C4SL
	Copper	N/A	2,400	7,100	520	68,000	12,000	44,000	LQM S4UL
	Lead	N/A	200	310	80	2,330	630	1,300	DEFRA C4SL
	Elemental Mercury	N/A	1.2	1.2	21	58 (25.8) ^{vap}	16	30 (25.8) ^{vap}	LQM S4UL
	Inorganic Mercury	N/A	40	56	19	1,100	120	240	LQM S4UL
	Methylmercury	N/A	11	15	6.0	320	40	68	LQM S4UL
	Nickel	N/A	130	180	53	980	230	800	LQM S4UL
	Selenium	N/A	250	430	88	12,000	1,100	1,800	LQM S4UL
Polycyclic Aromatic Hydrocarbons (PAHs)	Vanadium	N/A	410	1,200	91	9,000	2,000	5,000	LQM S4UL
	Zinc	N/A	3,700	40,000	620	730,000	81,000	170,000	LQM S4UL
	Acenaphthene	1%	210	3,000 (57.1) ^{sol}	34	84,000 (57.0) ^{sol}	15,000	29,000	LQM S4UL
		2.5%	510	4,700 (141) ^{sol}	85	97,000 (141) ^{sol}	15,000	30,000	LQM S4UL
		6%	1,100	6,000 (336) ^{sol}	200	100,000	15,000	30,000	LQM S4UL
	Acenaphthylene	1%	170	2,900 (86.1) ^{sol}	28	83,000 (86.1) ^{sol}	15,000	29,000	LQM S4UL
		2.5%	420	4,600 (212) ^{sol}	69	97,000 (212) ^{sol}	15,000	30,000	LQM S4UL
		6%	920	6,000 (506) ^{sol}	160	100,000	15,000	30,000	LQM S4UL
	Anthracene	1%	2,400	31,000 (1.17) ^{vap}	380	520,000	74,000	150,000	LQM S4UL
		2.5%	5,400	35,000	950	540,000	74,000	150,000	LQM S4UL
		6%	11,000	37,000	2,200	540,000	74,000	150,000	LQM S4UL
	Benz(a)anthracene	1%	7.2	11	2.9	170	29	49	LQM S4UL
		2.5%	11	14	6.5	170	29	56	LQM S4UL
		6%	13	15	13	180	29	62	LQM S4UL
	Benzo(a)pyrene (only)	1%	5.0	5.3	5.70	77	10.0	21	DEFRA C4SL
		2.5%	5.0	5.3	5.70	77	10.0	21	DEFRA C4SL
		6%	5.0	5.3	5.70	77	10.0	21	DEFRA C4SL
	Benzo(a)pyrene (surrogate marker Coal Tar)	1%	0.8	1.2	0.32	15	2.2	4	LQM S4UL
		2.5%	1.0	1.2	0.67	15	2.2	5	LQM S4UL
		6%	1.1	1.2	1.20	15	2.2	5	LQM S4UL
	Benzo(b)fluoranthene	1%	2.6	3.9	0.99	44	7.1	13	LQM S4UL
		2.5%	3.3	4.0	2.1	44	7.2	15	LQM S4UL
		6%	3.7	4.0	3.9	45	7.2	16	LQM S4UL
	Benzo(ghi)perylene	1%	320	360	290	3,900	640	1,400	LQM S4UL
		2.5%	340	360	470	4,000	640	1,500	LQM S4UL
		6%	350	360	640	4,000	640	1,600	LQM S4UL
	Benzo(k)fluoranthene	1%	77	110	37	1,200	190	370	LQM S4UL
		2.5%	93	110	75	1,200	190	410	LQM S4UL
		6%	100	110	130	1,200	190	440	LQM S4UL
	Chrysene	1%	15	30	4.1	350	57	93	LQM S4UL
		2.5%	22	31	9.4	350	57	110	LQM S4UL
		6%	27	32	19	350	57	120	LQM S4UL
	Dibenzo(ah)anthracene	1%	0.24	0.31	0.14	3.5	0.57	1.1	LQM S4UL
		2.5%	0.28	0.32	0.27	3.6	0.58	1.3	LQM S4UL
		6%	0.3	0.32	0.43	3.6	0.58	1.4	LQM S4UL
	Fluoranthene	1%	280	1,500	52	23,000	3,100	6,300	LQM S4UL
		2.5%	560	1,600	130	23,000	3,100	6,300	LQM S4UL
		6%	890	1,600	290	23,000	3,100	6,400	LQM S4UL
	Fluorene	1%	170	2,800 (36.0) ^{sol}	27	63,000 (30.9) ^{sol}	9,900	20,000	LQM S4UL
		2.5%	400	3,800 (76.5) ^{sol}	67	68,000	9,900	20,000	LQM S4UL
		6%	860	4,500 (183) ^{sol}	160	71,000	9,900	20,000	LQM S4UL
	Indeno(123-cd)pyrene	1%	27	45	9.5	500	82	150	LQM S4UL
		2.5%	36	46	21	510	82	170	LQM S4UL
		6%	41	46	39	510	82	180	LQM S4UL
	Naphthalene	1%	15	15	65	1600 f	11000 f	800 f	C4SL
		2.5%	36	36	130	3700 f	15000 f	1200 f	C4SL
		6%	85	85	200	8400 f	17000 f	1900 f	C4SL
	Phenanthrene	1%	95	1,300 (36.0) ^{sol}	15	22,000	3,100	6,200	LQM S4UL
		2.5%	220	1,500	38	22,000	3,100	6,200	LQM S4UL
		6%	440	1,500	90	22,000	3,100	6,300	LQM S4UL
	Pyrene	1%	620	3,700	110	54,000	7,400	15,000	LQM S4UL
		2.5%	1,200	3,800	270	54,000	7,400	15,000	LQM S4UL
		6%	2,000	3,800	620	54,000	7,400	15,000	LQM S4UL
	Coal Tar (B(a)P as surrogate marker)	1%	0.79	1.2	0.32	15	2.2	4.4	LQM S4UL
		2.5%	0.98	1.2	0.67	15	2.2	4.7	LQM S4UL
		6%	1.1	1.2	1.2	15	2.2	4.8	LQM S4UL

Generic Assessment Criteria Values

Contaminant		SOM	Res +	Res -	Allot.	Comm.	POS _{resi}	POS _{park}	Source
BTEx Compounds	Benzene	1%	0.087	0.38	0.017	27	72	90	LQM S4UL
		2.5%	0.17	0.70	0.034	47	72	100	LQM S4UL
		6%	0.37	1.4	0.075	90	73	110	LQM S4UL
		6%	0.87	3.3	0.180	98	140	230	C4SL
	Toluene	1%	130	880 (869) ^{vap}	22	56,000 (869) ^{vap}	56,000	87,000 (869) ^{vap}	LQM S4UL
		2.5%	290	1,900	51	110,000 (1,920) ^{vap}	56,000	95,000 (1,920) ^{vap}	LQM S4UL
		6%	660	3,900	120	180,000 (4,360) ^{vap}	56,000	100,000 (4,360) ^{vap}	LQM S4UL
	Ethylbenzene	1%	47	83	16	5,700 (518) ^{vap}	24,000	17,000 (518) ^{vap}	LQM S4UL
		2.5%	110	190	39	13,000 (1,220) ^{vap}	24,000	22,000 (1,220) ^{vap}	LQM S4UL
		6%	260	440	91	27,000 (2,840) ^{vap}	25,000	27,000 (2,840) ^{vap}	LQM S4UL
	o-xylene	1%	60	88	28	6,600 (478) ^{sol}	41,000	17,000 (478) ^{sol}	LQM S4UL
		2.5%	140	210	67	15,000 (1,120) ^{sol}	42,000	24,000 (1,120) ^{sol}	LQM S4UL
		6%	330	480	160	33,000 (2,620) ^{sol}	43,000	33,000 (2,620) ^{sol}	LQM S4UL
	m-xylene	1%	59	82	31	6,200 (625) ^{vap}	41,000	17,000 (625) ^{vap}	LQM S4UL
		2.5%	140	190	74	14,000 (1,470) ^{vap}	42,000	24,000 (1,470) ^{vap}	LQM S4UL
		6%	320	450	170	31,000 (3,460) ^{vap}	43,000	32,000 (3,460) ^{vap}	LQM S4UL
	p-xylene	1%	56	79	29	5,900 (576) ^{sol}	41,000	17,000 (576) ^{sol}	LQM S4UL
		2.5%	130	180	69	14,000 (1,350) ^{sol}	42,000	23,000 (1,350) ^{sol}	LQM S4UL
		6%	310	430	160	30,000 (3,170) ^{sol}	43,000	31,000 (3,170) ^{sol}	LQM S4UL
Petroleum Hydrocarbons	Aliphatic								
	EC 5-6	1%	42	42	730	3,200 (304) ^{sol}	570,000(304) ^{sol}	95,000 (304) ^{sol}	LQM S4UL
	EC>6-8	1%	100	100	2,300	7,800 (144) ^{sol}	600,000	150,000 (144) ^{sol}	LQM S4UL
	EC>8-10	1%	27	27	320	2,000 (78) ^{sol}	13,000	14,000 (78) ^{vap}	LQM S4UL
	EC>10-12	1%	130 (48) ^{vap}	130 (48) ^{vap}	2,200	9,700 (48) ^{sol}	13,000	21,000 (48) ^{vap}	LQM S4UL
	EC>12-16	1%	1,100 (24) ^{sol}	1,100 (24) ^{sol}	11,000	59,000 (24) ^{sol}	13,000	25,000 (24) ^{sol}	LQM S4UL
	EC>16-35	1%	65,000 (8.48)	65,000 (8.48) ^{f, sol}	260,000 ^f	160,000 ^f	250,000 ^f	450,000 ^f	LQM S4UL
	EC>35-44	1%	65,000 (8.48)	65,000 (8.48) ^{f, sol}	260,000 ^f	160,000 ^f	250,000 ^f	450,000 ^f	LQM S4UL
	Aliphatic								
	EC 5-6	2.5%	78	78	1,700	5,900 (558) ^{sol}	590,000	130,000 (558) ^{sol}	LQM S4UL
	EC>6-8	2.5%	230	230	5,600	17,000 (322) ^{sol}	610,000	220,000 (322) ^{sol}	LQM S4UL
	EC>8-10	2.5%	65	65	770	4,800 (190) ^{vap}	13,000	18,000 (190) ^{vap}	LQM S4UL
	EC>10-12	2.5%	330 (118) ^{vap}	330 (118) ^{vap}	4,400	23,000 (118) ^{vap}	13,000	23,000 (118) ^{vap}	LQM S4UL
	EC>12-16	2.5%	2,400 (59) ^{sol}	2,400 (59) ^{sol}	13,000	82,000 (59) ^{sol}	13,000	25,000 (59) ^{sol}	LQM S4UL
	EC>16-35	2.5%	92,000 (21)	92,000 (21) ^{f, sol}	270,000 ^f	1,700,000 ^f	250,000 ^f	480,000 ^f	LQM S4UL
	EC>35-44	2.5%	92,000 (21)	92,000 (21) ^{f, sol}	270,000 ^f	1,700,000 ^f	250,000 ^f	480,000 ^f	LQM S4UL
	Aliphatic								
	EC 5-6	6%	160	160	3,900	12,000 (1,150) ^{sol}	600,000	180,000 (1,150) ^{sol}	LQM S4UL
	EC>6-8	6%	530	530	13,000	40,000 (736) ^{sol}	620,000	320,000 (736) ^{sol}	LQM S4UL
	EC>8-10	6%	150	150	1,700	11,000 (451) ^{vap}	13,000	21,000 (451) ^{vap}	LQM S4UL
	EC>10-12	6%	760 (283) ^{vap}	760 (283) ^{vap}	7,300	47,000 (283) ^{vap}	13,000	24,000 (283) ^{vap}	LQM S4UL
	EC>12-16	6%	4,300 (142) ^{sol}	4,400 (142) ^{sol}	13,000	90,000 (142) ^{sol}	13,000	26,000 (142) ^{sol}	LQM S4UL
	EC>16-35	6%	110,000 ^f	110,000 ^f	270,000 ^f	1,800,000 ^f	250,000 ^f	490,000 ^f	LQM S4UL
	EC>35-44	6%	110,000 ^f	110,000 ^f	270,000 ^f	1,800,000 ^f	250,000 ^f	490,000 ^f	LQM S4UL
	Aromatic								
	EC5-7(benzene as non-	1%	70	370	13	26,000 (1,220) ^{sol}	56,000	76,000 (1,220) ^{sol}	LQM S4UL
	EC>7-8(toluene)	1%	130	860	22	56,000 (869) ^{vap}	56,000	87,000 (869) ^{vap}	LQM S4UL
	EC>8-10	1%	34	47	8.6	3,500 (613) ^{vap}	5,000	7,200 (613) ^{vap}	LQM S4UL
	EC>10-12	1%	74	250	13	16,000 (364) ^{sol}	5,000	9,200 (364) ^{sol}	LQM S4UL
	EC>12-16	1%	140	1,800	23	36,000 (169) ^{sol}	5,100	10,000	LQM S4UL
	EC>16-21	1%	260 ^f	1,900 ^f	46 ^f	28,000 ^f	3,800 ^f	7,600 ^f	LQM S4UL
	EC>21-35	1%	1,100 ^f	1,900 ^f	370 ^f	28,000 ^f	3,800 ^f	7,800 ^f	LQM S4UL
	EC>35-44	1%	1,100 ^f	1,900 ^f	370 ^f	28,000 ^f	3,800 ^f	7,800 ^f	LQM S4UL
	Aromatic								
	EC5-7(benzene as non-	2.5%	140	690	27	46,000 (2,260) ^{sol}	56,000	84,000 (2,260) ^{sol}	LQM S4UL
	EC>7-8(toluene)	2.5%	290	1,800	51	110,000 (1,920) ^{sol}	56,000	95,000 (1,920) ^{sol}	LQM S4UL
	EC>8-10	2.5%	83	110	21	8,100 (1,500) ^{vap}	5,000	8,500 (1,500) ^{vap}	LQM S4UL
	EC>10-12	2.5%	180	590	31	28,000 (899) ^{sol}	5,000	9,700 (899) ^{sol}	LQM S4UL
	EC>12-16	2.5%	330	2,300 (419) ^{sol}	57	37,000	5,100	10,000	LQM S4UL
	EC>16-21	2.5%	540 ^f	1,900 ^f	110 ^f	28,000 ^f	3,800 ^f	7,700 ^f	LQM S4UL
	EC>21-35	2.5%	1,500 ^f	1,900 ^f	820 ^f	28,000 ^f	3,800 ^f	7,800 ^f	LQM S4UL
	EC>35-44	2.5%	1,500 ^f	1,900 ^f	820 ^f	28,000 ^f	3,800 ^f	7,800 ^f	LQM S4UL
	Aromatic								
	EC5-7(benzene as non-	6%	300	1,400	57	86,000 (4,710) ^{sol}	56,000	92,000 (4,710) ^{sol}	LQM S4UL
	EC>7-8(toluene)	6%	660	3,900	120	180,000 (4,360) ^{vap}	56,000	100,000 (4,360) ^{vap}	LQM S4UL
	EC>8-10	6%	190	270	51	17,000 (3,580) ^{vap}	5,000	9,300 (3,580) ^{vap}	LQM S4UL
	EC>10-12	6%	380	1,200	4	34,000 (2,150) ^{sol}	5,000	10,000	LQM S4UL
	EC>12-16	6%	660	2,500	130	38,000	5,100	10,000	LQM S4UL
	EC>16-21	6%	930 ^f	1,900 ^f	260 ^f	28,000 ^f	3,800 ^f	7,800 ^f	LQM S4UL
	EC>21-35	6%	1,700 ^f	1,900 ^f	1,600 ^f	28,000 ^f	3,800 ^f	7,900 ^f	LQM S4UL
	EC>35-44	6%	1,700 ^f	1,900 ^f	1,600 ^f	28,000 ^f	3,800 ^f	7,900 ^f	LQM S4UL
	Aliphatic +Aromatic >EC44	1%	1,600 ^f	1,900 ^f	1,200 ^f	28,000 ^f	3,800 ^f	7,800 ^f	LQM S4UL
		2.5%	1,800 ^f	1,900 ^f	2,100 ^f	28,000 ^f	3,800 ^f	7,800 ^f	LQM S4UL
		6%	1,900 ^f	1,900 ^f	3,000 ^f	28,000 ^f	3,800 ^f	7,900 ^f	LQM S4UL

Generic Assessment Criteria Values

Contaminant		SOM	Res +	Res -	Allot.	Comm.	POS _{resi}	POS _{park}	Source
Chloalkanes and Alkenes & Explosives	1,2 Dichloroethane (DCA)	1%	0.11	0.16	0.05	12.0	300	300	DEFRA C4SL
		2.5%	0.18	0.24	0.10	17.0	310	330	DEFRA C4SL
		6%	0.31	0.41	0.19	29.0	310	330	DEFRA C4SL
	1,1,1 Trichloroethane (TCA)	1%	8.8	9.0	48	660	140,000	57,000 (1,425) ^{vap}	LQM S4UL
		2.5%	18	18	110	1,300	140,000	76,000 (2,915) ^{vap}	LQM S4UL
		6%	39	40	240	3,000	140,000	100,000 (6,392)	LQM S4UL
	1,1,2,2-Tetrachloroethanes (PCA)	1%	1.6	3.9	0.41	270	1,400	1,800	LQM S4UL
		2.5%	3.4	8.0	0.89	550	1,400	2,100	LQM S4UL
		6%	7.5	17	2.0	1,100	1,400	2,300	LQM S4UL
	1,1,1,2-Tetrachloroethanes (PCA)	1%	1.2	1.5	0.79	110	1,400	1,500	LQM S4UL
		2.5%	2.8	3.5	1.9	250	1,400	1,800	LQM S4UL
		6%	6.4	8.2	4.4	560	1,400	2,100	LQM S4UL
	Tetrachloroethene (PCE)	1%	0.31	0.32	2.00	24	3,200	1400	DEFRA C4SL
		2.5%	0.70	0.71	4.8	55	3,300	1900	DEFRA C4SL
		6%	1.60	1.60	11.0	130	3,400	2,500	DEFRA C4SL
	Tetrachloromethane (carbon tetrachloride)	1%	0.03	0.03	0.45	2.9	890	190	LQM S4UL
		2.5%	0.06	0.06	1.0	6.3	920	270	LQM S4UL
		6%	0.13	0.13	2.4	14	950	400	LQM S4UL
	Trichloroethene (TCE)	1%	0.009	0.010	0.032	0.7	76.0	41.0	DEFRA C4SL
		2.5%	0.020	0.020	0.072	1.5	78.0	51.0	DEFRA C4SL
		6%	0.043	0.045	0.160	3.4	79.0	69.0	DEFRA C4SL
	cis 1,2-dichloroethene	1%	0.46	0.50	0.890	38	3,800	2,000	DEFRA C4SL
		2.5%	0.78	0.84	1.70	64	3,800	2,400	DEFRA C4SL
		6%	1.50	1.60	3.60	120	3,900	3,100	DEFRA C4SL
	Trichloromethane (chloroform)	1%	0.91	1.2	0.42	99	2,500	2,600	LQM S4UL
		2.5%	1.7	2.1	0.83	170	2,500	2,800	LQM S4UL
		6%	3.4	4.2	1.7	350	2,500	3,100	LQM S4UL
	Trans-1,2 Dichloroethene	1%	0.9	0.9	3.7	69	13,000	5,600	DEFRA C4SL
		2.5%	1.6	1.7	7.5	120	13,000	7,000	DEFRA C4SL
		6%	3.3	3.4	16.0	260	13,000	9,100	DEFRA C4SL
	Chloroethene (vinyl chloride)	1%	0.006	0.015	0.0017	1.1E+00	7.8	18.0	DEFRA C4SL
		2.5%	0.010	0.019	0.0031	1.4E+00	7.8	19.0	DEFRA C4SL
		6%	0.017	0.029	0.0058	2.20	7.8	19.0	DEFRA C4SL
	2,4,6-Trinitrotoluene (TNT)	1%	1.6	65	0.24	1,000	130	260	LQM S4UL
		2.5%	3.7	66	0.58	1,000	130	270	LQM S4UL
		6%	8.1	66	1.4	1,000	130	270	LQM S4UL
	RDX	1%	120	13,000	17	210,000	26,000	49,000 (18.7) ^{sol}	LQM S4UL
		2.5%	250	13,000	38	210,000	26,000	51,000	LQM S4UL
		6%	540	13,000	85	210,000	27,000	53,000	LQM S4UL
	HMX	1%	5.7	6,700	0.86	110,000	13,000	23,000 (0.35) ^{vap}	LQM S4UL
		2.5%	13	6,700	1.9	110,000	13,000	23,000 (0.39) ^{vap}	LQM S4UL
		6%	26	6,700	3.9	110,000	13,000	24,000 (0.48) ^{vap}	LQM S4UL
Pesticides	Aldrin	1%	5.7	7.3	3.2	170	18	30	LQM S4UL
		2.5%	6.6	7.4	6.1	170	18	31	LQM S4UL
		6%	7.1	7.5	9.8	170	18	31	LQM S4UL
	Dieldrin	1%	0.97	7.0	0.17	170	18	30	LQM S4UL
		2.5%	2.0	7.3	0.41	170	18	30	LQM S4UL
		6%	3.5	7.4	0.96	170	18	31	LQM S4UL
	Atrazine	1%	3.3	610	0.5	9,300	1,200	2,300	LQM S4UL
		2.5%	7.8	620	1.2	9,400	1,200	2,400	LQM S4UL
		6%	17.4	620	2.7	9,400	1,200	2,400	LQM S4UL
	Dichlorvos	1%	3.2E-02	6.4	4.9E-03	140	16	26	LQM S4UL
		2.5%	6.6E-02	6.5	1.0E-02	140	16	26	LQM S4UL
		6%	0.14	6.6	2.2E-02	140	16	27	LQM S4UL
	Endosulfanns (2 isomers)	1%	7.4	160 (3.0E-03) ^{vap}	1.2	5,600 (3.0E-03) ^{vap}	1,200	2,300	LQM S4UL
		2.5%	18	280 (7.0E-03) ^{vap}	2.9	7,400 (7.0E-03) ^{vap}	1,200	2,400	LQM S4UL
		6%	41	410 (1.6E-02) ^{vap}	6.8	8,400 (1.6E-02) ^{vap}	1,200	2,500	LQM S4UL
	Hexachlorocyclohexane (3 isomers), inc Lindane	1%	8.5E-02	3.7	1.3E-02	65	8.1	15	LQM S4UL
		2.5%	0.2	3.8	3.2E-02	65	8.1	15	LQM S4UL
		6%	0.46	3.8	7.7E-02	65	8.1	16	LQM S4UL
Chlorobenzenes	Chlorobenzene	1%	0.46	0.46	5.9	56	11,000	1,300 (675) ^{sol}	LQM S4UL
		2.5%	1.0	1.0	14	130	13,000	2,000 (1,520) ^{sol}	LQM S4UL
		6%	2.4	2.4	32	290	14,000	2,900	LQM S4UL
	Dichlorobenzenes (3 isomers)	1%	23	24	94	2,000 (571) ^{sol}	90,000	24,000 (571) ^{sol}	LQM S4UL
		2.5%	55	57	230	4,800 (1,370) ^{sol}	95,000	36,000 (1,370) ^{sol}	LQM S4UL
		6%	130	130	540	11,000 (3,240) ^{sol}	98,000	51,000 (3,270) ^{sol}	LQM S4UL
	Trichlorobenzenes (3 isomers)	1%	2.6	2.6	55	220	15,000	1,700 (318) ^{vap}	LQM S4UL
		2.5%	6.4	6.4	140	530	17,000	2,600 (786) ^{vap}	LQM S4UL
		6%	15	15	320	1,300	19,000	4,000 (1,880) ^{vap}	LQM S4UL
	Tetrachlorobenzenes (3 isomers)	1%	0.66	0.75	0.38	49 (39.4) ^{vap}	78	110 (39) ^{vap}	LQM S4UL
		2.5%	1.6	1.9	0.90	120 (98.1) ^{vap}	79	120	LQM S4UL
		6%	3.7	4.3	2.2	240 (235) ^{vap}	79	130	LQM S4UL
	Pentachlorobenzene	1%	5.8	19	1.2	640 (43.0) ^{sol}	100	190	LQM S4UL
		2.5%	12	30	3.1	770 (107) ^{sol}	100	190	LQM S4UL
		6%	22	38	7.0	830	100	190	LQM S4UL
	Hexachlorobenzene	1%	1.8 (0.20) ^{vap}	4.1 (0.20) ^{vap}	0.47	110 (0.20) ^{vap}	16	30	LQM S4UL
		2.5%	3.3 (0.50) ^{vap}	5.7 (0.50) ^{vap}	1.1	120	16	30	LQM S4UL
		6%	4.9	6.7 (1.2) ^{vap}	2.5	120	16	30	LQM S4UL

Generic Assessment Criteria Values

Contaminant		SOM	Res +	Res -	Allot.	Comm.	POS _{resi}	POS _{park}	Source
Chlorophenol	Chlorophenols (4 congeners)	1%	0.87 ^g	94	0.13 ^g	3,500	620	1,100	LQM S4UL
		2.5%	2.0	150	0.30	4,000	620	1,100	LQM S4UL
		6%	4.5	210	0.70	4,300	620	1,100	LQM S4UL
	Pentachlorophenol	1%	0.22	27 (16.4) ^{vap}	3.0E-02	400	60	110	LQM S4UL
		2.5%	0.52	29	8.0E-02	400	60	120	LQM S4UL
		6%	1.2	31	0.19	400	60	120	LQM S4UL
Others	Carbon Disulphide	1%	0.14	0.14	4.8	11	11,000	1,300	LQM S4UL
		2.5%	0.29	0.29	10	22	11,000	1,900	LQM S4UL
		6%	0.62	0.62	23	47	11,000	2,700	LQM S4UL
	Hexachlorobutadiene	1%	0.29	0.32	0.25	31	25	48	LQM S4UL
		2.5%	0.7	0.78	0.61	66	25	50	LQM S4UL
		6%	1.6	1.8	1.4	120	25	51	LQM S4UL
	Phenol	1%	120	440 (460)	23	440 ^{dir} (26,000)	440 ^{dir} (10,000)	440 ^{dir} (7,600)	LQM S4UL
		2.5%	200	690	42	690 ^{dir} (30,000)	690 ^{dir} (10,000)	690 ^{dir} (8,300)	LQM S4UL
		6%	380	1,200	83	1,300 ^{dir} (34,000)	1,300 ^{dir} (10,000)	1,300 ^{dir} (9,300)	LQM S4UL

sol/vap = solubility/vapour limit (potentially use if free product identified, although highly conservative)
f=naphthalene is based on comparison of inhalation exposure with TDI(inhal) for localised effect
f = oral, dermal and inhalation exposures compared to oral HCV
dir = S4ULs based on threshold protective of direct skin contact with phenol)brackets long term exposure for illustration purposes)
g = derived based on 2,3,4-tetrachlorophenol

Appendix D – Membrane Proof of Provenance



Appendix E – Validation Pit Photographs

Pit 1



View of pit 1.



View of soil in capping layer excavation in pit 1. Demarcation membrane at base.



Depth measurement of pit 1 (*circa 550mm* soil cover over membrane).

Pit 2



View of pit 2.



View of soil in capping layer excavation in pit 2. Demarcation membrane at base.



Depth measurement of pit 2 (*circa 570mm* soil cover over membrane).

Pit 3



View of pit 3.



View of soil in capping layer excavation in pit 3. Demarcation membrane at base.



Depth measurement of pit 3 (*circa 680mm* soil cover over membrane).

Pit 4

	View of pit 4.
	View of soil in capping layer excavation in pit 4. Demarcation membrane at base.
	Depth measurement of pit 4 (<i>circa</i> 650mm soil cover over membrane).

Pit 5



View of pit 5.



View of soil in capping layer excavation in pit 5. Demarcation membrane at base.



Depth measurement of pit 5 (*circa 650mm* soil cover over membrane).

Pit 6



View of pit 6.



View of soil in capping layer excavation in pit 6. Demarcation membrane at base.



Depth measurement of pit 6 (*circa 600mm* soil cover over membrane).

Pit 7



View of pit 7.



View of soil in capping layer excavation in pit 7. Demarcation membrane at base.



Depth measurement of pit 7 (*circa 600mm* soil cover over membrane).

Pit 8



View of pit 8.



View of soil in capping layer excavation in pit 8. Demarcation membrane at base.



Depth measurement of pit 8 (*circa 650mm* soil cover over membrane).

Pit 9

	View of pit 9.
	View of soil in capping layer excavation in pit 9. Demarcation membrane at base.
	Depth measurement of pit 9 (<i>circa</i> 650mm soil cover over membrane).

Pit 10



View of pit 10.



View of soil in capping layer excavation in pit 10. Demarcation membrane at base.



Depth measurement of pit 10 (*circa 650mm* soil cover over membrane).

Pit 11

	View of pit 11.
	View of soil in capping layer excavation in pit 11. Demarcation membrane at base.
	Depth measurement of pit 11 (<i>circa 600mm</i> soil cover over membrane).

Pit 12

	View of pit 12.
	View of soil in capping layer excavation in pit 12. Demarcation membrane at base.
	Depth measurement of pit 12 (<i>circa 600mm</i> soil cover over membrane).

Appendix F – New Supply Pipe Photographs & Certificate



Appendix G - References

¹ DCL (2019). "National Planning Policy Framework." Department of Communities and Local Government.

² Environment Agency, 2000, "Technical Aspects of Site Investigation", Technical Report P5-065/TR, Volumes I and II, Text Supplements.

³ Environment Agency, 2000, "Technical Aspects of Site Investigation", Technical Report P5-065/TR, Volumes I and II, Text Supplements.

⁴ DEFRA, December 2014, "Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination", SP1010, Policy Companion Document.

⁵ CL:AIRE, September 2014, "Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination", SP1010, Final Project Report (Revision 2).

⁶ Environment Agency, January 2009, "Updated technical background to the CLEA model", Science Report SC050021/SR3.

⁷ Environment Agency, January 2009, "Human health toxicological assessment of contaminants in soil", Science Report - Final SC050021/SR2.

⁸ Environment Agency, January 2009, "A review of body weight and height data used within the Contaminated Land Exposure Assessment model (CLEA)", Project SC050021/Final Technical Review 1.

⁹ Environment Agency, November 2008, "Compilation of data for priority organic pollutants for derivation of Soil Guideline Values", Science Report SC050021/SR7.

¹¹ Environment Agency, April 2002, "Contaminants in soils: collation of toxicological data and intake values for humans. Benzo(a)pyrene", TOX2.

¹² U.S. Environmental Protection Agency, September 1984, "Health Effects Assessment for Polycyclic Aromatic Hydrocarbons (PAHs)", EPA/540/1-86/013.

¹³ Environment Agency, September 2003, "Review of the Fate and Transport of Selected Contaminants in the Soil Environment", Draft Technical Report P5-079/TR1.

¹⁴ CL:AIRE, September 2014, "Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination", SP1010, Final Project Report (Revision 2).

¹⁵ Public Health England, September 2017, "Contaminated land information sheet: risk assessment approaches for polycyclic aromatic hydrocarbons (PAHs)".

¹⁶ Culp S.J., Gaylor D.W., Sheldon W.G., Goldstein L.S., Beland F.A. , January 1998, "A comparison of the tumors induced by coal tar and benzo[a]pyrene in a 2-year bioassay", Carcinogenesis, Volume 19, P117-124.

Based across the UK with offices
in Manchester, Swindon and
Glasgow.

Manchester (Head Office)

Unit 29
Eton Business Park
Eton Hill Rd, Radcliffe
M26 2ZS

0161 763 7200
info@thelkgroup.com

Manchester (Ancoats Office)

84 Silk Street
Ancoats
Manchester
M4 6BJ

0161 763 7200
info@thelkgroup.com

Glasgow

Wright Business Centre
1 Lonmay Road
Glasgow
G33 4EL

0141 773 6269
info@thelkgroup.com

Swindon

39 Bowman House Business Centre
Bowman Court
Whitehill Lane
Royal Wootton Bassett
Swindon
SN4 7DB

01793 987390
info@thelkgroup.com



LK GROUP