



Soil Verification Report

Project Name

Johnson Drive

Project Address

Land at Johnson Drive
Finchampstead
RG40 3NW

Client

Palatine Homes Limited

Project Number

23-176.07

Version

4

Prepared on

18 August 2026

Report Quality Management

Project Name	Johnson Drive		
Project Address	Land at Johnson Drive, Finchampstead, RG40 3NW		
Project Title	Soil Verification Report		
Client	Palatine Homes Limited		
Project Number	23-176.07		
Version	4		Date
Prepared by	Oliver Cock BSc (Hons) MSc	Geo-Environmental Consultant	19/08/2026
Checked by	James Burkitt BEng (Hons) CEnv MRICS	Managing Director	19/08/2026

Aviron Associates Limited (Aviron) has prepared this report in accordance with our fee proposal to the above listed Client or their agents and subsequent instructions pertinent to this which were received from the above listed Client.

This report is confidential and non-assignable by the Client. Aviron shall not be responsible for any use of the report or its contents for any other purpose than for which, and to whom, it was prepared and provided.

Should the Client pass copies of this report to other parties for further comment and advice the whole of the report should be provided and used in the context to which it was prepared.

No professional liability or warranty shall be extended to other parties by Aviron in this connection without the explicit written agreement thereto by Aviron.

Should this report be submitted to stakeholders or statutory bodies by any party other than the above listed Client a copyright law may be infringed and the party submitting the report may not be entitled to do so unless accompanied by a covering letter from Aviron or the Client.

For the avoidance of doubt and litigation Aviron should be contacted to establish lawful use of this report.

© Aviron Associates Limited 2026

Aviron Associates Limited
Badgemore House
Badgemore Park
Gravel Hill
Henley on Thames
RG9 4NR

Telephone numbers 01491 413 722
07787 771 686

james@aviron.co.uk
www.aviron.co.uk

Contents

1.0	PROJECT AND SITE INFORMATION	1
2.0	RE-USE OF STOCKPILED SOILS	4
3.0	COVER SYSTEM VERIFICATION INSPECTIONS.....	5
4.0	RISK ASSESSMENT	9
6.0	CONCLUSIONS AND RECOMMENDATIONS	11
6.0	PROJECT INSTRUCTION AND LIMITATIONS.....	12
7.0	REFERENCES AND OTHER SOURCES OF INFORMATION	14

Figures

1	Site Location Plan
2	Pre-Clearance Site Layout Plan
3	Proposed Development Plan
4	Soil Contamination Plan
5	Cover System Area and Verification Plan
6	Stockpile Plan and Photographs

Appendices

I	Stockpile Sampling Report - 2025
II	Verification Inspection Photographs - 2026
III	Laboratory Certificates of Analysis and Assessment Criteria - 2026

1.0 PROJECT AND SITE INFORMATION

1.1 APPOINTMENT

Aviron Associates Limited (Aviron) was retained by Palatine Homes Limited (the “Client”) to prepare a Verification Report for the following premises:

Land at Johnson Drive, Finchampstead, RG40 3NW (hereafter referred to as the “site”).

This report proceeds the Discovery Strategy, Remediation Strategy and Verification Plan (DS, RS and VP), dated December 2024 and referenced 23-176.03 and also version 3 of this Verification report for Plots 3, 4, 7 and 8.

The purpose of this report is to provide a review of remediation excavation and soil verification works at the site. This report shall demonstrate that any previous (or undiscovered) soil contamination has been removed from the subject gardens and that the specified Plots can be considered suitable for residential occupancy without presenting an occupancy exposure risk.

1.2 THE SITE

Table 1.2 presents the site details.

Table 1.2: Site Details	
Site Location	The site is located at the northern end of Johnson Drive, off Nine Mile Ride (B3430), approximately 2km to the north-east of Finchampstead. Figure 1 is presented as a Site Location Plan.
National Grid Ref.	Centred at 480592 165179.
Recent Land Use	The site was previous split into two distinct areas, one in the north of the site accessed using a tree-lined gravel track leading off Johnson Drive in the south-west of the site, and the other in the south of the site via the garden of 6 Johnson Drive to the south. Northern two-thirds of the site: an area comprising disused land and woodland, used for the storage of building materials, a stockpile of crushed concrete and soil understood to have resulted from the excavation of a swimming pool to the adjacent home. Two buildings/workshops are also located in the south-east of this area. Southern third of the site: a section of the rear garden of the adjacent number 6 Johnson Drive, including landscaped borders and trees. An equestrian building is also located in the north-east of this area. Figure 2 is presented as the Pre-Development Site Layout Plan.
Surrounding Land Use	The site is located in a semi-rural semi-residential area with homes to the north-west and west, London Road and a public house to the north, Greenacres, Edgewood, Buckhurst Lodge and St Annes Manor Hotel to the east, and open fields to the south and south-west.
Proposed Land Use	The proposed development comprises the construction of eight new detached homes and

Table 1.2: Site Details

	garages with private gardens, and an access road running along the northern boundary and into the centre of the site at three locations. Figure 3 is presented as the Proposed Development Plan.
--	--

1.3 REMEDIATION ACTION PLAN

The site was previously investigated by Aviron which is reported within our Preliminary Risk Assessment (PRA) and Site Investigation (SI) report, dated September 2024, version 2 and referenced 23-176.01.

Table 1.3 summarises the pertinent environmental risks providing advice on further works and assessment, which are addressed in the aforementioned DS, RS and VP.

Table 1.3: Environment Risk Summary

Item	Risk Description	To be addressed?
Aviron Recommendations		
1	Local Polycyclic Aromatic Hydrocarbon (PAH) contamination within Made Ground in the east of the site around former workshops (Plots 3, 4 and 5 gardens)	A Discovery Strategy, Remediation Strategy and Verification Plan was prepared to detail a remedial method to address the PAH soil contamination shown within Figure 4 .
2	Asbestos Containing Soils (ACS) detected in the north of the site (Plot 7 and 8 gardens) in 2017 but not in 2023.	ACS were encountered during the more recent investigation within the re-worked Clay sampled at HP15 within the rear garden of Plot 7. A Discovery Strategy, Remediation Strategy and Verification Plan was prepared to detail a remedial method to address the asbestos soil contamination shown within Figure 4 .
3	Potential for undiscovered soil contamination during workshop removal	A Discovery Strategy, Remediation Strategy and Verification Plan was prepared to address this aspect.
4	Any imported Topsoil should be chemically suitable for use in private gardens.	A Discovery Strategy, Remediation Strategy and Verification Plan was prepared to provide a criterion for the re-use and import of suitable Topsoil and sub-soil.
5	Ensure material encountered is suitable for desired water main.	A Discovery Strategy, Remediation Strategy and Verification Plan was prepared with the recommendation to consult local water authority prior to water main installation.
6	Ingress of hazardous ground gases (CH ₄ + CO ₂) into new homes and depleted oxygen.	A final round of worst-case round of ground gas monitoring has concluded the gas risk assessment and characterised the site as CS1. Gas protection shall not be necessary.
Wokingham Borough Council Requests		
7	Review recently moved soil locations and historic burn sites to ensure they have been included in	Supplementary investigation has recorded acceptable concentrations of all determinants analysed, with the

Table 1.3: Environment Risk Summary		
Item	Risk Description	To be addressed?
	the site analysis.	exception of ACS within HP15. Where HP14 was completed in the rear garden of Plot 6 where moved soil was present, determinant concentrations are acceptable and compliment previous investigation. In the area of historic burning to rear gardens of Plots 7 and 8 a remedial cover system is proposed.

1.4 PROJECT VERIFICATION REQUIREMENT

The DS, RS and VP provided a remediation method which recommended the following actions:

1. Complete discovery inspections to assess any previously undiscovered soil contamination.
2. Test any imported/re-used sub-soil and Topsoil to complete garden/soft landscaped areas to confirm chemical suitability.
3. Inspect the construction of clean cover systems to ensure a suitable thickness of 'clean' soils upon a membrane in areas where PAH and ACS were previously identified in **Figure 4** and also **Figure 5** which is enclosed as a Cover System Area and Verification Plan.

1.5 VERIFICATION OBJECTIVES

The objective of this report is to gain regulatory and stake holder approval and written confirmation such that the soil verification (inspection) confirms the absence of contaminative risk to site end users. This report has also been prepared to address the requirements of the Local Planning Authority and also development warranty providers.

2.0 RE-USE OF STOCKPILED SOILS

Appendix I is enclosed as a Stockpile Sampling Report. This report provides the detail for the sampling of one stockpile (SP1) of soil, which table 2.0 provides a summary of the outcome of the exercise.

Table 3.0: Summary of Stockpile Sampling			
Stockpile ID	Source of Material*	Samples	Chemical suitability for re-use?
SP1	Re-worked Topsoil of pale grey, brown, slightly gravelly Silt with vegetation, rootlets and occasional cobbles of brick, concrete and timber. The material was stripped from the outcropping re-worked Topsoil outside of the remedial cover system areas and stockpiled in the west of the site to await potential re-use.	B1	Private Gardens Subject to horticultural requirements. Most likely to be re-used as a sub-soil following removal anthropogenic and deleterious objects (ie screening of concrete/brick/wood etc). Possible inert waste for disposal.

The stockpiled re-worked Topsoil within SP1 is considered to be chemically suitable for re-use within Private Gardens. This was anticipated given the material originated from area of the site which were previously sampled and tested at acceptable concentrations.

Figure 6 is enclosed as a Stockpile Location Plan, as of 22 October 2025 along with recent photographs of the Stockpile as of 17 March 2026.

3.0 COVER SYSTEM VERIFICATION INSPECTIONS

The following section documents a site visit completed in order to inspect the progression of clean cover system works.

The Client has confirm that during the course of groundworks no previously undiscovered contamination was identified

3.1 VERIFICATION INSPECTION: COVER SYSTEM THICKNESS

The means of verification was completed by hand and machine excavated trial holes through the recently placed Topsoil and Sub-soil cover in garden areas which are shown on **Figure 5** and described in table 3.1. The trial holes were dug to enable logging, inspection and dimensioning by the Aviron geo-environmental consultant as follows:

-  Visit 1 – 17 March 2026. Inspection of Plots 3 (hand dug)
-  Visit 2 – 27 April 2026. Inspection of Plot 4 (hand dug)
-  Visit 3 – 6 July 2026. Inspection of Plots 7 and 8 (machine dug)
-  Visit 4 – 18 August 2026. Inspection of Plot 5 (hand dug)

Table 3.1 provides a summary, rationale and cover thickness of trial holes completed.

Table 3.1: Verification Trial Holes – Cover System					
Location	Date and Rationale	Evidence of deleterious objects	Thickness of Topsoil (m)	Thickness of sub-soil (m)	Membrane?
HP3	17 March 2026 Private Garden to Plot 3	No evidence of deleterious objects in garden or excavated arisings	0.6	0	Yes
HP4	27 April 2026 Private Garden to Plot 4	No evidence of deleterious objects in garden or excavated arisings	0.6	0	Yes
HP5	18 August 2026 Private Garden to Plot 5	No evidence of deleterious objects in garden or excavated arisings	0.6	0	Yes
TP7	6 July 2026. Private Garden to Plot 7	No evidence of deleterious objects in garden or excavated arisings	0.6	0	Yes

TP8	6 July 2026. Private Garden to Plot 8	No evidence of delirious objects in garden or excavated arisings	0.6	0	Yes
-----	--	--	-----	---	-----

Enclosed within **Appendix III** are Site Inspection Photographs of the Trial Holes proving the depth of Topsoil.

All depth measurement in table 3.1 were completed using a standard tape measure. The levelling staff has been applied to the photographs visually demonstrate with a larger measuring scale.

It is concluded that a suitable cover system has been constructed which required a minimum of 600mm/0.6m (private gardens) 'cover' upon a geotextile membrane.

The physical inspection confirms the absence of deleterious objects within the cover system.

3.2 VERIFICATION INSPECTION: RE-USED TOPSOIL QUALITY

Table 3.2 summarises the samples of re-used Topsoil collected and submitted for analysis during the site visit of 17 March 2026 (TS3-TS5) and 6 July 2026 (TS7-TS8).

Table 3.2: Soil Geochemical Testing			
Sample	Strata Sampled	Notes	Analysis
TS3	Brown, grey, slightly gravelly, silty Clay with organic matter and vegetation (re-worked Topsoil)	Collected as a composite and representative sample of re-worked Topsoil sample from the garden of Plot 3, within the recently constructed cover system.	ES-1
TS4	Brown, grey, slightly gravelly, silty Clay with organic matter and vegetation (re-worked Topsoil)	Collected as a composite and representative sample of re-worked Topsoil sample from the stockpile within the garden of Plot 4, which was awaiting spreading to construct the cover system.	ES-1
TS5	Brown, grey, slightly gravelly, silty Clay with organic matter and vegetation (re-worked Topsoil)	Collected as a composite and representative sample of re-worked Topsoil sample from the stockpile within the garden of Plot 5, which was awaiting spreading to construct the cover system.	ES-1
TS7	Brown, grey, slightly gravelly, silty Clay with organic matter and vegetation (re-worked Topsoil)	Collected as a composite and representative sample of re-worked Topsoil sample from the garden of Plot 7, within the recently constructed cover system.	ES-1
TS8	Brown, grey, slightly gravelly, silty Clay with organic matter and vegetation (re-worked Topsoil)	Collected as a composite and representative sample of re-worked Topsoil sample from the garden of Plot 8, within the recently constructed cover system.	ES-1

A composite soil sampling strategy was adopted to provide representative analysis of the in-situ Topsoil. This was deemed most appropriate to enable *en mass* soil quality to be determined as it is likely raking, cultivating

and surface preparation would be undertaken prior to laying of turf and formal planting. This would agitate and re-distribute the soil and therefore singular 'spot' samples would be inappropriate and not representative of the anticipated re-worked conditions of the soil.

In order to create a composite sample sub-samples were collected by hand excavation from the aforementioned trial holes and placed within a clean bulk sample bag. The sub-samples within the sampling bag were then homogenised as best as possible to create *en mass* soil representation from which a specimen sample was collected and placed into pre-labelled glass amber jars.

All samples were sent by courier to the UKAS/MCERTS accredited laboratory, Construction Testing Services Limited within ice packed cool boxes for the following analysis:

-  Aviron's "ES-1" suite of laboratory analysis which includes; arsenic, barium, cadmium, total chromium, copper, nickel, zinc, lead, mercury, selenium, water soluble boron, total cyanide, total sulphate, water soluble sulphide, speciated Polycyclic Aromatic Hydrocarbons (PAH), speciated Total Petroleum Hydrocarbons (TPH), Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) and Methyl Tert-Butyl Ether (MTBE), organic matter, total phenols, pH and asbestos.

The analysis chosen provides broad and suitable screening of soil contaminants to enable potential risk to human health to be determined and as later described, all samples recorded chemically acceptable concentrations and the absence of asbestos.

3.3 REMEDIATION TARGETS

Aviron has followed the technical approach on Land Contamination Risk Management (LCRM), accessed on gov.uk website and other available guidance to assess contaminant concentrations. LCRM guidance replaces the Contaminated Land Report 11 (CLR11) "Model Procedures for the Management of Land Contamination" prepared by the Environment Agency in 2004. CLR11, which was withdrawn in 2020, provided guidance on the application of management processes when assessing potentially contaminated land.

Details of the methodology and Aviron's position on the adoption of guidance values is outlined below.

The available chemical data, from soil samples tested, is sorted into appropriate datasets depending on sampling regime and ground conditions. An initial generic quantitative risk assessment is completed upon using the relevant tier 1 screening criteria and where appropriate statistical modelling. Risks to human health shall be initially assessed by comparing soil chemical data against various published screening criteria. These have been sourced from the following and in order of preference:

-
- 🌱 Category 4 Screening Levels (C4SLs) prepared by the Department of Environmental Food and Rural Affairs (DEFRA) and published March 2014.
 - 🌱 Phase 2 C4SLs prepared by CL:AIRE and published May 2021.
 - 🌱 Suitable 4 Use Levels (S4ULs) prepared by Land Quality Management/Chartered Institute of Environmental Health (LQM/CEIH) and published December 2014. LQM acknowledgement for use of S4ULs. *"Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3275. All rights reserved"*.
 - 🌱 Soil Guidance Values (SGVs) prepared by the Environment Agency (EA)/DEFRA and published 2009.
 - 🌱 Soil Generic Assessment Criteria (GAC) prepared by Environment Industries Commission (EIC)/Association of Geotechnical and Geoenvironmental Specialists (AGS)/Contaminated Land: Application In Real Environments (CL:AIRE) and published 2010.

Aviron has adopted the above hierarchy in response to LCRM recommendations.

3.4 REVIEW OF LABORATORY RESULTS

Laboratory certificates of analysis along with the 'residential with plant uptake' end use criteria (private gardens) are enclosed within **Appendix III**.

Concentrations of all determinants analysed:

- 🌱 Samples **TS3, TS4, TS5, TS7 and TS8** from the in-situ re-worked Topsoil, recorded **acceptable determinant/chemical concentrations**.

It is considered that the soil chemistry (and physical nature) of the cover system to the new garden of Plot 3, 4, 5, 7 and 8 is acceptable and also the re-worked Topsoil intended for the gardens of Plot 5, which has now be placed in-situ.

4.0 RISK ASSESSMENT

4.1 METHODOLOGY

A Conceptual Site Model (CSM) has been prepared in accordance with LCRM based on the information obtained as part of this verification exercise which in turn was derived from previous risk assessment works. Possible risks associated with potential sources of contamination and sensitive receptors identified have been assessed via a source-pathway-receptor (SPR) model in accordance with current UK protocols. A risk may only exist where a plausible SPR linkage is presented and where the quantity or concentration of a contaminant is sufficient to pose harm. Under the statutory definition "Contamination" may only exist where contaminants pose a risk of harm to a receptor. Risk may be defined as a function of the likelihood and severity of any adverse effects resulting from a contamination event. This risk classification has been assessed in accordance with CIRIAC552. A summary of how risk is derived and the associated definition is presented in tables 4.1.1 and 4.1.2.

Table 4.1.1: Risk Ratings Matrix				
	Consequence			
Probability	Severe	Medium	Mild	Minor
High Likelihood	Very high risk	High risk	Moderate Risk	Moderate/low risk
Likely	High risk	Moderate Risk	Moderate/low risk	Low risk
Low Likelihood	Moderate Risk	Moderate/low risk	Low risk	Very low risk
Unlikely	Moderate/low risk	Low risk	Very low risk	Very low risk
Table 4.1.2: Risk Ratings Definition				
Risk Rationale	Definition			
Very high risk	A high probability that severe harm could occur to determined receptor from identified contaminant - OR - evidence exists that severe harm to receptor is currently occurring. Urgent investigation and remediation should be considered. If demonstrated this risk is likely to result in substantial liability.			
High risk	Harm is likely to occur to determined receptor from identified contaminant. Urgent investigation and short-term risk minimisation remediation followed by longer term fit for purpose remediation should be considered. If demonstrated this risk is likely to result in substantial liability.			
Moderate Risk	It is possible that harm could occur to a determined receptor from identified contaminant. It is relatively unlikely that any harm would be severe or should harm occur it is likely to be relatively mild.			
Moderate/low risk	It is possible that harm could occur to a determined receptor from identified contaminant. It is unlikely that any harm would be severe or should harm occur it is probable to be relatively mild.			
Low risk	It is possible that harm could occur to a determined receptor from identified contaminant. It is unlikely that such harm, if indeed present, would at worst be mild.			
Very low risk	There is a low possibility that harm could occur to a receptor. In such event the harm would not be severe.			

4.2 SUMMARY OF POLLUTANT LINKAGES FOR PROPOSED LAND USE - CSM

The initial CSM is based upon the proposed site end use and the information currently consulted relating to various risk sources and plausible pollutant linkages and is presented within table 4.2.

Table 4.2: Conceptual Site Model (for plausible pollutant linkage pathways)					
Source	Receptor	Pathway	Probability	Consequence	Risk & Justification
Native PAH and ACS Soil Contamination	Construction workers	Direct contact	Unlikely	Minor	Very Low Suitable cover system in place upon geotextile membrane acting as a capillary break to prevent soil mixing between imported 'clean' soil and any underlying Made Ground
	End users	Direct contact	Unlikely	Minor	
	Adjacent land users	Direct contact via run-off	Unlikely	Minor	
	Soft landscaping	Root uptake	Unlikely	Minor	
	Water supply pipes	Direct contact	Unlikely	Minor	
	Buildings & infrastructure	Direct contact	Unlikely	Minor	
Contaminants within re-used Topsoil to new gardens	End users Soft Landscaping	Direct contact	Unlikely	Minor	Very Low All concentrations of determinants recorded at acceptable concentrations within imported soil.

It is considered that the site presents a **VERY LOW** risk and no further assessment is considered necessary.

6.0 CONCLUSIONS AND RECOMMENDATIONS

A thickness of 600mm/0.6m of clean cover has been constructed within completed private gardens to Plots 3, 4, 5, 7 and 8 as verified within the corresponding trial holes.

The re-worked Topsoil used within the cover systems originated from the former soft landscaped areas of the site, which chemical analysis during the initial site investigation demonstrated as chemically suitable for re-use.

A secondary method a verification was completed upon the stripped re-worked Topsoil which was stockpile in October 2025, whereby a single composite sample of the material (SP1) was collected and testing to confirm chemical suitability for private gardens re-use.

Further to the above two lines of evidence, once in-situ to gardens of Plots 3, 4, 5, 7 and 8 and as a tertiary line of evidence, the re-worked Topsoil was sampled as TS3, TS4, TS5, TS7 and TS8, again returning acceptable soil chemistry.

It is considered that in-situ soils within soft landscaped areas do not present a chemical risk to human health from dermal contact, ingestion, inhalation or gassing via organic degradation.

The completed gardens and soft landscaping are considered fit for purpose and no further assessment is considered necessary.

6.0 PROJECT INSTRUCTION AND LIMITATIONS

6.1 SCOPE OF WORKS

The following scope of work was undertaken in accordance with an agreed proposal prior to the works:

-  Attend site as instructed to complete a site inspection, collect soil samples for verification analysis.
-  All soil samples shall be collected in accordance with the instruction and ground conditions and submitted to UKAS/MCERTS accredited laboratories for testing.
-  Prepare a Verification Report to document the exercise and determine if the site is suitable for use.

Aviron has relied upon information received from the Client and their agents as accurate, unless contradicted by written documentation or site observations.

6.2 PUBLISHED GUIDANCE

This report follows the technical approach presented on Land contamination risk management (LCRM), accessed on gov.uk website. The guidance replaced the Contaminated Land Report 11 (CLR11) "Model Procedures for the Management of Land Contamination" prepared by the Environment Agency in 2004. CLR11, which was withdrawn in 2020, provided guidance on the application of management processes when assessing potentially contaminated land.

This project and report have been designed to fulfil the information requirements set out in LCRM. This report is additionally prepared in accordance with current guidance notes, standards and practices as set out by the Environment Agency and statutory organisations in order to establish potential and significant contaminant linkages as defined in Part IIA of the Environmental Protection Act 1990.

6.3 LIMITATIONS

Aviron's scope of work has been designed to meet the timeframe and budgets. As such it may follow that further work would be prudent upon evaluation of the ground conditions. The scope of work provided shall provide a view of site conditions and understanding of potential geo-environmental risks and possible mitigation procedures.

The information used in this report has been derived from the site investigation, which in turn were based on known current and historical land uses identified at the site and surrounding area, available to Aviron at the time of the investigation.

The selected intrusive investigation locations were based on available data and are intended to inform the site-specific risk assessment. As such, only the areas assessed through these investigation points are considered in this report. It should therefore be acknowledged that portions of the site remain unexamined, and it is possible that conditions exist in these areas which could not be identified due to the limitations of available evidence, time, or budget constraints.

This report has been prepared in accordance with current legislation, statutory guidance, and industry best practices at the time of issue. Should relevant regulations or guidance change following publication, the content and conclusions of this report should be reviewed in light of those changes.

Furthermore, if a significant period elapses between the issue date of this report and its application, changes in site conditions may occur. In particular, the findings of the site inspection may no longer be valid if the site's use or condition has changed during the intervening period.

7.0 REFERENCES AND OTHER SOURCES OF INFORMATION

Aviron. Reports listed in section 1.0.

BS EN ISO 22475-1 Geotechnical investigation and testing - sampling methods and groundwater measurements.

BS10175: 2011. British Standards Institute. Investigation of Potentially Contaminated Land - Code of Practice

LQM/CIEH: Paul Nathanail, Caroline McCaffrey, Andy Gillett, Richard Ogden and Judith Nathanail. 2014. The LQM/CIEH S4ULs for Human Health Risk Assessment. Land Quality Press, Nottingham. ISBN 978-0-9931084-0-2. "Copyright Land Quality Management Limited reproduced with permission; Publication number S4UL3275. All rights reserved"

SP1010 - Development of Category 4 Screening Levels for Land Affected by Contamination. Final Project Report (Revision 2). Contaminated Land: Applications In Real Environmental (CL:AIRE). September 2014.

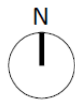
SR2: Human health toxicological assessment of contaminants in soil, Science Report SC050021/SR2, Environment Agency, August 2008.

SR7: Compilation of Data for Priority Organic Pollutants for Derivation of Soil Guideline Values, Science Report SC050021/SR7, Environment Agency, November 2008.

Environment Agency. July 2005. Guidance on Requirements for Land Contamination Reports.

Figures

- 1 Site Location Plan
- 2 Pre-Clearance Site Layout Plan
- 3 Proposed Development Plan
- 4 Soil Contamination Plan
- 5 Cover System Area and Verification Plan
- 6 Stockpile Plan and Photographs



Legend



Approximate Development Site Boundary

Landscape/Wildlife Corridor

Notes

Figure 1

Drawing Title

Site Location Plan

Project Number 23-176.07

Project Title

Land at Johnson Drive, Finchampstead,
RG40 3NW

Drawn by OB

Checked by JB

Scale NTS





Legend

-  Approximate Development Site Boundary
-  Landscape/Wildlife Corridor

Notes

Figure 2

Drawing Title

Pre-Clearance Site Layout and Photograph Direction Plan

Project Number 23-176.07

Project Title

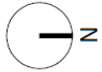
Land at Johnson Drive, Finchampstead, RG40 3NW

Drawn by OB

Checked by JB

Scale NTS





Legend

Notes

Provided by Client in 2024.

Figure 3

Drawing Title

Proposed Development Plan

Project Number 23-176.07

Project Title

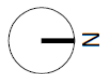
Land at Johnson Drive, Finchampstead,
RG40 3NW

Drawn by OB

Checked by JB

Scale NTS





Legend

- ST Contamination Identification
- Asbestos Contamination
- Aviron Contamination Identification
- Aviron 'Uncontaminated' Location

Notes

Provided by Client in 2024.

ST. Southern Testing

Figure 4

Drawing Title

Soil Contamination Plan

Project Number 23-176.07-1

Project Title

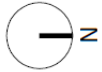
Land at Johnson Drive, Finchampstead, RG40 3NW

Drawn by OB

Checked by JB

Scale NTS





Legend

- ST Contamination Identification
- Asbestos Contamination
- Aviron Contamination Identification
- Aviron 'Uncontaminated' Location
- Cover System Area (soft landscaping only)
- Verification Trial Hole

Notes

Provided by Client in 2024.

ST. Southern Testing

Figure 5

Drawing Title

Cover System Area and Verification Plan

Project Number 23-176.07

Project Title

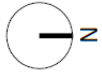
Land at Johnson Drive, Finchampstead, RG40 3NW

Drawn by OB

Checked by JB

Scale NTS





Stockpile Photographs taken 17 March 2026.

Legend

Stockpile—22/10/2025

Notes

Figure 6

Drawing Title

Re-Worked Topsoil Stockpile Location Plan and Photographs

Project Number 23-176.07

Project Title

Land at Johnson Drive, Finchampstead, RG40 3NW

Drawn by OB

Checked by JB

Scale NTS



Appendices

- I Stockpile Sampling Report - 2025
- II Verification Inspection Photographs - 2026
- III Laboratory Certificates of Analysis and Assessment Criteria - 2026

Appendix

I Stockpile Sampling Report - 2025



SOIL CONTAMINATION TESTING STOCKPILE IN WEST OF SITE

Client	Palatine Homes Limited
Works	Stockpile in West of Site Soil Contamination Sampling and Testing
Site	Land at Johnson Drive, Finchampstead, RG40 3NW

Project	Version	Date
23-176.06	1	6 November 2025

1.0 INTRODUCTION

Aviron Associates Limited (Aviron) was instructed by Palatine Homes Limited (The Client) to attend site and collect soil samples for chemical analysis from the above site to enhance their understanding of the chemical quality of in-situ soil for the purpose of possible on-site re-use or waste soil disposal.

2.0 THE SITE

Table 1 provides a brief summary of the site and the environment it sits within.

Table 1: The Project and Site Environs	
Current Site Arrangement	The site is currently undergoing construction into eight new homes, as depicted in Figure 1 which is enclosed within Appendix I .

3.0 FIELD WORK

An Aviron Consultant attended site on 22 October 2025 in order to collect samples from a stockpile of soil, understood to comprised re-worked Topsoil from the oversite strip to Plot 1, Plot 2, rear of Plot 3 and frontages of Plots 4 and 5; which may be considered to re-use as a sub-soil to the proposed new development. Photographs of the stockpile are provided within **Figure 2** and it's position is approximately shown in **Figure 1**.

The purpose of the exercise was to collect representative soil samples for chemical and Waste Acceptance Criteria (WAC) analysis to determine possible re-use suitability and (as necessary) waste soil classification.

The following sampling rationale was developed:

- Within each stockpile machine excavate four trial holes to enable a sub-sample of stockpiled soil from each trial hole to be collected in order to compose a composite sample to be submitted for laboratory testing.
- The composite soil sampling strategy was adopted to provide representative analysis of the in-situ soil. This was deemed most appropriate to enable *en mass* soil quality to be determined as excavation, stockpiling and loading of soil during the groundworks phase will agitate and re-distribute the soil. Therefore singular 'spot' samples would be inappropriate and not represent the anticipated re-worked conditions of the soil.
- Once sub-samples (4no. total) from each trial pit are collected the sub-samples were placed within a clean bulk sample bag to be agitated/mixed. When all four sub-samples had been mixed the composite sample was placed within appropriate sample containers to compose the specimen composite sample.

Table 2 provides a summary of the sample(s) collected from the Stockpile defined in **Figures 1** and **2** and submitted for analysis.

Aviron Associates Limited Head Office

Badgemore House – Badgemore Park – Gravel Hill – Henley on Thames – RG9 4NR

Contacts

T: 01491 413 722 - M: 07787 771 686 - F: 01491 413 722 - E: james@aviron.co.uk - W: www.aviron.co.uk

Registered Office

Herschel House, 58 Herschel Street, Slough, Berkshire, SL1 1PG

Company no. 06471253 - VAT no. 929 5083 96

Table 2: Rational of Soil Sampling		
Stockpile	Aviron Visual Description	Samples taken
SP1	Re-worked Topsoil of pale grey, brown, slightly gravelly, clayey Silt with vegetation.	SP1 Comprised of samples SP1-1, SP1-2, SP1-3 and SP1-4

The **investigation photographs** are enclosed in **Appendix II**.

The purpose of the sampling was to provide representative chemical analysis of the stockpiled material for the purpose of determining a re-use suitability in the event the stockpiled soil may be re-used as a sub-soil (within a remedial cover system) or should the stockpiled soil be unsuitable for re-use to determine a waste stream.

Composite environmental soil samples were collected as previously discussed and are summarised within Table 2. All soil samples were collected from excavated arisings using latex gloves and a clean stainless-steel trowel. All soil samples were collected in accordance with Aviron's standard sampling protocols. Environmental soil samples were submitted for the following analysis:

-  Aviron's 'ES-1 Suite' includes the following parameters; arsenic, barium, cadmium, total chromium, copper, nickel, zinc, lead, mercury, selenium, water soluble boron, total cyanide, total sulphate, water soluble sulphate (SO₄), total sulphur, speciated PAH, total phenols, pH, TPH CWG (Total Petrol Hydrocarbon Criteria Working Group), Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), Methyl Tert-Butyl Ether (MTBE), asbestos and organic matter.
-  **WAC** (Waste Acceptance Criteria) to determine a waste soil classification, alongside the ES-1 Suite.

Samples were submitted to i2 Analytical Limited on 22 October 2025, being placed within ice-packed cool boxes during transit.

5 CHEMICAL LABORATORY RESULTS

Certificates of the laboratory analytical results are presented in **Appendix III** along with the chemical Generic Assessment Criteria (GAC).

The objective of this assessment is to determine possible re-use of the stockpiled material in the west of the site. The chosen GAC within **Appendix III** has been selected for private gardens (gardens with homegrown produce), to enable a determination of the suitability of the material to be re-used within private gardens.

Based on the mean average Organic Matter concentration the 2.5% SOM values shall be applied to this assessment. Table 3 presents the outcome of the interpretation of the laboratory results and makes a determination in regard of possible re-use or waste streams.

Table 3: Summary of Geochemical Results			
Stockpile	Aviron Visual Description	Samples	Re-Use?
SP1	Re-worked Topsoil of pale grey, brown, slightly gravelly Silt with vegetation, rootlets and occasional cobbles of brick, concrete and timber.	B1	Private Gardens Subject to horticultural requirements. Most likely to be re-used as a sub-soil following removal anthropogenic and deleterious objects (ie screening of concrete/brick/wood etc). Possible inert waste for disposal.

6 CONCLUSIONS AND RECOMMENDATIONS

Table 3 defines how the stockpile material may be re-used. However, where used in soft landscaped areas the physical and horticultural quality of the material should be checked by the project's landscape architect.



Any anthropogenic and deleterious objects (concrete/brick/wood etc) should be removed from the material prior to placement within soft landscaped areas.

Should you have any questions please contact the undersigned.

Prepared by
James Burkitt BEng (Hons) CEnv MRICS Managing Director

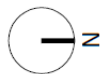


Appendix I

Figure 1 – Stockpile Location Plan

Figure 2 – Stockpile Photographs





Legend

- Stockpile—22/10/2025
- Photo direction

Notes

Provided by Client

Figure 1

Drawing Title

Stockpile—22/10/2025

Project Number 23-176.06

Project Title

Land at Johnson Drive, Finchampstead, RG40 3NW

Drawn by DN

Checked by JB

Scale NTS





Stockpile—P1



Stockpile—P2



Stockpile—P3



Stockpile—P4

Legend

Notes

Figure 2

Drawing Title

Stockpile photographs—22/10/2025

Project Number 23-176.06

Project Title

Land at Johnson Drive, Finchampstead, RG40 3NW

Drawn by DN

Checked by JB

Scale NTS







SP1-1 Hole Photo



SP1-2 Hole Photo



SP1-3 Hole Photo



SP1-4 Hole Photo



SP1—Composite Sample Photo





Aviron Associates Ltd
Badgemore House
Henley
Oxfordshire
RG9 4NR

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

t:

e: james@aviron.co.uk
orlando@aviron.co.uk
david@aviron.co.uk

t: 01923 225404

f: 01923 237404

e: info-i2analytical@normecgroup.com

Analytical Report Number : 25-057493

Project / Site name:	Johnson Drive Finchamstead	Samples received on:	23/10/2025
Your job number:	23 176 06	Samples instructed on/ Analysis started on:	23/10/2025
Your order number:	23 176 06	Analysis completed by:	06/11/2025
Report Issue Number:	1	Report issued on:	06/11/2025
Samples Analysed:	1 soil sample - 1 leachate sample		

Signe

Joanna Biolik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

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

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

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 25-057493
Project / Site name: Johnson Drive Finchamstead
Your Order No: 23 176 06

Lab Sample Number	725854			
Sample Reference	SP1			
Sample Number	None Supplied			
Water Matrix	N/A			
Depth (m)	None Supplied			
Date Sampled	22/10/2025			
Time Taken	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Stone Content	%	0.1	NONE	29.5
Moisture Content	%	0.01	NONE	12
Total mass of sample received	kg	0.1	NONE	2

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MMI
Analysis completed	N/A	N/A	N/A	31/10/2025

General Inorganics

pH (L005B)	pH Units	N/A	MCERTS	7.3
pH (L099)	pH Units	N/A	MCERTS	6.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO ₄	mg/kg	50	MCERTS	390
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	22
Water Soluble SO ₄ 16hr extraction (2:1)	mg/l	1.25	MCERTS	11
Total Sulphur	mg/kg	50	MCERTS	200
Organic Matter (automated)	%	0.1	MCERTS	3.5
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2
Loss on Ignition @ 450°C	%	0.2	MCERTS	3.9
Acid Neutralisation Capacity	mmol/kg	-9999	NONE	1.1

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0
----------------------------	-------	---	--------	-------

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.13
Pyrene	mg/kg	0.05	MCERTS	0.13
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.09
Chrysene	mg/kg	0.05	MCERTS	0.12
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.16
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.06
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.11
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.07
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.07
Coronene	mg/kg	0.05	NONE	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	0.95
Total WAC-17 PAHs	mg/kg	0.85	NONE	0.95

Analytical Report Number: 25-057493
 Project / Site name: Johnson Drive Finchamstead
 Your Order No: 23 176 06

Lab Sample Number				725854
Sample Reference				SP1
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				None Supplied
Date Sampled				22/10/2025
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	4.3
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	7.5
Copper (aqua regia extractable)	mg/kg	1	MCERTS	9.1
Lead (aqua regia extractable)	mg/kg	1	MCERTS	38
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	3.5
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	38

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS 1D AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS 1D AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS 1D AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH CU 1D AL}	mg/kg	1	MCERTS	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH CU 1D AL}	mg/kg	2	MCERTS	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH CU 1D AL}	mg/kg	8	MCERTS	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH CU 1D AL}	mg/kg	8	MCERTS	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 _{EH CU+HS 1D AL}	mg/kg	10	NONE	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS 1D AR}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS 1D AR}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS 1D AR}	mg/kg	0.02	MCERTS	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH CU 1D AR}	mg/kg	1	MCERTS	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH CU 1D AR}	mg/kg	2	MCERTS	< 2.0
TPHCWG - Aromatic >EC16 - EC21 _{EH CU 1D AR}	mg/kg	10	MCERTS	< 10
TPHCWG - Aromatic >EC21 - EC35 _{EH CU 1D AR}	mg/kg	10	MCERTS	< 10
TPHCWG - Aromatic >EC5 - EC35 _{EH CU+HS 1D AR}	mg/kg	10	NONE	< 10

Mineral Oil (EC10 - EC40) _{EH CU 1D AL}	mg/kg	10	NONE	< 10
--	-------	----	------	------

VOCs

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

Total BTEX	µg/kg	10	MCERTS	< 10
------------	-------	----	--------	------



Analytical Report Number: 25-057493
 Project / Site name: Johnson Drive Finchamstead
 Your Order No: 23 176 06

Lab Sample Number				725854
Sample Reference				SP1
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				None Supplied
Date Sampled				22/10/2025
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

PCBs by GC-MS

PCB Congener 28	mg/kg	0.001	MCERTS	< 0.001
PCB Congener 52	mg/kg	0.001	MCERTS	< 0.001
PCB Congener 101	mg/kg	0.001	MCERTS	< 0.001
PCB Congener 118	mg/kg	0.001	MCERTS	< 0.001
PCB Congener 138	mg/kg	0.001	MCERTS	< 0.001
PCB Congener 153	mg/kg	0.001	MCERTS	< 0.001
PCB Congener 180	mg/kg	0.001	MCERTS	< 0.001

Total PCBs	mg/kg	0.007	MCERTS	< 0.007
------------	-------	-------	--------	---------

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

Analytical Report Number: 25-057493
Project / Site name: Johnson Drive Finchamstead

Your Order No: 23 176 06

Lab Sample Number				725854
Sample Reference				SP1
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				None Supplied
Date Sampled				22/10/2025
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	Units	Test Limit of detection	Test Accreditation Status	

10:1 WAC Leachate

Arsenic	mg/l	0.001	ISO 17025	< 0.00100
Barium	mg/l	0.00005	ISO 17025	0.0114
Cadmium	mg/l	0.0001	ISO 17025	< 0.000100
Chromium	mg/l	0.0004	ISO 17025	< 0.00040
Copper	mg/l	0.0007	ISO 17025	0.011
Mercury	mg/l	0.0005	ISO 17025	< 0.000500
Molybdenum	mg/l	0.0004	ISO 17025	0.00292
Nickel	mg/l	0.0003	ISO 17025	0.0015
Lead	mg/l	0.001	ISO 17025	0.0027
Antimony	mg/l	0.0017	ISO 17025	< 0.0017
Selenium	mg/l	0.004	ISO 17025	< 0.0040
Zinc	mg/l	0.0004	ISO 17025	0.016
Chloride	mg/l	0.15	ISO 17025	2.3
Fluoride	mg/l	0.05	ISO 17025	0.12
Sulphate	mg/l	0.045	ISO 17025	10
Total dissolved solids	mg/l	6	ISO 17025	35
Total monohydric phenols	mg/l	0.01	ISO 17025	< 0.010
Dissolved organic carbon	mg/l	0.1	NONE	7.74

10:1 WAC Leachate

Arsenic	mg/kg	0.01	NONE	< 0.0100
Barium	mg/kg	0.0005	NONE	0.114
Cadmium	mg/kg	0.001	NONE	< 0.00100
Chromium	mg/kg	0.004	NONE	< 0.0040
Copper	mg/kg	0.007	NONE	0.11
Mercury	mg/kg	0.005	NONE	< 0.00500
Molybdenum	mg/kg	0.004	NONE	0.0292
Nickel	mg/kg	0.003	NONE	0.015
Lead	mg/kg	0.01	NONE	0.027
Antimony	mg/kg	0.017	NONE	< 0.017
Selenium	mg/kg	0.04	NONE	< 0.040
Zinc	mg/kg	0.004	NONE	0.16
Chloride	mg/kg	1.5	NONE	23
Fluoride	mg/kg	0.5	NONE	1.2
Sulphate	mg/kg	0.45	NONE	100
Total dissolved solids	mg/kg	60	NONE	350
Total monohydric phenols	mg/kg	0.1	NONE	< 0.10
Dissolved organic carbon	mg/kg	1	NONE	77.4

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

i2 Analytical

7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 8YS

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:			25-057493						
						Client: Aviron Associates Ltd			
Location			Johnson Drive Finchamstead						
Lab Reference (Sample Number)			725854			Landfill Waste Acceptance Criteria			
						Limits			
Sampling Date			22/10/2025			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID			SP1						
Depth (m)			None Supplied						
Solid Waste Analysis									
TOC (%)**			2			3%	5%	6%	
Loss on Ignition (%) **			3.9			--	--	10%	
BTEX (µg/kg) **			< 10			6000	--	--	
Sum of PCBs (mg/kg) **			< 0.007			1	--	--	
Mineral Oil (mg/kg) EH, 10, CU, AL			< 10			500	--	--	
Total PAH (WAC-17) (mg/kg)			0.95			100	--	--	
pH (units)**			7.3			--	>6	--	
Acid Neutralisation Capacity (mmol / kg)			1.1			--	To be evaluated	To be evaluated	
Eluate Analysis (BS EN 12457 - 2 preparation utilising end over end leaching procedure)			10:1		10:1	Limit values for compliance leaching test			
							using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
			mg/l				mg/kg		
Arsenic *			< 0.00100		< 0.0100	0.5	2	25	
Barium *			0.0114		0.114	20	100	300	
Cadmium *			< 0.000100		< 0.00100	0.04	1	5	
Chromium *			< 0.00040		< 0.0040	0.5	10	70	
Copper *			0.011		0.11	2	50	100	
Mercury *			< 0.000500		< 0.00500	0.01	0.2	2	
Molybdenum *			0.00292		0.0292	0.5	10	30	
Nickel *			0.0015		0.015	0.4	10	40	
Lead *			0.0027		0.027	0.5	10	50	
Antimony *			< 0.0017		< 0.017	0.06	0.7	5	
Selenium *			< 0.0040		< 0.040	0.1	0.5	7	
Zinc *			0.016		0.16	4	50	200	
Chloride *			2.3		23	800	15000	25000	
Fluoride*			0.12		1.2	10	150	500	
Sulphate *			10		100	1000	20000	50000	
TDS*			35		350	4000	60000	100000	
Phenol Index (Monohydric Phenols) *			< 0.010		< 0.10	1	-	-	
DOC			7.74		77.4	500	800	1000	
Leach Test Information									
Stone Content (%)			29.5						
Sample Mass (kg)			2						
Dry Matter (%)			88						
Moisture (%)			12						

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3. This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



Analytical Report Number : 25-057493

Project / Site name: Johnson Drive Finchamstead

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
725854	SP1	None Supplied	None Supplied	Brown loam and clay with vegetation and stones

Analytical Report Number : 25-057493

Project / Site name: Johnson Drive Finchamstead

Water matrix abbreviations:

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

Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
pH at 20°C in soil	Determination of pH in soil by addition of water followed by electrometric measurement	In-house method	L005B	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
PCB's By GC-MS in soil	Determination of PCB by extraction with hexane followed by GC-MS	In-house method based on USEPA 8082	L027B	D	MCERTS
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by electrometric measurement	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L031B	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR Analyser	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES	In-house method	L038B	D	MCERTS
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025

Analytical Report Number : 25-057493

Project / Site name: Johnson Drive Finchamstead

Water matrix abbreviations:

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

Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
One stage WAC 10:1 leachate preparation	One stage batch test at a liquid to solid ratio of 10 L/kg	BS EN 12457-2-2002	L043B	W	ISO 17025
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe	In-house method based on Guidance on Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046B	W	NONE
Loss on ignition of soil @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	In-house method	L047-PL	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID in soil	Determination of total petroleum hydrocarbons in soil by GC-FID with carbon banding aliphatic and aromatic	In-house method	L076B	D	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil (Summed Bands)	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic (Summed Bands).	Calculation	L076B/L088-PL	D/W	NONE
Total petroleum hydrocarbons by GC-FID in soil	Determination of total petroleum hydrocarbons in soil by GC-FID	In-house method	L076B	D	NONE
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025
Total petroleum hydrocarbons with carbon banding by HS-GC/MS in soil	Determination of total petroleum hydrocarbons in soil by HS-GC/MS with carbon banding aliphatic and aromatic	In-house method	L088-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099-PL	D	MCERTS

Analytical Report Number : 25-057493

Project / Site name: Johnson Drive Finchamstead

Water matrix abbreviations:

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

Final Sewage Effluent (FSE) Landfill Leachate (LL)

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

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

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

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

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

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

The result for sum should be interpreted with caution

LAND CONTAMINATION REMEDIATION SELECTION AND USE OF RE-USED + IMPORTED SOIL

GENERAL

Soils laid as clean cover soft landscaped areas of private or communal gardens or public open space gardens should not only meet the necessary chemical criteria as defined by Land Contamination Risk Management (LCRM) or site specifically derived chemical targets; but they must also provide a suitable growing medium for plants and not contain deleterious objects (sharps/hard materials) which may cause physical injury

RE-USE OF SOILS

In accordance with CL:AIRE Code of Practice (2011) materials are only considered waste if 'they are discarded, intended to be discarded or required to be discarded by the holder'. Current guidance recommends the retention and re-use of site won soils where there is a need for the materials and where the risk is acceptable.

The Code of Practice therefore allows soils to be re-used on site where the following criteria are met:

-  The re-use of the soils will not present an unacceptable or increased risk to controlled waters, the environment and human health;
-  The soils are suitable both in terms of chemical and geotechnical properties for the intended use without prior treatment;
-  Only the required volume is used, and no more;
-  There is a required use and a certainty of use, not just a possibility.

In order to comply with the Code of Practice, a Material Management Plan (MMP) that confirms the above criteria are met has to be prepared in advance of excavation of soils. The material management plan must be reviewed by a 'Qualified Person' who then issues a declaration to the Environment Agency. Where a Remediation Strategy and Verification Plan is in place on the receiver site (under direct transfer) or site of re-use (site or origin scenario), the agreement of the use of the DOWCOP and of the RSVP would be required from the regulators (Environment Agency and Local Authority). Any associated planning conditions in this respect would also need to be complied with. At this stage and subject to regulatory agreement, it is proposed to re-use clean naturally occurring soils (as clean cover soils and general bulk fill) and Made Ground (as general bulk fill beneath a clean cover system) under a MMP for the site.

Where materials do not meet the required criteria, it may be possible to treat them under an environmental permit/appropriate treatment license so that they may be re-used on site.

In accordance with the Definition of Waste Code of Practice, the re-use of materials will need to be fully documented and included within the Verification Report produced on completion of the works.

In addition, any variation or deviation from the Materials Management Plan, where developed for the site, including change in volumes, change in materials or proposed source areas or area of re-use will need to be clearly documented for inclusion in the validation report for the site.

Failure to document and fully record the works may result in the EA and HMRC determining that waste has been deposited on site illegally, which may be subject to large fines and the requirement to subsequently remove the material from the site.

Should excess clean naturally occurring materials be identified on site, it may be possible for these to be re-used these soils on other sites through the CL:AIRE register of materials, as opposed to these materials being considered waste. However, it is understood that there is a deficit of materials on this site, such that this is unlikely.

It should be noted that the Definition of Waste Code of Practice cannot be applied to a site retrospectively.

If soils are to be stockpiled on site as part of the development for a period greater than 1 year for ongoing use under the Definition of Waste Code of Practice then regulatory confirmation should be sought in order to demonstrate and confirm an ongoing requirement and certainty of use of those materials in line with the guidance.

POSSIBLE SOURCES OF IMPORTED MATERIAL

Imported soils may be obtained from various sources, however, the source of the soils must be demonstrated to be from land of a non-contaminative history or a reputable manufacturing plant. It shall remain the responsibility of the Client or their Contractor to obtain soils complying with the specification which are likely to be subject to additional on-site/in-situ tests specified by the Consultant to accord with Local Planning Authority (LPA) and/or build warranty requirements.

TOPSOIL

Topsoil should meet the physical criteria set out by the projects landscape architect to ensure suitable growing media for selected planting. Soils should be inspected to ensure no deleterious (harmful to humans) objects, such as sharps or hard materials.

SUBSOIL

Sub-soil should meet the physical criteria set out by the projects landscape architect to ensure suitable growing media for selected planting. Soils should be inspected to ensure no deleterious (harmful to humans) objects, such as sharps or hard materials.

CHEMICAL CRITERIA

Chemical concentrations considered to appropriate for a tier 2 Generic Quantitative Risk Assessment (GQRA) as recommended by LCRM are appended for the following residential land uses:

-  Engineering fill (Public Open Space by residential development) with asbestos <0.1%.
-  Private gardens with homegrown produce.
-  Communal gardens without homegrown produce.
-  Public Open Space by residential development.

ACCEPTANCE/REJECTION OF MATERIAL

Where a material considered for procurement fails to meet the above criteria it should be rejected and an alternative source sought. Where material is tested in-situ/on-site and fails the necessary physical criteria (by testing or inspection) and chemical criteria (by testing) it should be removed from site and not used with soft landscaped areas or cover systems.

STORAGE OF RE-USED OR IMPORTED MATERIAL

Any re-used or imported material on to site must be kept in quarantine to prevent cross contamination from any residual soil contamination not yet encapsulated by hardstanding or from uncontrolled deposition of building materials; such as operatives throwing waste on a heap. Ideally quarantine should be upon a membrane and behind fencing/under a tarpaulin.



Residential with Homegrown Produce
Soil Screening Values (GACs)
Private Gardens

Determinant	1% SOM (mg/kg)	2.5% SOM (mg/kg)	6% SOM (mg/kg)	Criteria	Determinant	1% SOM (mg/kg)	2.5% SOM (mg/kg)	6% SOM (mg/kg)	Criteria
METALS, SEMI-METALS, INORGANICS + PAH					Pyrene	620	1,200	2,000	LQM S4UL
Arsenic	37	37	37	C4SL/LQM S4UL	Phenols	78	0.98	1.1	LQM S4UL
Boron	290	290	290	LQM S4UL	TOTAL PETROLEUM HYDROCARBONS				
Cadmium	11	11	11	LQM S4UL	Benzene	0.087	0.17	0.37	LQM S4UL
Chromium III	910	910	910	LQM S4UL	Toluene	130	290	660	LQM S4UL
Chromium IV	6	6	6	LQM S4UL	Ethylbenzene	47	110	260	LQM S4UL
Copper	2,400	2,400	2,400	LQM S4UL	o-xylene	60	140	330	LQM S4UL
Mercury	1.2	1.2	1.2	LQM S4UL	m-xylene	59	140	320	LQM S4UL
Nickel	180	180	180	LQM S4UL	p-xylene	56	130	310	LQM S4UL
Lead	200	200	200	LQM S4UL	Aliphatic EC 5-6	42	78	160	LQM S4UL
Selenium	250	250	250	LQM S4UL	Aliphatic EC >6-8	100	230	530	LQM S4UL
Zinc	3,700	3,700	3,700	LQM S4UL	Aliphatic EC >8-10	27	65	150	LQM S4UL
Free Cyanide	34	34	34	ATRISK	Aliphatic EC >10-12	130	330	760	LQM S4UL
Acenaphthene	210	510	1100	LQM S4UL	Aliphatic EC >12-16	1,100	2,400	4300	LQM S4UL
Acenaphthylene	170	420	920	LQM S4UL	Aliphatic EC >16-35	65,000	92,000	110,000	LQM S4UL
Anthracene	2,400	5,400	11,000	LQM S4UL	Aliphatic EC >35-44	65,000	92,000	110,000	LQM S4UL
Benzo(a)anthracene	7.2	11	13	LQM S4UL	Aromatic EC 5-7 (benzene)	70	140	300	LQM S4UL
Benzo(a)pyrene	2.2	2.7	3	LQM S4UL	Aromatic EC >7-8 (toluene)	130	290	660	LQM S4UL
Benzo(b)fluoranthene	2.6	3.3	3.7	LQM S4UL	Aromatic EC >8-10	34	83	190	LQM S4UL
Benzo(ghi)perylene	320	340	350	LQM S4UL	Aromatic EC >10-12	74	180	380	LQM S4UL
Benzo(k)fluoranthene	77	93	100	LQM S4UL	Aromatic EC >12-16	140	330	660	LQM S4UL
Chrysene	15	22	27	LQM S4UL	Aromatic EC >16-21	260	540	930	LQM S4UL
Dibenz(ah)anthracene	0.24	0.28	0.3	LQM S4UL	Aromatic EC >21-35	1,100	1,500	1,700	LQM S4UL
Fluoranthene	280	560	890	LQM S4UL	Aromatic EC >35-44	1,100	1,500	1,700	LQM S4UL
Fluorene	170	400	860	LQM S4UL	Aromatic EC >44-70	1,600	1,800	1,900	LQM S4UL
Indeno(123-cd)pyrene	27	36	41	LQM S4UL	ASBESTOS				
Naphthalene	2.3	5.6	13	LQM S4UL	None Detectable				Aviron Adopted Value
Phenanthrene	95	220	440	LQM S4UL					

Appendix

II Verification Inspection Photographs - 2026



HP3 Position

Taken following hole excavation with the measuring staff in the hole and the house in the background



HP3 Depth

Taken with the measuring staff in the hole to demonstrate depth



HP3 Down Hole

Taken to evidence the membrane



HP3 Arisings

Taken to demonstrate the soils within the cover system



HP4 Position

Taken following hole excavation with the measuring staff in the hole and the house in the background



HP4 Depth

Taken with the measuring staff in the hole to demonstrate depth



HP4 Down Hole

Taken to evidence the membrane



HP4 Arisings

Taken to demonstrate the soils within the cover system



TP7 Position

Taken following hole excavation with the measuring staff in the hole and the house in the background



TP7 Depth

Taken with the measuring staff in the hole to demonstrate depth



TP7 Down Hole

Taken to evidence the membrane



TP7 Arisings

Taken to demonstrate the soils within the cover system



TP8 Position

Taken following hole excavation with the measuring staff in the hole and the house in the background



TP8 Depth

Taken with the measuring staff in the hole to demonstrate depth



TP8 Down Hole

Taken to evidence the membrane



TP8 Arisings

Taken to demonstrate the soils within the cover system



HP5 Position

Taken following hole excavation with the measuring staff in the hole and the house in the background



HP5 Depth

Taken with the measuring staff in the hole to demonstrate depth



HP5 Down Hole

Taken to evidence the membrane



HP5 Arisings

Taken to demonstrate the soils within the cover system

Appendix

III Laboratory Certificates of Analysis and Assessment Criteria - 2026

Analytical Test Report	E26/03781/AVI/26-11916	Tested on Behalf of
Clients Project Reference	23-179.07-1 Land at Johnson Drive, Wokingham, RG40 3NW	Aviron Associates Limited
Clients Order Number	23-179.07-1	Badgemore House
Sample(s) Analysed	3	Badgemore Park
Sample(s) received / instructed	19/03/2026 / 19/03/2026	Greys Road
Sample(s) Tested	19/03/2026 to 27/03/2026	
Report issued	27/03/2026	RG9 4NR
Report issue number	1	

Signed

James Gane
Analytical Services Manager

Notes:

General

This report shall not be reproduced except in full

Please refer to Methodologies page for details pertaining to the analytical methods undertaken.

Samples were supplied by customer, results apply to the samples as received.

Samples will be retained for 14 days after issue of this report with the exception of the asbestos test portion which is held for 6 months unless otherwise requested.

Where specification limits are included these are for guidance only. Where a measured value has been highlighted this is not implying acceptance or failure and certainty of measurement values have not been taken into account.

Uncertainty of measurement values are available on request.

Moisture Content was determined in accordance with CTS method statement MS - CL - Sample Prep, oven dried at <30°C.

Moisture Content is reported as a percentage of the dry mass of soil, this calculation is in accordance with BS1377, Part 2, 1990, Clause 3.2

Stone Content was determined in accordance with CTS method statement MS - CL - Sample Prep and refers to the percentage of stones retained on a 10mm BS test sieve.

MCERTS Accreditation only covers the SAND, CLAY and LOAM matrices

Please note: Where further analysis is required, samples identified as containing asbestos are screened and tested on an as received basis. No correction is made for moisture content and other than the asbestos test(s) these results are not covered by our accreditation.

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

Deviating Samples

On receipt samples are compared against our sample holding and handling protocols, where any deviations have been noted these are reported on our deviating sample page (if present)

Accreditation Key

U = UKAS Accreditation, M = MCERTS Accreditation, N = Unaccredited, SC = Subcontracted

E26/03781/AVI/26-11916

23-179.07-1 Land at Johnson Drive, Wokingham, RG40 3NW

Analytical Test Results - ENV Analysis Solids

Lab Reference					737138	737139	737140
Client Sample ID					-	-	-
Client Sample Location					TS3	TS4	TS5
Client Sample Type					-	-	-
Client Sample Number					-	-	-
Depth - Top (m)					-	-	-
Depth - Bottom (m)					-	-	-
Date of Sampling					17/03/2026	17/03/2026	17/03/2026
Time of Sampling					-	-	-
Sample Matrix					Clay	Clay	Clay
Determinant	Code	Units	LOD	Accreditation			
Arsenic	ICPMETS	mg/kg	10	M	< 10	< 10	< 10
Barium	ICPMETS	mg/kg	2	M	68	92	63
Boron (Water Soluble)	WSBORONS	mg/kg	2.5	N	< 2.5	< 2.5	< 2.5
Cadmium	ICPMETS	mg/kg	0.2	M	0.6	0.6	0.5
Chromium (Total)	ICPMETS	mg/kg	1	U	9.1	8.8	7.7
Copper	ICPMETS	mg/kg	2	M	20	18	16
Lead	ICPMETS	mg/kg	1.5	M	120	110	99
Mercury	ICPMETS	mg/kg	2.5	U	< 2.5	< 2.5	< 2.5
Nickel	ICPMETS	mg/kg	1	M	5.9	5.9	4.6
Selenium	ICPMETS	mg/kg	8	N	< 8.0	< 8.0	< 8.0
Zinc	ICPMETS	mg/kg	2	M	120	160	87
Total Phenols	SKALARPHS	mg/kg	1	M	< 1.0	< 1.0	< 1.0
Cyanide (Total)	SKALARCNS	mg/kg	1	M	< 1.0	< 1.0	< 1.0
Acid Soluble Sulphate	ASSO4S	%	0.01	N	0.04	0.03	0.03
pH	PHS	pH units	1	M	8.2	7.7	6.7
Water Soluble Sulphate (as SO4)	ANIONSS	mg/L	10	N	82	33	23
Total Sulphur Content (as S)	1377TS-ELT	%	0.01	U	0.04	0.04	0.03
SOM	TOCS	%	0.86	U	5.2	7.1	4.9
Asbestos	ASB	p/a	-	U	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Acenaphthene	PAHASRDS	mg/kg	0.02	M	< 0.02	< 0.02	< 0.02
Acenaphthylene	PAHASRDS	mg/kg	0.02	U	0.02	< 0.02	< 0.02
Anthracene	PAHASRDS	mg/kg	0.02	U	0.07	0.03	< 0.02
Benzo[a]anthracene	PAHASRDS	mg/kg	0.02	M	0.23	0.15	0.10
Benzo[a]pyrene	PAHASRDS	mg/kg	0.02	M	0.24	0.18	0.11
Benzo[b]fluoranthene	PAHASRDS	mg/kg	0.02	M	0.24	0.20	0.12
Benzo[ghi]perylene	PAHASRDS	mg/kg	0.02	M	0.19	0.13	0.08
Benzo[k]fluoranthene	PAHASRDS	mg/kg	0.02	M	0.11	0.08	0.06
Chrysene	PAHASRDS	mg/kg	0.02	M	0.19	0.13	0.09
Dibenzo[a,h]anthracene	PAHASRDS	mg/kg	0.02	M	0.05	0.03	< 0.02
Fluoranthene	PAHASRDS	mg/kg	0.02	M	0.46	0.33	0.18
Fluorene	PAHASRDS	mg/kg	0.02	M	< 0.02	< 0.02	< 0.02
Indeno[1,2,3,-cd]pyrene	PAHASRDS	mg/kg	0.02	M	0.19	0.14	0.09
Naphthalene	PAHASRDS	mg/kg	0.02	M	< 0.02	< 0.02	< 0.02
Phenanthrene	PAHASRDS	mg/kg	0.02	M	0.18	0.08	0.06

E26/03781/AVI/26-11916

23-179.07-1 Land at Johnson Drive, Wokingham, RG40 3NW

Analytical Test Results - ENV Analysis Solids

Lab Reference					737138	737139	737140
Client Sample ID					-	-	-
Client Sample Location					TS3	TS4	TS5
Client Sample Type					-	-	-
Client Sample Number					-	-	-
Depth - Top (m)					-	-	-
Depth - Bottom (m)					-	-	-
Date of Sampling					17/03/2026	17/03/2026	17/03/2026
Time of Sampling					-	-	-
Sample Matrix					Clay	Clay	Clay
Determinant	Code	Units	LOD	Accreditation			
Pyrene	PAHASRDS	mg/kg	0.02	M	0.40	0.29	0.16
Total PAH (Sum of USEPA 16)	PAHASRDS	mg/kg	0.32	U	2.6	1.9	1.2

E26/03781/AVI/26-11916

23-179.07-1 Land at Johnson Drive, Wokingham, RG40 3NW

Analytical Test Results - EPHVPHS

Lab Reference					737138	737139	737140
Client Sample ID					-	-	-
Client Sample Location					TS3	TS4	TS5
Client Sample Type					-	-	-
Client Sample Number					-	-	-
Depth - Top (m)					-	-	-
Depth - Bottom (m)					-	-	-
Date of Sampling					17/03/2026	17/03/2026	17/03/2026
Time of Sampling					-	-	-
Sample Matrix					Clay	Clay	Clay
Determinant	Code	Units	LOD	Accreditation			
Benzene	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
Toluene	VPHS	mg/kg	0.01	M	0.08	0.07	0.16
Ethylbenzene	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
m&p Xylene	VPHS	mg/kg	0.02	M	< 0.02	< 0.02	< 0.02
o-Xylene	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
Methyl tert-butyl ether (MTBE)	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
Aliphatic >C5 to C6 [5]	VPHS	mg/kg	0.06	M	< 0.06	< 0.06	< 0.06
Aliphatic >C6 to C8 [5]	VPHS	mg/kg	0.06	M	< 0.06	< 0.06	< 0.06
Aliphatic >C8 to C10 [5]	VPHS	mg/kg	0.06	M	< 0.06	< 0.06	< 0.06
Aliphatic >C10-C12 [13]	GCXGCS	mg/kg	1	M	< 1.0	< 1.0	< 1.0
Aliphatic >C12-C16 [13]	GCXGCS	mg/kg	1	M	2.0	< 1.0	3.9
Aliphatic >C16-C21 [13]	GCXGCS	mg/kg	1	M	5.9	3.4	12
Aliphatic >C21-C35 [13]	GCXGCS	mg/kg	2	M	18	20	33
Aliphatic >C35-C44 [13]	GCXGCS	mg/kg	5	N	< 5.0	< 5.0	< 5.0
Aromatic >C5 to C7 [6]	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
Aromatic >C7 to C8 [6]	VPHS	mg/kg	0.01	M	0.08	0.07	0.16
Aromatic >C8 to C10 [6]	VPHS	mg/kg	0.06	M	< 0.06	< 0.06	< 0.06
Aromatic >C10-C12 [14]	GCXGCS	mg/kg	1	M	< 1.0	< 1.0	< 1.0
Aromatic >C12-C16 [14]	GCXGCS	mg/kg	1	M	< 1.0	< 1.0	< 1.0
Aromatic >C16-C21 [14]	GCXGCS	mg/kg	1	M	21	18	21
Aromatic >C21-C35 [14]	GCXGCS	mg/kg	2	M	31	24	45
Aromatic >C35-C44 [14]	GCXGCS	mg/kg	5	N	13	< 5.0	9.0
Total >C5-C35 (Ali/Aro) [10]	CWGS	mg/kg	10	M	77	65	120
Total >C5-C40 (Ali/Aro) [10]	CWGS	mg/kg	10	M	88	71	120

E26/03781/AVI/26-11916

23-179.07-1 Land at Johnson Drive, Wokingham, RG40 3NW

Sample Descriptions

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Description	Moisture Content (%)	Stone Content (%)	Passing 2mm test sieve (%)
737138	-	TS3	SOIL	-	Dark brown slightly gravelly silty clay with occasional organic matter rootlets	20	< 0.1	83
737139	-	TS4	SOIL	-	Dark brown slightly gravelly slightly sandy silty clay with occasional organic matter rootlets	30	< 0.1	82
737140	-	TS5	SOIL	-	Dark brown slightly gravelly slightly sandy silty clay with occasional organic matter rootlets	26	2.7	75

E26/03781/AVI/26-11916

23-179.07-1 Land at Johnson Drive, Wokingham, RG40 3NW

Analysis Methodologies - Please refer to sample comments page (if present) for any changes to methods Methods

Test Code	Test Name / Reference	Sample condition for analysis	Sample Preparation	Test Details
1377TS-ELT	BS1377 Total Sulphur Content by HTC	Oven dried	BS1377 : Part 1 : 2016	Total Sulphur Content testing of Soil in accordance with BS 1377 : Part 3 : 2018 + A1 : 2021 Clause 7.10 (using Eltra CS-800 Analyser)
ANIONSS	MS - CL - Anions by Aquakem (2:1Extract)	Oven dried	Passing 2mm test sieve	Determination of Anions (inc Sulphate, chloride etc.) in soils by Aquakem. Analysis is based on a 2:1 water to soil extraction ratio
ASB	MS - AS - Asbestos	-	-	Fibre identification is in accordance with in house documented methods which are based on the procedure documented in the HSE Document HSG 248 "Asbestos: The analysts guide for sampling, analysis and clearance procedures"
ASSO4S	MS - CL - Acid Soluble Sulphate	Oven Dried	Passing 2mm test sieve	Determination of total sulphate in soils by acid extraction followed by ICP analysis
CWGS	Calculation from VPH-S and EPH-S	As received	Passing 10mm test sieve	Determination of TPH CWG (Volatile Petroleum Hydrocarbons and Extractable Petroleum Hydrocarbons) in soils via Headspace-GC-MS and GC-GC-FID respectively
GCXGCS	MS - CL - TPH & EPH by GCXGC	As received	Passing 10mm test sieve	Determination of TPH and EPH in soils via GCXGC-FID
ICPMETS	MS - CL - ICP Metals	Air dried	Passing 10mm test sieve	Determination of metals in soils via ICP
PAHASRDS	MS - CL - PAH (As Received)	As received	Passing 10mm test sieve	Determination of Polyaromatic hydrocarbons in soil via GC-MS
PHS	MS - CL - pH in Soils	As received	Passing 10mm test sieve	Determination of pH in soils using a pH probe (using a 1:3 soil to water extraction)
SAMPLEPREP	MS - CL - Sample Preparation	-	-	Preparation of samples (including determination of moisture content) to allow for subsequent analysis
SKALARCNS	MS - CL - Cyanide by Skalar	As received	Passing 10mm test sieve	Determination of cyanide (total / free / complex) in soil using a Skalar segmented flow analyser
SKALARPHS	MS - CL - Phenols by Skalar	As received	Passing 10mm test sieve	Determination of total phenols in soil using Skalar segmented flow analyser
TOCS	MS - CL - TOC Eltra	Air Dried	Passing 10mm test sieve	Determination of Total Organic Carbon in soils
VPHS	MS - CL - VPH	As received	Passing 10mm test sieve	Determination of VPH in soils via Headspace-GC-MS
WSBORONS	MS - CL - WS Boron	Air dried	Passing 10mm test sieve	Determination of Water soluble Boron in soils via ICP

E26/03781/AVI/26-11916

23-179.07-1 Land at Johnson Drive, Wokingham, RG40 3NW

HWOL TPH Acronym Index

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
Total	Aliphatics and Aromatics
AL	Aliphatics Only
AR	Aromatics Only
2D	GC-GC - Double Coil Gas Chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (except for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry

Key of Codes	
[1]	EH_1D_TOTAL
[2]	EH_CU_1D_TOTAL
[3]	EH_CU+HS_1D_TOTAL
[4]	EH_1D+HS_MS_TOTAL
[5]	HS_MS_1D_AL
[6]	HS_MS_1D_AR
[7]	HS_MS_1D_TOTAL
[8]	EH_CU_1D_AL
[9]	EH_CU_1D_AR
[10]	EH_2D+HS_1D_TOTAL
[11]	EH_CU_2D+HS_1D_TOTAL
[12]	EH_2D_TOTAL
[13]	EH_2D_AL
[14]	EH_2D_AR
[15]	EH_CU_2D_TOTAL
[16]	EH_CU_2D_AL
[17]	EH_CU_2D_AR

E26/03781/AVI/26-11916

23-179.07-1 Land at Johnson Drive, Wokingham, RG40 3NW

Additional Method Notes

Method	Notes
TRL 447 Suite	1. Sample preparation was in accordance with TRL 447 Appendix C. 2. Testing was carried out in accordance with methods 1, 2 and 4 of TRL 447 2001 (Updated 2005). 3. Oxidisable sulphides and total potential sulphate have been calculated in accordance with TRL 447, Appendix C Test 4. Values are reported against a dry mass of sample passing a 2mm test sieve after oven drying, where required material retained on the 2mm test sieve was recombined with the test portion prior to analysis.
BS1377 Acid Soluble Chloride	1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016 2. Testing was in accordance with BS 1377 : Part 3 : 2018 + A1: 2021, acid soluble method. 3. Some information required by BS 1377 has not been reported. This information is available on request.
BS1377 Loss on Ignition	Testing was in accordance with BS 1377: Part 3: 2018 + A1: 2021 Clause 6. Determination of the mass loss on ignition. Some information required by BS1377: 2016: Part 1 has not been reported. This information is available on request.
BS1377 Organic Matter Content	1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016 2. Testing was in accordance with BS 1377: Part 3 : 2018 + A1: 2021 Clause 4. 3. The reported % organic content is the average organic matter content present in the soil fraction passing the 2mm test sieve to the nearest 0.1% of the original oven dry mass of soil. 4. Some information required by BS 1377 has not been reported. This information is available on request.
BS1377 pH Value	pH testing was in accordance with BS 1377 : Part 3 : 2018 + A1: 2021 Clause 12
BS1377 Sulphate (acid soluble)	1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016. 2. Sulphate testing of Soil in accordance with BS 1377 : Part 3 : 2018 + A1 : 2021 Clause 7.9 & 7.5. 3. Some information required by BS 1377 has not been reported. This information is available on request.
BS1377 Total Dissolved Solids	Determination of TDS in accordance with BS 1377: Part 3
BS1377 Total Sulphur	1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016.
BS1377 Water Soluble Chloride	1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016 2. Testing was in accordance with BS 1377 : Part 3 : 2018 + A1: 2021, Clause 7.2, water soluble method. 3. Some information required by BS 1377 has not been reported. This information is available on request.
BS1377 Sulphate (water soluble) (ICP-OES)	1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016. 2. Sulphate testing of Soil in accordance with BS 1377 : Part 3 : 2018 + A1 : 2021 Clause 7.3 & 7.5. 3. pH of the water extract was not recorded. 4. Some information required by BS 1377 has not been reported. This information is available on request.
EN1744 Acid Soluble Sulphate	Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 12. Analysis subcontracted to a UKAS accredited laboratory
EN1744 Total Sulphur by HTC (Cl. 11.2)	Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 11.2 Analysis subcontracted to a UKAS accredited laboratory
EN1744 Total Sulphur (Cl. 11.1)	Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 11. Analysis subcontracted to a UKAS accredited laboratory
EN1744 Water Soluble Chloride	Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 7 (Reference Method). Analysis subcontracted to a UKAS accredited laboratory
EN1744 Water Soluble Sulphate	Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 10. Analysis subcontracted to a UKAS accredited laboratory

E26/03781/AVI/26-11916

23-179.07-1 Land at Johnson Drive, Wokingham, RG40 3NW

Additional Method Notes

Method	Notes
Oxidisable Sulphides Calculation (HTC)	Calculated in accordance with TRL 447 using results determined in accordance with EN1744
Oxidisable Sulphides Calculation (Grav)	Calculated in accordance with TRL 447 using results determined in accordance with EN1744
Total Potential Sulphate (Calc from 1744 Total S)	Derived from the Total sulphur concentration determined in accordance with EN1744.
BS1881 Alkali (Na ₂ O + K ₂ O)	1. Testing was in accordance with BS 1881: Part 124: 2015 Clause 12.3. 2. A concrete density of 2300kg/m³ was used in the calculation of equivalent sodium oxide content per m³ of concrete. 3. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015. 4. Quality control samples are tested with each batch of samples.
BS1881 Calcium Oxide Content (EDTA Titration)	1. Testing was in accordance with BS 1881: Part 124: 2015 Clause 6.4. 2. Cement content (%m/m) has been calculated assuming the presence in the concrete of Ordinary Portland Cement, containing 64.5% by mass of Calcium Oxide. 3. Samples of the original constituents of the mix were not submitted. 4. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015. 5. Quality control samples are tested with each batch of samples. 6. Samples were identified as being part of a batch and therefore the results are from a single analysis only.
BS1881 Cement Content (ICP method)	1. Testing was in accordance with BS 1881: Part 124: 2015 Clause 6.5 by ICP. 2. Cement content has been calculated assuming the presence in the concrete of Ordinary Portland Cement, containing 20.2% and 64.5% by mass of soluble silica and calcium oxide respectively. 3. Samples of the original constituents of the mix were not submitted. 4. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015. 5. Quality control samples are tested with each batch of samples. 6. Samples were identified as being part of a batch
Chloride in Concrete by Aquakem (Acid Soluble)	1. Testing was in accordance with in house method statement MS - CL - Chloride in Hardened concrete by Aquakem. 2. Samples were not passed over the 125micron BS Test Sieve before testing. 3 Quality control samples are tested with each batch of samples.
Moisture Content of Grout Mortar & Concrete	1. Testing was in accordance with in house method statement MS Moisture Content of Grout, Mortar and Concrete
MS - Sulphate in Hardened Concrete by ICP	1. Testing undertaken in accordance with in house method statement MS - Sulphate in hardened concrete by ICP. 2. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015. 3. Quality control samples are tested with each batch of samples.
BS1881 Water Cement Ratio	1 Testing was in accordance with BS 1881: Part 124: 2015+A1:2021. 2. Cement content was determined in accordance with BS 1881: Part 124: 2015+A1:2021 Clause 6.5 by ICP. 3. Samples of the original constituents of the mix was/was not submitted. 4. Original water/cement ratio has been calculated in accordance with BS 1881: Part 124: 2015+A1:2021 Clause 9.6. 5. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015+A1:2021.
BS4551 Mix Proportion	1. Sample preparation was in accordance with BS4551 2005 + A2:2013 Clause 7. 4.5. 2. Testing was in accordance with BS 4551: Part 2: 2005 + A2:2013 Clause 7.5.3 and 7.5.3.4. 3. Cement content has been calculated assuming the presence in the mix of Ordinary Portland Cement containing 20.2% and 64.5% by mass of soluble silica and calcium oxide respectively.
BS6463-102 Neutralizing Value	Testing was undertaken in accordance with an in house method statement based on

E26/03781/AVI/26-11916

23-179.07-1 Land at Johnson Drive, Wokingham, RG40 3NW

Additional Method Notes

Method	Notes
BS3882:2015 Specification for topsoil	Testing was undertaken in accordance with the methodologies within BS3882:2015
BS8601:2013 Specification for subsoil	Testing was undertaken in accordance with the methodologies within BS8601:2013
Depth of Carbonation (BS EN 14630:2006)	1. Testing was carried out in accordance with BS EN 14630:2006 Depth of Carbonation. 2. Testing was carried out in the laboratory. 3. Indicator Solution Used– 1g of Phenolphthalein powder dissolved in a solution of 50ml of Methylated Spirits and 100ml of deionised water
HAC	1. Testing was in accordance with BRE Information Sheet IS 15/74. 2. Contaminated samples may give a false result. 3. Samples taken from extensively carbonated concrete containing Portland Cement may give a false positive result. 4. If conclusive identification of the presence of High Alumina Cement is required this result should be confirmed by a more definitive test.
pH Value of Concrete	1. Testing was in accordance with in house method statement MS – pH Value of Hardened Concrete, Grout and Water from voids
Sub - EN1744 Sulphide	Analysis was in accordance with BS EN 1744-1 : 2009 + A1 : 2012, clause 13 and subcontracted to a UKAS accredited laboratory for this test

Analytical Test Report

E26/09217/AVI/26-29860

Tested on Behalf of

Clients Project Reference Land at Johanson Drive, Wokingham, RG40 3NW 23-176.07-2
Clients Order Number 23-176.07-2
Sample(s) Analysed 2
Sample(s) received / instructed 08/07/2026 / 08/07/2026
Sample(s) Tested 08/07/2026 to 16/07/2026
Report issued 17/07/2026
Report issue number 1

Aviron Associates Limited
Badgemore House
Badgemore Park
Greys Road
RG9 4NR

Signed



Emily Blissett
Report Manager

Notes:

General

This report shall not be reproduced except in full

Please refer to Methodologies page for details pertaining to the analytical methods undertaken.

Samples were supplied by customer, results apply to the samples as received.

Samples will be retained for 14 days after issue of this report with the exception of the asbestos test portion which is held for 6 months unless otherwise requested.

Where specification limits are included these are for guidance only. Where a measured value has been highlighted this is not implying acceptance or failure and certainty of measurement values have not been taken into account.

Uncertainty of measurement values are available on request.

Moisture Content was determined in accordance with CTS method statement MS - CL - Sample Prep, oven dried at <30°C.

Moisture Content is reported as a percentage of the dry mass of soil, this calculation is in accordance with BS1377, Part 2, 1990, Clause 3.2

Stone Content was determined in accordance with CTS method statement MS - CL - Sample Prep and refers to the percentage of stones retained on a 10mm BS test sieve.

MCERTS Accreditation only covers the SAND, CLAY and LOAM matrices

Please note: Where further analysis is required, samples identified as containing asbestos are screened and tested on an as received basis. No correction is made for moisture content and other than the asbestos test(s) these results are not covered by our accreditation.

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

Deviating Samples

On receipt samples are compared against our sample holding and handling protocols, where any deviations have been noted these are reported on our deviating sample page (if present)

Accreditation Key

U = UKAS Accreditation, M = MCERTS Accreditation, N = Unaccredited, SC = Subcontracted

E26/09217/AVI/26-29860

Land at Johanson Drive, Wokingham, RG40 3NW 23-176.07-2

Analytical Test Results - ENV Analysis Solids

Lab Reference					828086	828087
Client Sample ID					TS7	TS8
Client Sample Location					TS7	TS8
Client Sample Type					-	-
Client Sample Number					-	-
Depth - Top (m)					-	-
Depth - Bottom (m)					-	-
Date of Sampling					06/07/2026	06/07/2026
Time of Sampling					-	-
Sample Matrix					Clay	Sand
Determinant	Code	Units	LOD	Accreditation		
Arsenic	ICPMETS	mg/kg	10	M	< 10	< 10
Barium	ICPMETS	mg/kg	2	M	88	64
Boron (Water Soluble)	WSBORONS	mg/kg	2.5	N	< 2.5	< 2.5
Cadmium	ICPMETS	mg/kg	0.2	M	6.2	0.8
Chromium (Total)	ICPMETS	mg/kg	1	U	21	11
Copper	ICPMETS	mg/kg	2	M	110	38
Lead	ICPMETS	mg/kg	1.5	M	96	83
Mercury	ICPMETS	mg/kg	2.5	U	< 2.5	< 2.5
Nickel	ICPMETS	mg/kg	1	M	13	5.9
Selenium	ICPMETS	mg/kg	8	N	< 8.0	< 8.0
Zinc	ICPMETS	mg/kg	2	M	370	130
Total Phenols	SKALARPHS	mg/kg	1	M	< 1.0	< 1.0
Cyanide (Total)	SKALARCNS	mg/kg	1	M	< 1.0	< 1.0
Acid Soluble Sulphate	ASSO4S	%	0.01	N	0.04	0.04
pH	PHS	pH units	1	M	7.5	7.5
Water Soluble Sulphate (as SO4)	ANIONSS	mg/L	10	N	79	63
Total Sulphur Content (as S)	1377TS-ELT	%	0.01	U	0.04	0.03
SOM	TOCS	%	0.86	U	4.1	4.2
Asbestos	ASB	p/a	-	U	No Asbestos Detected	No Asbestos Detected
Acenaphthene	PAHASRDS	mg/kg	0.02	M	< 0.02	< 0.02
Acenaphthylene	PAHASRDS	mg/kg	0.02	U	< 0.02	< 0.02
Anthracene	PAHASRDS	mg/kg	0.02	U	0.02	0.02
Benzo[a]anthracene	PAHASRDS	mg/kg	0.02	M	0.11	0.11
Benzo[a]pyrene	PAHASRDS	mg/kg	0.02	M	0.15	0.16
Benzo[b]fluoranthene	PAHASRDS	mg/kg	0.02	M	0.20	0.21
Benzo[ghi]perylene	PAHASRDS	mg/kg	0.02	M	0.13	0.13
Benzo[k]fluoranthene	PAHASRDS	mg/kg	0.02	M	0.07	0.07
Chrysene	PAHASRDS	mg/kg	0.02	M	0.12	0.13
Dibenzo[a,h]anthracene	PAHASRDS	mg/kg	0.02	M	0.03	0.03
Fluoranthene	PAHASRDS	mg/kg	0.02	M	0.18	0.18
Fluorene	PAHASRDS	mg/kg	0.02	M	< 0.02	< 0.02
Indeno[1,2,3,-cd]pyrene	PAHASRDS	mg/kg	0.02	M	0.13	0.14
Naphthalene	PAHASRDS	mg/kg	0.02	M	< 0.02	< 0.02
Phenanthrene	PAHASRDS	mg/kg	0.02	M	0.05	0.05
Pyrene	PAHASRDS	mg/kg	0.02	M	0.17	0.17

E26/09217/AVI/26-29860

Land at Johanson Drive, Wokingham, RG40 3NW 23-176.07-2

Analytical Test Results - ENV Analysis Solids

Lab Reference					828086	828087
Client Sample ID					TS7	TS8
Client Sample Location					TS7	TS8
Client Sample Type					-	-
Client Sample Number					-	-
Depth - Top (m)					-	-
Depth - Bottom (m)					-	-
Date of Sampling					06/07/2026	06/07/2026
Time of Sampling					-	-
Sample Matrix					Clay	Sand
Determinant	Code	Units	LOD	Accreditation		
Total PAH (Sum of USEPA 16)	PAHASRDS	mg/kg	0.32	U	1.4	1.5

E26/09217/AVI/26-29860

Land at Johanson Drive, Wokingham, RG40 3NW 23-176.07-2

Analytical Test Results - EPHVPHS

Lab Reference					828086	828087
Client Sample ID					TS7	TS8
Client Sample Location					TS7	TS8
Client Sample Type					-	-
Client Sample Number					-	-
Depth - Top (m)					-	-
Depth - Bottom (m)					-	-
Date of Sampling					06/07/2026	06/07/2026
Time of Sampling					-	-
Sample Matrix					Clay	Sand
Determinant	Code	Units	LOD	Accreditation		
Benzene	VPHS	mg/kg	0.01	M	< 0.01	< 0.01
Toluene	VPHS	mg/kg	0.01	M	0.02	0.03
Ethylbenzene	VPHS	mg/kg	0.01	M	< 0.01	< 0.01
m&p Xylene	VPHS	mg/kg	0.02	M	< 0.02	< 0.02
o-Xylene	VPHS	mg/kg	0.01	M	< 0.01	< 0.01
Methyl tert-butyl ether (MTBE)	VPHS	mg/kg	0.01	M	< 0.01	< 0.01
Aliphatic >C5 to C6 [5]	VPHS	mg/kg	0.06	M	< 0.06	< 0.06
Aliphatic >C6 to C8 [5]	VPHS	mg/kg	0.06	M	< 0.06	< 0.06
Aliphatic >C8 to C10 [5]	VPHS	mg/kg	0.06	M	< 0.06	< 0.06
Aliphatic >C10-C12 [13]	GCXGCS	mg/kg	1	M	< 1.0	< 1.0
Aliphatic >C12-C16 [13]	GCXGCS	mg/kg	1	M	1.1	2.0
Aliphatic >C16-C21 [13]	GCXGCS	mg/kg	1	M	3.9	3.8
Aliphatic >C21-C35 [13]	GCXGCS	mg/kg	2	M	22	26
Aliphatic >C35-C44 [13]	GCXGCS	mg/kg	5	N	< 5.0	< 5.0
Aromatic >C5 to C7 [6]	VPHS	mg/kg	0.01	M	< 0.01	< 0.01
Aromatic >C7 to C8 [6]	VPHS	mg/kg	0.01	M	0.02	0.03
Aromatic >C8 to C10 [6]	VPHS	mg/kg	0.06	M	< 0.06	< 0.06
Aromatic >C10-C12 [14]	GCXGCS	mg/kg	1	M	< 1.0	< 1.0
Aromatic >C12-C16 [14]	GCXGCS	mg/kg	1	M	< 1.0	< 1.0
Aromatic >C16-C21 [14]	GCXGCS	mg/kg	1	M	7.1	6.5
Aromatic >C21-C35 [14]	GCXGCS	mg/kg	2	M	22	33
Aromatic >C35-C44 [14]	GCXGCS	mg/kg	5	N	< 5.0	< 5.0
Total >C5-C35 (Ali/Aro) [10]	CWGS	mg/kg	10	M	56	71
Total >C5-C40 (Ali/Aro) [10]	CWGS	mg/kg	10	M	59	74

E26/09217/AVI/26-29860

Land at Johanson Drive, Wokingham, RG40 3NW 23-176.07-2

Sample Descriptions

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Description	Moisture Content (%)	Stone Content (%)	Passing 2mm test sieve (%)
828086	TS7	TS7	SOIL	-	Brown gravelly very sandy silty clay with rare rootlets	6.9	< 0.1	73
828087	TS8	TS8	SOIL	-	Brown gravelly silty sand with rare rootlets organic matter	5.5	5.7	65

E26/09217/AVI/26-29860

Land at Johanson Drive, Wokingham, RG40 3NW 23-176.07-2

Sample Comments

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Comments
828086	TS7	TS7	SOIL	-	VPH/BTEX - Sample taken from container with headspace.

E26/09217/AVI/26-29860

Land at Johanson Drive, Wokingham, RG40 3NW 23-176.07-2

Analysis Methodologies - Please refer to sample comments page (if present) for any changes to methods Methods

Site addresses where testing is performed: Leicester - 7-11 Harding Street, Leicester, LE1 4DH

Poole - Unit D11, Admiralty Park, Station Road, Holton Heath, Poole, BH16 6HX & Unit 14B, Blackhill Road West, Holton Heath Trading Park, Poole, Dorset, BH16 6LE

Test Code	Test Name / Reference	Sample condition for analysis	Sample Preparation	Test Site	Test Details
1377TS-ELT	BS1377 Total Sulphur Content by HTC	Oven dried	BS1377 : Part 1 : 2016	Leicester	Total Sulphur Content testing of Soil in accordance with BS 1377 : Part 3 : 2018 + A1 : 2021 Clause 7.10 (using Eltra CS-800 Analyser)
ANIONSS	MS - CL - Anions by Aquakem (2:1Extract)	Oven dried	Passing 2mm test sieve	Leicester	Determination of Anions (inc Sulphate, chloride etc.) in soils by Aquakem. Analysis is based on a 2:1 water to soil extraction ratio
ASB	MS - AS - Asbestos	-	-	Leicester	Fibre identification is in accordance with in house documented methods which are based on the procedure documented in the HSE Document HSG 248 "Asbestos: The analysts guide for sampling, analysis and clearance procedures"
ASSO4S	MS - CL - Acid Soluble Sulphate	Oven Dried	Passing 2mm test sieve	Leicester	Determination of total sulphate in soils by acid extraction followed by ICP analysis
CWGS	Calculation from VPH-S and EPH-S	As received	Passing 10mm test sieve	Leicester	Determination of TPH CWG (Volatile Petroleum Hydrocarbons and Extractable Petroleum Hydrocarbons) in soils via Headspace-GC-MS and GC-GC-FID respectively
GXCXCS	MS - CL - TPH & EPH by GXCXGC	As received	Passing 10mm test sieve	Leicester	Determination of TPH and EPH in soils via GCxGC-FID
ICPMETS	MS - CL - ICP Metals	Air dried	Passing 10mm test sieve	Leicester	Determination of metals in soils via ICP
PAHASRDS	MS - CL - PAH (As Received)	As received	Passing 10mm test sieve	Leicester	Determination of Polyaromatic hydrocarbons in soil via GC-MS
PHS	MS - CL - pH in Soils	As received	Passing 10mm test sieve	Leicester	Determination of pH in soils using a pH probe (using a 1:3 soil to water extraction)
SAMPLEPREP	MS - CL - Sample Preparation	-	-	Leicester	Preparation of samples (including determination of moisture content) to allow for subsequent analysis
SKALARCNS	MS - CL - Cyanide by Skalar	As received	Passing 10mm test sieve	Leicester	Determination of cyanide (total / free / complex) in soil using a Skalar segmented flow analyser
SKALARPHS	MS - CL - Phenols by Skalar	As received	Passing 10mm test sieve	Leicester	Determination of total phenols in soil using Skalar segmented flow analyser
TOCS	MS - CL - TOC Eltra	Air Dried	Passing 10mm test sieve	Leicester	Determination of Total Organic Carbon in soils
VPHS	MS - CL - VPH	As received	Passing 10mm test sieve	Leicester	Determination of VPH in soils via Headspace-GC-MS
WSBORONS	MS - CL - WS Boron	Air dried	Passing 10mm test sieve	Leicester	Determination of Water soluble Boron in soils via ICP

E26/09217/AVI/26-29860

Land at Johanson Drive, Wokingham, RG40 3NW 23-176.07-2

HWOL TPH Acronym Index

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
Total	Aliphatics and Aromatics
AL	Aliphatics Only
AR	Aromatics Only
2D	GC-GC - Double Coil Gas Chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (except for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry

Key of Codes	
[1]	EH_1D_TOTAL
[2]	EH_CU_1D_TOTAL
[3]	EH_CU+HS_1D_TOTAL
[4]	EH_1D+HS_MS_TOTAL
[5]	HS_MS_1D_AL
[6]	HS_MS_1D_AR
[7]	HS_MS_1D_TOTAL
[8]	EH_CU_1D_AL
[9]	EH_CU_1D_AR
[10]	EH_2D+HS_1D_TOTAL
[11]	EH_CU_2D+HS_1D_TOTAL
[12]	EH_2D_TOTAL
[13]	EH_2D_AL
[14]	EH_2D_AR
[15]	EH_CU_2D_TOTAL
[16]	EH_CU_2D_AL
[17]	EH_CU_2D_AR

E26/09217/AVI/26-29860

Land at Johanson Drive, Wokingham, RG40 3NW 23-176.07-2

Additional Method Notes

Method	Notes
TRL 447 Suite	1. Sample preparation was in accordance with TRL 447 Appendix C. 2. Testing was carried out in accordance with methods 1, 2 and 4 of TRL 447 2001 (Updated 2005). 3. Oxidisable sulphides and total potential sulphate have been calculated in accordance with TRL 447, Appendix C Test 4. Values are reported against a dry mass of sample passing a 2mm test sieve after oven drying, where required material retained on the 2mm test sieve was recombined with the test portion prior to analysis.
BS1377 Acid Soluble Chloride	1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016 2. Testing was in accordance with BS 1377 : Part 3 : 2018 + A1: 2021, acid soluble method. 3. Some information required by BS 1377 has not been reported. This information is available on request.
BS1377 Loss on Ignition	Testing was in accordance with BS 1377: Part 3: 2018 + A1: 2021 Clause 6. Determination of the mass loss on ignition. Some information required by BS1377: 2016: Part 1 has not been reported. This information is available on request.
BS1377 Organic Matter Content	1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016 2. Testing was in accordance with BS 1377: Part 3: 2018 + A1: 2021 Clause 4. 3. The reported % organic content is the average organic matter content present in the soil fraction passing the 2mm test sieve to the nearest 0.1% of the original oven dry mass of soil. 4. Some information required by BS 1377 has not been reported. This information is available on request.
BS1377 pH Value	pH testing was in accordance with BS 1377 : Part 3 : 2018 + A1: 2021 Clause 12
BS1377 Sulphate (acid soluble)	1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016. 2. Sulphate testing of Soil in accordance with BS 1377 : Part 3 : 2018 + A1 : 2021 Clause 7.9 & 7.5. 3. Some information required by BS 1377 has not been reported. This information is available on request.
BS1377 Total Dissolved Solids	Determination of TDS in accordance with BS 1377: Part 3
BS1377 Total Sulphur	1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016.
BS1377 Water Soluble Chloride	1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016 2. Testing was in accordance with BS 1377 : Part 3 : 2018 + A1: 2021, Clause 7.2, water soluble method. 3. Some information required by BS 1377 has not been reported. This information is available on request.
BS1377 Sulphate (water soluble) (ICP-OES)	1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016. 2. Sulphate testing of Soil in accordance with BS 1377 : Part 3 : 2018 + A1 : 2021 Clause 7.3 & 7.5. 3. pH of the water extract was not recorded. 4. Some information required by BS 1377 has not been reported. This information is available on request.
EN1744 Acid Soluble Sulphate	Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 12. Analysis subcontracted to a UKAS accredited laboratory
EN1744 Total Sulphur by HTC (Cl. 11.2)	Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 11.2 Analysis subcontracted to a UKAS accredited laboratory
EN1744 Total Sulphur (Cl. 11.1)	Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 11. Analysis subcontracted to a UKAS accredited laboratory
EN1744 Water Soluble Chloride	Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 7 (Reference Method). Analysis subcontracted to a UKAS accredited laboratory

E26/09217/AVI/26-29860

Land at Johanson Drive, Wokingham, RG40 3NW 23-176.07-2

Additional Method Notes

Method	Notes
EN1744 Water Soluble Sulphate	Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 10. Analysis subcontracted to a UKAS accredited laboratory
Oxidisable Sulphides Calculation (HTC)	Calculated in accordance with TRL 447 using results determined in accordance with EN1744
Oxidisable Sulphides Calculation (Grav)	Calculated in accordance with TRL 447 using results determined in accordance with EN1744
Total Potential Sulphate (Calc from 1744 Total S)	Derived from the Total sulphur concentration determined in accordance with EN1744.
BS1881 Alkali (Na ₂ O + K ₂ O)	1. Testing was in accordance with BS 1881: Part 124: 2015 Clause 12.3. 2. A concrete density of 2300kg/m³ was used in the calculation of equivalent sodium oxide content per m³ of concrete. 3. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015. 4. Quality control samples are tested with each batch of samples.
BS1881 Calcium Oxide Content (EDTA Titration)	1. Testing was in accordance with BS 1881: Part 124: 2015 Clause 6.4. 2. Cement content (%m/m) has been calculated assuming the presence in the concrete of Ordinary Portland Cement, containing 64.5% by mass of Calcium Oxide. 3. Samples of the original constituents of the mix were not submitted. 4. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015. 5. Quality control samples are tested with each batch of samples. 6. Samples were identified as being part of a batch and therefore the results are from a single analysis only.
BS1881 Cement Content (ICP method)	1. Testing was in accordance with BS 1881: Part 124: 2015 Clause 6.5 by ICP. 2. Cement content has been calculated assuming the presence in the concrete of Ordinary Portland Cement, containing 20.2% and 64.5% by mass of soluble silica and calcium oxide respectively. 3. Samples of the original constituents of the mix were not submitted. 4. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015. 5. Quality control samples are tested with each batch of samples. 6. Samples were identified as being part of a batch
Chloride in Concrete by Aquakem (Acid Soluble)	1. Testing was in accordance with in house method statement MS - CL - Chloride in Hardened concrete by Aquakem. 2. Samples were not passed over the 125micron BS Test Sieve before testing. 3 Quality control samples are tested with each batch of samples.
Moisture Content of Grout Mortar & Concrete	1. Testing was in accordance with in house method statement MS Moisture Content of Grout, Mortar and Concrete
MS - Sulphate in Hardened Concrete by ICP	1. Testing undertaken in accordance with in house method statement MS - Sulphate in hardened concrete by ICP. 2. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015. 3. Quality control samples are tested with each batch of samples.
BS1881 Water Cement Ratio	1 Testing was in accordance with BS 1881: Part 124: 2015+A1:2021. 2. Cement content was determined in accordance with BS 1881: Part 124: 2015+A1:2021 Clause 6.5 by ICP. 3. Samples of the original constituents of the mix was/was not submitted. 4. Original water/cement ratio has been calculated in accordance with BS 1881: Part 124: 2015+A1:2021 Clause 9.6. 5. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015+A1:2021.

E26/09217/AVI/26-29860

Land at Johanson Drive, Wokingham, RG40 3NW 23-176.07-2

Additional Method Notes

Method	Notes
BS4551 Mix Proportion	1. Sample preparation was in accordance with BS4551 2005 + A2:2013 Clause 7. 4.5. 2. Testing was in accordance with BS 4551: Part 2: 2005 + A2:2013 Clause 7.5.3 and 7.5.3.4. 3. Cement content has been calculated assuming the presence in the mix of Ordinary Portland Cement containing 20.2% and 64.5% by mass of soluble silica and calcium oxide respectively.
BS6463-102 Neutralizing Value	Testing was undertaken in accordance with an in house method statement based on BS6463-102
BS3882:2015 Specification for topsoil	Testing was undertaken in accordance with the methodologies within BS3882:2015
BS8601:2013 Specification for subsoil	Testing was undertaken in accordance with the methodologies within BS8601:2013
Depth of Carbonation (BS EN 14630:2006)	1. Testing was carried out in accordance with BS EN 14630:2006 Depth of Carbonation. 2. Testing was carried out in the laboratory. 3. Indicator Solution Used– 1g of Phenolphthalein powder dissolved in a solution of 50ml of Methylated Spirits and 100ml of deionised water
HAC	1. Testing was in accordance with BRE Information Sheet IS 15/74. 2. Contaminated samples may give a false result. 3. Samples taken from extensively carbonated concrete containing Portland Cement may give a false positive result. 4. If conclusive identification of the presence of High Alumina Cement is required this result should be confirmed by a more definitive test.
pH Value of Concrete	1. Testing was in accordance with in house method statement MS – pH Value of Hardened Concrete, Grout and Water from voids
Sub - EN1744 Sulphide	Analysis was in accordance with BS EN 1744-1 : 2009 + A1 : 2012, clause 13 and subcontracted to a UKAS accredited laboratory for this test

LAND CONTAMINATION REMEDIATION SELECTION AND USE OF RE-USED + IMPORTED SOIL

GENERAL

Soils laid as clean cover soft landscaped areas of private or communal gardens or public open space gardens should not only meet the necessary chemical criteria as defined by Land Contamination Risk Management (LCRM) or site specifically derived chemical targets; but they must also provide a suitable growing medium for plants and not contain deleterious objects (sharps/hard materials) which may cause physical injury

RE-USE OF SOILS

In accordance with CL:AIRE Code of Practice (2011) materials are only considered waste if 'they are discarded, intended to be discarded or required to be discarded by the holder'. Current guidance recommends the retention and re-use of site won soils where there is a need for the materials and where the risk is acceptable.

The Code of Practice therefore allows soils to be re-used on site where the following criteria are met:

-  The re-use of the soils will not present an unacceptable or increased risk to controlled waters, the environment and human health;
-  The soils are suitable both in terms of chemical and geotechnical properties for the intended use without prior treatment;
-  Only the required volume is used, and no more;
-  There is a required use and a certainty of use, not just a possibility.

In order to comply with the Code of Practice, a Material Management Plan (MMP) that confirms the above criteria are met has to be prepared in advance of excavation of soils. The material management plan must be reviewed by a 'Qualified Person' who then issues a declaration to the Environment Agency. Where a Remediation Strategy and Verification Plan is in place on the receiver site (under direct transfer) or site of re-use (site or origin scenario), the agreement of the use of the DOWCOP and of the RSVP would be required from the regulators (Environment Agency and Local Authority). Any associated planning conditions in this respect would also need to be complied with. At this stage and subject to regulatory agreement, it is proposed to re-use clean naturally occurring soils (as clean cover soils and general bulk fill) and Made Ground (as general bulk fill beneath a clean cover system) under a MMP for the site.

Where materials do not meet the required criteria, it may be possible to treat them under an environmental permit/appropriate treatment license so that they may be re-used on site.

In accordance with the Definition of Waste Code of Practice, the re-use of materials will need to be fully documented and included within the Verification Report produced on completion of the works.

In addition, any variation or deviation from the Materials Management Plan, where developed for the site, including change in volumes, change in materials or proposed source areas or area of re-use will need to be clearly documented for inclusion in the validation report for the site.

Failure to document and fully record the works may result in the EA and HMRC determining that waste has been deposited on site illegally, which may be subject to large fines and the requirement to subsequently remove the material from the site.

Should excess clean naturally occurring materials be identified on site, it may be possible for these to be re-used these soils on other sites through the CL:AIRE register of materials, as opposed to these materials being considered waste. However, it is understood that there is a deficit of materials on this site, such that this is unlikely.

It should be noted that the Definition of Waste Code of Practice cannot be applied to a site retrospectively.

If soils are to be stockpiled on site as part of the development for a period greater than 1 year for ongoing use under the Definition of Waste Code of Practice then regulatory confirmation should be sought in order to demonstrate and confirm an ongoing requirement and certainty of use of those materials in line with the guidance.

POSSIBLE SOURCES OF IMPORTED MATERIAL

Imported soils may be obtained from various sources, however, the source of the soils must be demonstrated to be from land of a non-contaminative history or a reputable manufacturing plant. It shall remain the responsibility of the Client or their Contractor to obtain soils complying with the specification which are likely to be subject to additional on-site/in-situ tests specified by the Consultant to accord with Local Planning Authority (LPA) and/or build warranty requirements.

TOPSOIL

Topsoil should meet the physical criteria set out by the projects landscape architect to ensure suitable growing media for selected planting. Soils should be inspected to ensure no deleterious (harmful to humans) objects, such as sharps or hard materials.

SUBSOIL

Sub-soil should meet the physical criteria set out by the projects landscape architect to ensure suitable growing media for selected planting. Soils should be inspected to ensure no deleterious (harmful to humans) objects, such as sharps or hard materials.

CHEMICAL CRITERIA

Chemical concentrations considered to appropriate for a tier 2 Generic Quantitative Risk Assessment (GQRA) as recommended by LCRM are appended for the following residential land uses:

-  Engineering fill (Public Open Space by residential development) with asbestos <0.1%.
-  Private gardens with homegrown produce.
-  Communal gardens without homegrown produce.
-  Public Open Space by residential development.

ACCEPTANCE/REJECTION OF MATERIAL

Where a material considered for procurement fails to meet the above criteria it should be rejected and an alternative source sought. Where material is tested in-situ/on-site and fails the necessary physical criteria (by testing or inspection) and chemical criteria (by testing) it should be removed from site and not used with soft landscaped areas or cover systems.

STORAGE OF RE-USED OR IMPORTED MATERIAL

Any re-used or imported material on to site must be kept in quarantine to prevent cross contamination from any residual soil contamination not yet encapsulated by hardstanding or from uncontrolled deposition of building materials; such as operatives throwing waste on a heap. Ideally quarantine should be upon a membrane and behind fencing/under a tarpaulin.



Residential with Homegrown Produce
Soil Screening Values (GACs)
Private Gardens

Determinant	1% SOM (mg/kg)	2.5% SOM (mg/kg)	6% SOM (mg/kg)	Criteria	Determinant	1% SOM (mg/kg)	2.5% SOM (mg/kg)	6% SOM (mg/kg)	Criteria
METALS, SEMI-METALS, INORGANICS + PAH					Pyrene	620	1,200	2,000	LQM S4UL
Arsenic	37	37	37	C4SL/LQM S4UL	Phenols	78	0.98	1.1	LQM S4UL
Boron	290	290	290	LQM S4UL	TOTAL PETROLEUM HYDROCARBONS				
Cadmium	11	11	11	LQM S4UL	Benzene	0.087	0.17	0.37	LQM S4UL
Chromium III	910	910	910	LQM S4UL	Toluene	130	290	660	LQM S4UL
Chromium IV	6	6	6	LQM S4UL	Ethlybenzene	47	110	260	LQM S4UL
Copper	2,400	2,400	2,400	LQM S4UL	o-xylene	60	140	330	LQM S4UL
Mercury	1.2	1.2	1.2	LQM S4UL	m-xylene	59	140	320	LQM S4UL
Nickel	180	180	180	LQM S4UL	p-xylene	56	130	310	LQM S4UL
Lead	200	200	200	LQM S4UL	Aliphatic EC 5-6	42	78	160	LQM S4UL
Selenium	250	250	250	LQM S4UL	Aliphatic EC >6-8	100	230	530	LQM S4UL
Zinc	3,700	3,700	3,700	LQM S4UL	Aliphatic EC >8-10	27	65	150	LQM S4UL
Free Cyanide	34	34	34	ATRISK	Aliphatic EC >10-12	130	330	760	LQM S4UL
Acenaphthene	210	510	1100	LQM S4UL	Aliphatic EC >12-16	1,100	2,400	4300	LQM S4UL
Acenaphthylene	170	420	920	LQM S4UL	Aliphatic EC >16-35	65,000	92,000	110,000	LQM S4UL
Anthracene	2,400	5,400	11,000	LQM S4UL	Aliphatic EC >35-44	65,000	92,000	110,000	LQM S4UL
Benzo(a)anthracene	7.2	11	13	LQM S4UL	Aromatic EC 5-7 (benzene)	70	140	300	LQM S4UL
Benzo(a)pyrene	2.2	2.7	3	LQM S4UL	Aromatic EC >7-8 (toluene)	130	290	660	LQM S4UL
Benzo(b)fluoranthene	2.6	3.3	3.7	LQM S4UL	Aromatic EC >8-10	34	83	190	LQM S4UL
Benzo(ghi)perylene	320	340	350	LQM S4UL	Aromatic EC >10-12	74	180	380	LQM S4UL
Benzo(k)fluoranthene	77	93	100	LQM S4UL	Aromatic EC >12-16	140	330	660	LQM S4UL
Chrysene	15	22	27	LQM S4UL	Aromatic EC >16-21	260	540	930	LQM S4UL
Dibenz(ah)anthracene	0.24	0.28	0.3	LQM S4UL	Aromatic EC >21-35	1,100	1,500	1,700	LQM S4UL
Fluoranthene	280	560	890	LQM S4UL	Aromatic EC >35-44	1,100	1,500	1,700	LQM S4UL
Fluorene	170	400	860	LQM S4UL	Aromatic EC >44-70	1,600	1,800	1,900	LQM S4UL
Indeno(123-cd)pyrene	27	36	41	LQM S4UL	ASBESTOS				
Naphthalene	2.3	5.6	13	LQM S4UL	None Detectable			Aviron Adopted Value	
Phenanthrene	95	220	440	LQM S4UL					

AVIRON ASSOCIATES LIMITED

is a dynamic company of Chartered Environmental Surveyors and Geotechnical Engineers.

We continuously work hard to ensure our services are the most technically competent, efficient and viable in our market place. Our years of experience of vastly varied sites and projects compliment our ability to deliver assured and effective Ground Investigations and Risk Assessments of both Brownfield, Greenfield and Currently Developed Land.

Our clients choose Aviron to plan, design and manage their Ground Investigations and Land Remediation Schemes assisting in land procurement to deliver engineering requirements, discharge planning and ensure their sites are suitable, developable and sustainable.

Our tenaciously committed team ensure regardless of project value we will always deliver quickly, effectively and exceed expectations.



AVIRON ASSOCIATES LIMITED

Badgemore House
Badgemore Park
Gravel Hill
Henley on Thames
Oxfordshire
RG9 4NR

TELEPHONE: 07787 771 686 / 01491 413 722

FAX : 01491 413 722

ENQUIRIES: james@aviron.co.uk

WEB: www.aviron.co.uk