

# **Land off Kirton's Farm Road, Reading**

## **Soil Characterisation Report**

30250853-AUK-XX-ZZ-TR-ZZ-0004-P004

FEBRUARY 2025

# Land off Kirton's Farm Road, Reading

## Soil Characterisation Report

|             |                                    |
|-------------|------------------------------------|
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| Arcadis Ref | 30250853-AUK-XX-ZZ-TR-ZZ-0004-P004 |

## Version Control

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| P003    | 27/10/2025 | SC     | Minor amendments |
| P004    | 14/07/2026 | LH     | Minor amendments |

This report dated 04 February 2025 has been prepared for M&G Real Estate (M&G) acting on behalf of Prudential Assurance Company Ltd (the "Client") in accordance with the terms and conditions of appointment 20 November 2024 (the "Appointment") between the Client and **Arcadis Consulting (UK) Limited** ("Arcadis") for the purposes specified in the Appointment. For avoidance of doubt, no other person(s) may use or rely upon this report or its contents, and Arcadis accepts no responsibility for any such use or reliance thereon by any other third party.

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# 1 Introduction

## 1.1 Background

- 1.1.1 Arcadis Consulting (UK) Limited ("Arcadis") has been commissioned by M&G Real Estate (M&G) acting on behalf of Prudential Assurance Company Ltd ("the Client") to carry out soil sampling to characterise previously imported soils in support of a Town and Country Planning Act (TCPA) application for the removal of soils and subsequent restoration of a site for future agricultural use (the Proposed Development), for a parcel of land off Kirton's Farm Road, near Reading, Berkshire.
- 1.1.2 The Site is currently vacant with scrub and vegetation growth present. A quantity of natural soils generated as a result of forming a development platform for an adjacent historical development in the area were located to part of the Site under agreement with Englefield Estate Trust Corporation Limited (the 'Freeholders') and have been present at the Site for over 20 years.

## 1.2 Proposed Development

- 1.2.1 The Proposed Development involves the removal of the previously imported soils (approximately 18,000 m<sup>3</sup>) currently stored on part of the Site, including required enabling works, followed by the restoration and reprofiling of the land to its original level (using only indigenous material, placed elsewhere on the site only) and condition for future agricultural use, as originally intended.

## 1.3 Aim & Objectives

- 1.3.1 The key aim of the assessment is to provide relevant information that can be used to determine suitable management options for the soil including the provision of information to a facility that has relevant authorisation to accept the soils.
- 1.3.2 The following details the aims and objectives:
- Completion of health and safety (H&S) documentation to support the Ground Investigation (GI) works;
  - Collection of 10 shallow soil samples and associated laboratory analysis for a range of determinands to assess the soil characterisation and quality;
  - Comparison of the findings with previous investigations tested by Ramboll in 2015; and
  - Present the results of the GI detailing the ground conditions and laboratory results to be detailed in a report (this report).

## 1.4 Site Description

- 1.4.1 The Site comprises a vacant triangular parcel of land that historically a quantity of natural soils were transported to and placed on the eastern half of the Site. The Site is bounded on all three sides by bramble, ruderal vegetation and semi-mature or mature trees. Along the eastern edge of the Site a small access track is present (aligned parallel with Kirton's Farm Road adjacent to the east) of which a small portion is surfaced with asphalt. The western part of the Site, which was not subject to the placement of previously imported soils, is also slightly raised above the land to the north and south. This concurs with the known history of the Site, where indigenous materials were re-profiled and moved to the western part of the Site prior to the import of the soils placed in the eastern half. Distinct areas denoted by small dips are visible in the eastern part of the Site that was subject to the placement of soils by M&G. A definitive line was observed between the east and west areas where original ground level was observed. At the time of writing this report, the Site had been recently de-vegetated with scrub grass and cut down bramble / scrub present at surface.

## 1.5 Reliability of Information / Limitations

- 1.5.1 This report is only valid when used in its entirety. Any information or advice included in the report should not be relied upon until considered in the context of the whole report and previous work. Reference should be made to the full Study Limitations presented in Appendix A.
- 1.5.2 Arcadis' liability, pursuant to the terms of the appointment of Arcadis by M&G, is strictly limited to the work undertaken and the matters contained and specifically referred to in this report.
- 1.5.3 Ground investigations by nature only reveal a small percentage of the ground conditions present beneath the Site. The possibility of significant variation in ground conditions existing between sampling locations cannot be discounted. Reported ground conditions are based on observations made at the time of the ground investigation. Levels are based on depths below ground (surface) level at the time of the investigation
- 1.5.4 The following should be noted:
- GI was limited to a maximum exploratory depth of 0.3. m bgl (shallow hand dug pits as per proposal); and
  - GI locations were only advanced within the eastern half of site where the previously imported soils were placed.

## 1.6 Reliance

- 1.6.1 It is understood that the current report will be prepared for the use of M&G. The contents of this report may not be used or relied upon by any person other than this party without the express written consent and authorisation of Arcadis.

## 2 Ground Investigation and Findings

### 2.1 Scope of Ground Investigation

- 2.1.1 The aim of the GI was to collect samples from the previously imported soils to confirm that the soil conditions and chemical characterisation completed by Ramboll in 2015 (Ramboll UK Ltd, 2021) is still valid and provide supplementary information.
- 2.1.2 A summary of the completed Ground Investigation works is presented as follows:
- Completion of H&S documentation including an Arcadis permit to dig procedure at ten locations prior to breaking ground;
  - Cable Avoidance Tool (CAT) scan of 10 locations to check for presence of buried utilities in-line with Arcadis H&S memorandum of change documentation;
  - Completion of 10 hand excavated shallow inspection pits advanced to 0.3 m bgl on the 13 December 2024;
  - Logging of all locations in general accordance with BS5930 (British Standards Institution);
  - Collection of a single soil sample from each location; and
  - Chemical testing of the 10 collected soil samples by an MCERTS/ UKAS accredited laboratory.
- 2.1.3 The hand pits were located at areas not investigated previously by Ramboll. No investigation was undertaken in the area previously identified as containing construction and demolition waste. Figure 3 attached shows the location of the hand-pits.

### 2.2 Laboratory Testing

- 2.2.1 The suite of chemical testing selected was based on the testing completed by Ramboll the rationale for which is presented in the Ramboll reporting (L1620011452-035\_01.docx01) (Ramboll UK Ltd, 2021). In summary, the testing schedule was based on a general suite of determinands together with pesticides given the probable agricultural origin of the previously imported soils as previously identified by Ramboll. The Arcadis testing suite is presented in Table 2-1 below, with all 10 samples scheduled for the testing with the exception of Waste Acceptance Criteria testing which was scheduled on 6 samples only.

Table 2-1 Laboratory Testing Suite

| Testing Suite                                                                                            | Comment                                                                        |
|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Metals – Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Zinc. Hexavalent chromium. | General metals suite as per Ramboll testing                                    |
| Speciated Polycyclic aromatic hydrocarbons (PAHs)                                                        | General PAH suite, total of 16 or 17 depending on whether WAC suite was tested |
| Pesticides – organochlorine, organophosphorus, acid herbicides                                           | Scheduled due to likely agricultural origin of soils                           |
| Total Petroleum Hydrocarbons – Criteria Working Group (TPH CWG) – aliphatic / aromatic C5-C35            | As per Ramboll testing                                                         |

| Testing Suite                                                                         | Comment                                                            |
|---------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| Benzene, toluene, ethylbenzene, xylene (BTEX) and methyl-tertiary-butyl-ether ( MTBE) |                                                                    |
| Asbestos screen                                                                       | Asbestos screen as per Ramboll testing                             |
| Total cyanide                                                                         | As per Ramboll testing                                             |
| Sulphate as SO <sub>4</sub>                                                           | As per Ramboll testing                                             |
| Soil Organic Matter / Total Organic Carbon                                            | To provide information on natural organic content of sampled soils |
| Loss on Ignition                                                                      | To provide information on natural organic content of sampled soils |
| WAC Testing                                                                           | To inform potential routes for the management of soils             |
| Polychlorinated biphenyls (PCBs)                                                      | Included as part of the WAC testing suite                          |

## 2.3 Ground Conditions

2.3.1 The ground conditions encountered and summarised in Table 3-2 below are from the Arcadis GI. Exploratory hole logs are presented in Appendix B and site photographs are presented in Appendix C.

Table 2-2 Encountered Ground Conditions

| Stratum                                      | Depth Encountered | Encountered Thickness Range (m) |
|----------------------------------------------|-------------------|---------------------------------|
| Previously imported soils– surficial layer   | 0.00              | 0.05 – 0.10                     |
| Previously imported soils – subsurface layer | 0.00 – 0.10       | 0.20 – 0.30                     |

## 2.4 Previously Imported Soils – Surficial Layer

2.4.1 Encountered in 9 of the 10 locations. The surficial layer was typically described as a silty sandy clay with occasional gravel and frequent roots and rootlets; or a clayey sandy gravel with frequent roots and rootlets.

2.4.2 The surficial layer is thin <0.1m and has frequent organic content in the form of vegetation growth and roots / rootlets (that have developed in the 20 years since the soils were imported). Gravels within the surficial layer are flint, which is consistent with the underlying regional geology. A single anthropogenic inclusion (concrete cobble) was observed in one location only (HP08).

## 2.5 Previously Imported Soils – Subsurface Layer

- 2.5.1 Encountered at all locations and typically described as a brown sandy gravelly clay or a clayey sandy gravel with occasional or rare rootlets. The “subsurface” layer was encountered from the surface in HP07.
- 2.5.2 Rare anthropogenic inclusions were observed within this subsurface layer in 1 location only (HP05) consisting of brick, concrete and fabric.
- 2.5.3 The ground conditions encountered are generally consistent with the previous GI completed by Ramboll (refer previous reporting for full summary (Arcadis, 2025) & (Ramboll UK Ltd, 2021)). It is noted here that Ramboll logged most of the soils as topsoil. However, based on the observation recorded on the exploratory hole logs as part of this GI, Arcadis consider that the soils appear to be consistent with a sub-soil (excluding the surficial layer, due to the vegetation growth). Furthermore, specialist testing carried out by Ramboll failed the British Standard test for topsoil classification. The soils also appear to be consistent with a local source due to the presence of flint gravels which is consistent with the expected regional geology (Beenham Grange Gravel Member) (British Geological Survey).

## **2.6 Visual and Olfactory Evidence of Contamination**

- 2.6.1 Visual and olfactory evidence of contamination was not encountered during the GI. Photo-ionisation detector (PID) screening of samples recorded negligible concentrations of volatile organic compound concentrations (i.e. all results between 0.0 – 0.3ppm).

## 3 Laboratory Testing Results

3.1.1 Ten samples were collected from the base of each hand pit at a depth of approximately 0.3 m bgl and were analysed for a range of determinands (refer Table 2 above) by Element laboratory. Element is accredited under the United Kingdom Accreditation Service (UKAS) and Monitoring Certification Scheme (MCertS) (for selected chemical analysis) laboratory and an Arcadis approved supplier.

### 3.2 Summary of the chemical results

3.2.1 Table 3-1 below summarises the results of the laboratory analysis completed by Arcadis and Ramboll and where available the anticipated background concentration for soils based on the underlying geology as provided in the Groundsure report (Groundsure, 2024). Laboratory certificates for the Arcadis GI and Ramboll GI are provided in Appendix D.

Table 3-1 Summary Table - Range of Determinand Concentrations

| Determinand                                  | Range mg/kg <sup>1</sup> (min – max) |              | Background Concentration <sup>2</sup> |
|----------------------------------------------|--------------------------------------|--------------|---------------------------------------|
|                                              | Arcadis GI                           | Ramboll GI 3 | Background                            |
| <b>Metals</b>                                |                                      |              |                                       |
| Arsenic                                      | 4.5 – 11.3                           | 4.7 – 13.9   | 15 – 25                               |
| Cadmium                                      | <0.1 – 0.1                           | <0.1 – 0.3   | 1.8                                   |
| Chromium                                     | 56.1 – 98.9                          | 43.6 – 141.7 | 60 – 90                               |
| Hexavalent Chromium                          | <LOD <sup>4</sup>                    | <LOD         | -                                     |
| Copper                                       | 7 – 22                               | 7 – 24       | -                                     |
| Lead                                         | 13 – 37                              | 7 – 31       | 100                                   |
| Mercury                                      | <LOD                                 | <LOD         | -                                     |
| Nickel                                       | 10.2 – 27.8                          | 11.1 – 35.8  | 15 - 30                               |
| Selenium                                     | <LOD                                 | <1 – 1       | -                                     |
| Zinc                                         | 24 – 65                              | 27 – 78      | -                                     |
| <b>PAHs</b> - Sum of 17                      | <0.64 – 22.8                         | -            | -                                     |
| <b>PAHs</b> - Sum of 16                      | <LOD                                 | <0.6 – 6.4   | -                                     |
| <b>PCBs</b> - Sum of 7 (µg / kg)             | <LOD                                 | -            | -                                     |
| Pesticides                                   | <LOD                                 | <LOD         | -                                     |
| TPH Total (C <sup>5</sup> -C <sup>35</sup> ) | <38 – 39                             | <38 – 73     | -                                     |

| Determinand                 | Range mg/kg <sup>1</sup> (min – max) |                      | Background Concentration <sup>2</sup> |
|-----------------------------|--------------------------------------|----------------------|---------------------------------------|
|                             | Arcadis GI                           | Ramboll GI 3         | Background                            |
| BTEX / MTBE (µg / kg)       | <LOD                                 | <LOD                 | -                                     |
| Total Cyanide               | <LOD                                 | <LOD                 | -                                     |
| Sulphate as SO <sub>4</sub> | <0.0015 – 0.0224                     | <0.0015 – 2.1891     | -                                     |
| pH (pH unit)                | 7.21 – 8.55                          | 7.09 – 8.23          | -                                     |
| Total Organic Carbon (%)    | 0.64 – 1.67                          | 0.14 – 1.49          | -                                     |
| Soil Organic Matter (%)     | <0.2 – 2.9                           | -                    | -                                     |
| Loss on Ignition (%)        | 3.2 – 6.3                            | -                    | -                                     |
| Phenol                      | <LOD                                 | <LOD                 | -                                     |
| Asbestos                    | No asbestos detected                 | No asbestos detected | -                                     |

1 – mg/kg unless otherwise stated.

2 – Background concentrations are BGS estimated values from rural topsoil data collected at a sample density of approximately 1 per 2 km<sup>2</sup> taken from the Groundsure Report (Groundsure, 2024).

3 – Not including Ramboll samples TP34 and TP34a from within the Construction and Demolition stockpile and therefore not including the detectable concentration of asbestos in TP34.

4 – <LOD = below laboratory limit of detection.

### 3.3 Discussion of the results

3.3.1 As shown in Table 3 above the range of concentrations of the analytes tested by Arcadis and Ramboll are very similar and typically recorded within the same order of magnitude.

### 3.4 Metals

3.4.1 Metals were generally recorded at low concentrations at or below background concentrations in both the Arcadis GI and the Ramboll GI. Chromium was recorded marginally above the upper background concentration in the Arcadis GI in one sample only (98.9 mg/kg vs 90 mg/kg) and slightly above the upper background concentration range in the Ramboll GI (141.7 mg/kg). Nickel was recorded within the background concentration range in the Arcadis GI and slightly above the upper background range within the Ramboll GI (35.8 mg/kg vs 30 mg/kg).

### 3.5 PAHs

- 3.5.1 PAHs were generally recorded at low or non-detect concentrations in the Arcadis GI and the Ramboll GI. A number of speciated PAH compounds were recorded in one sample (HP07) from the Arcadis GI with a total sum of 17 PAHs of 22.88 mg/kg. No obvious source of PAHs were observed during the GI (e.g. asphalt fragments).

## **3.6 TPH CWG**

- 3.6.1 Concentrations of total petroleum hydrocarbons (TPH) were typically non-detect or recorded at very low concentrations within the Arcadis GI (e.g. HP03 – aromatic EC<sub>21</sub>-EC<sub>35</sub> – 39 mg/kg). This is consistent with the Ramboll GI which also largely reported non-detect or very low concentrations of TPH. There was no visual staining, no olfactory evidence noted or elevated PID readings in HP03.

## **3.7 Total Organic Carbon**

- 3.7.1 Total Organic Carbon concentrations are generally low in both GI's ranging between 0.64 – 1.67 mg/kg in the Arcadis GI and 0.14 – 1.49 mg /kg in the Ramboll GI.

## **3.8 pH**

- 3.8.1 pH values were recorded within neutral ranges anticipated for soils (7-9) in both GIs.

## **3.9 Asbestos**

- 3.9.1 No asbestos was detected in the samples from the Arcadis and Ramboll GIs, with the exception of the single sample (TP34) from the Construction and Demolition waste (C&D) stockpile collected in the Ramboll GI, which is not included within the table summary above.

## **3.10 Non-Detect Results**

- 3.10.1 As presented in Table 3 above pesticides, phenol, asbestos, BTEX / MTBE, hexavalent chromium, PCBs, total cyanide and mercury were all reported as below the laboratory limit of detection in all samples from both the Arcadis GI and Ramboll GI.

## **3.11 Waste Acceptance Criteria**

- 3.11.1 Six samples were scheduled for WAC testing, the results of which indicated that the samples analysed meet the inert landfill criteria for disposal.

## 4 Soil Characterisation Discussion

- 4.1.1 The ground conditions observed during the Arcadis GI were typically consistent with the ground conditions recorded in the Ramboll GI. A thin surficial layer was observed containing frequent rootlets and roots present due to vegetation growth on top of the previously imported soils. Underlying the surface layer is a sandy gravelly clay or clayey sandy gravel. It is considered that the soils encountered during the Arcadis GI are characteristic of a sub-soil and not a topsoil as was logged during the Ramboll GI. The inclusion of frequent flint gravels within the exploratory holes is also consistent with a local source i.e. likely to be from the Beenham Grange Gravel Member. This is consistent with the known local source of the soils as detailed in the Arcadis Desk Study Report (Arcadis, 2025) (Land at Kirtons Farm Road, Reading Phase 1 Preliminary Risk Assessment Report, 30250853-AUK-XX-ZZ-TR-ZZ-0004-P002).
- 4.1.2 The Ramboll reporting (Ramboll UK Ltd, 2021) included additional topsoil specification testing (six samples) to assess if the soil met the British Standard 3882 (2007 specification for topsoil). The samples failed to meet the British Standard BS 3882 for topsoil classification. Of note, based on the results that did not meet the relevant criteria for topsoil classification, was the low organic matter which was recorded below the threshold.
- 4.1.3 Considering the lines of evidence from the soils sampled in the Arcadis GI (observations and topsoil testing results from Ramboll GI) it is considered that the interpretation of the previously imported soils as sub soils rather than topsoil is appropriate.
- 4.1.4 Based on the laboratory results from both the Arcadis GI and the Ramboll GI the soils sampled appear to be locally sourced based on observations and the concentration of metals recorded in the soils are generally within the background concentration ranges. The concentrations of all determinands are considered to be low. PAHs recorded in a sample from one location (HP07) in the Arcadis GI were considered an outlier concentration (22.8mg/kg) compared with the other data sets which were generally non-detect. PAHs were recorded in 4 samples from the Ramboll GI and were a magnitude of order lower than the outlier concentration from the Arcadis GI (the maximum concentration of Total PAHs recorded was 6.4 mg/kg).
- 4.1.5 Waste acceptance criteria testing completed on six samples from the Arcadis GI and based on the results the soils would likely be suitable for acceptance at an inert landfill. However, the waste acceptance criteria are subject to the conditions set out in individual environmental permits for the receiving waste management facility.
- 4.1.6 The Arcadis GI did not investigate the C&D stockpile (estimated volume 170 m<sup>3</sup>) located in the north of the Site. These materials will not be removed off site with the sub soils in the main area and need to be transported to a separate waste management facility or permitted landfill. Given the vegetation and roots observed in the surficial layer (approximately 0.1m thick) present across the previously imported soils, it may be necessary for these soils to be transported to a waste management facility separate from the sub soils.

## 5 References

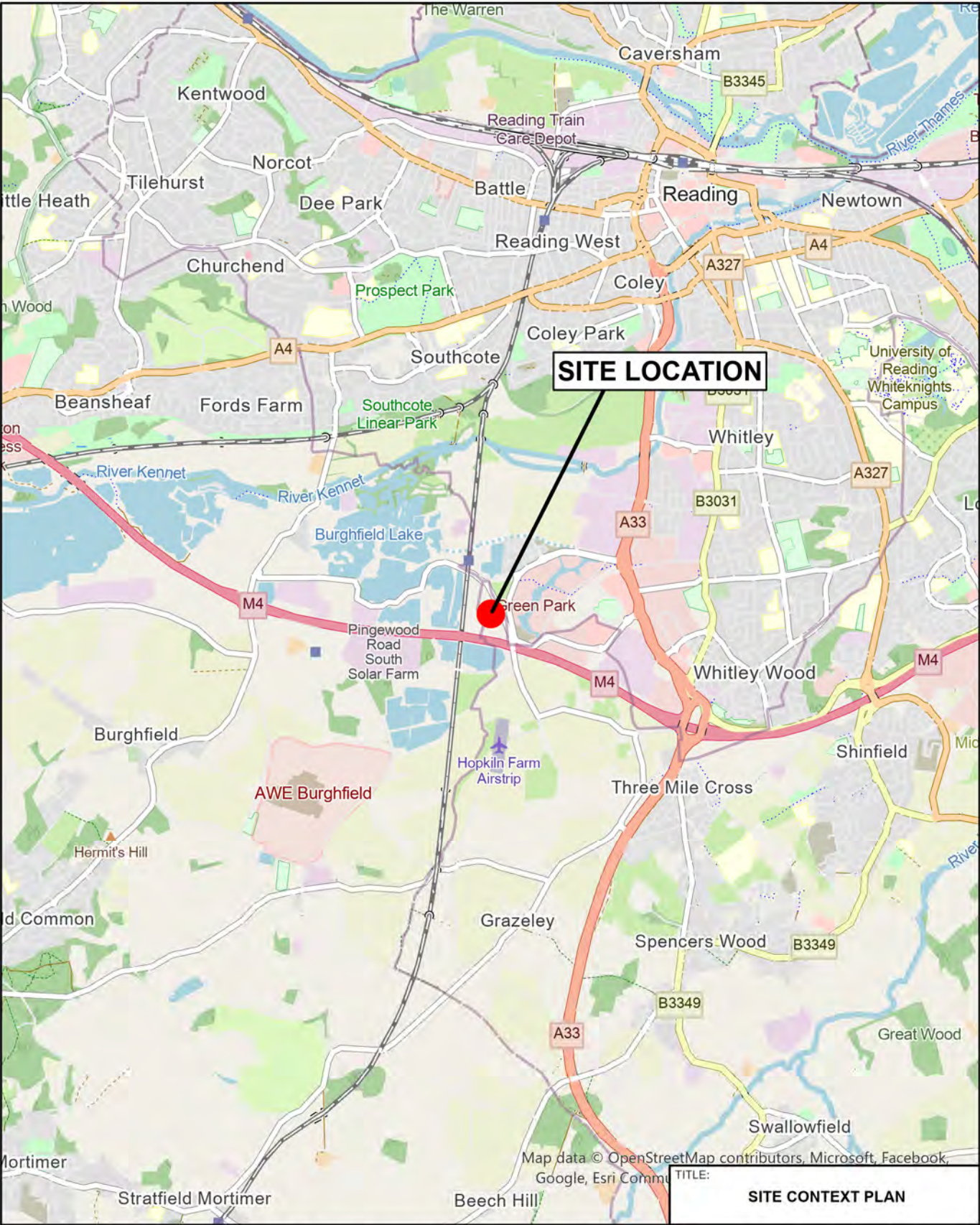
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- Groundsure. (2024). *Green Park, Reading. GS-DOD-DRT-WHU-LPH*.
- Ramboll UK Ltd. (2021). *Green Park: Assessment of Stockpiled Materials (Ref.no. L1620011452-035\_01.docx01)*.

## **6 Figures**

**Figure 1 – Site Context Plan**

**Figure 2 – Site Location Plan**

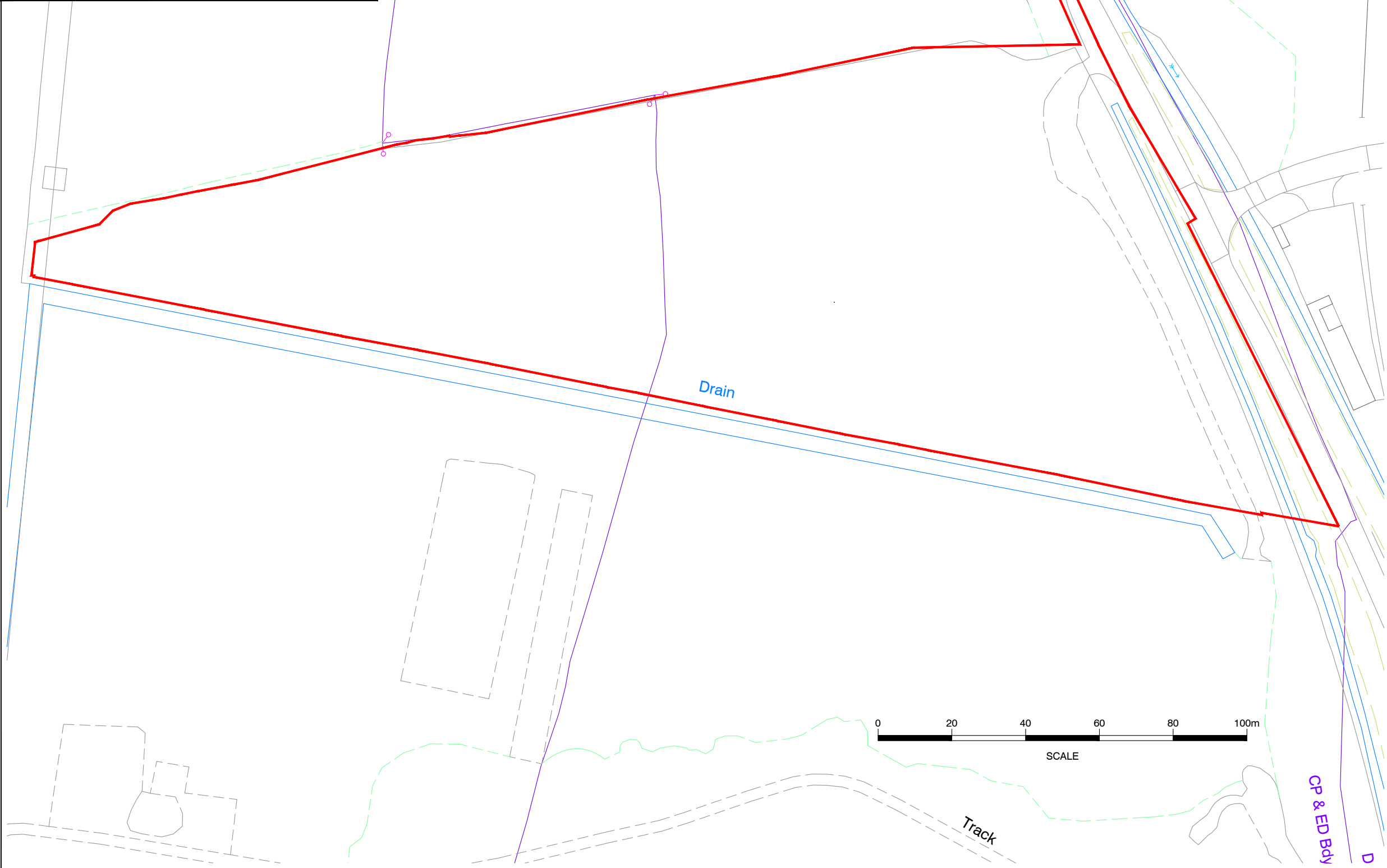
**Figure 3 – Exploratory Hole Location Plan**



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| LEGEND                                                       | NOTES |
|--------------------------------------------------------------|-------|
| <div><div></div><div>SITE LOCATION</div></div>               |       |
| <div><div>00.20.40.81.21.62</div><div>Kilometres</div></div> |       |

|                                                       |                 |
|-------------------------------------------------------|-----------------|
| TITLE:<br><b>SITE CONTEXT PLAN</b>                    |                 |
| SITE :<br><b>LAND OFF KIRTON'S FARM ROAD, READING</b> |                 |
| CLIENT :<br><b>M&amp;G REAL ESTATE</b>                |                 |
| PROJECT : <b>30280066</b>                             | <b>FIGURE 1</b> |
| DATE : 03/08/26                                       | DRAWN BY : BNB  |
| DRG No. : 30280066-AUK-XX-ZZ-DR-ZZ-0055-P001          |                 |
| SCALE : 1:50,000                                      | PRINT : A4      |
| <div><div></div><div>ARCADIS</div></div>              |                 |



Shelter

CP & ED Bdy  
D

**LEGEND:**  

RED LINE BOUNDARY

LOCAL AUTHORITY BOUNDARY

**NOTES:**  
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All entities shown on this drawing are to be regarded as approximate and are indicative only. No measurements taken from this drawing should be used for the location of intrusive investigation works on site. Symbols for boreholes, trial pits and other specific features are representations of location only and unless otherwise specified, do not represent the true size of the feature. Contact ARCADIS UK in case of any query.

|     |            |                       |       |       |        |
|-----|------------|-----------------------|-------|-------|--------|
|     |            |                       |       |       |        |
|     |            |                       |       |       |        |
| 2   | 31/07/2026 | SITE BOUNDARY REVISED | BNB   |       |        |
| 1   | 10/07/2026 | FIRST ISSUED          | BNB   |       |        |
| Rev | Date       | Description           | Drawn | Check | Approv |

PROJECT:  
LAND OFF KIRTON'S  
FARM ROAD, READING

Site  
LAND OFF KIRTON'S FARM ROAD  
READING

Client  
MAG REAL ESTATE  
10 FENCHURCH AVENUE  
LONDON  
EC3M 5AG

Registered office:  
80Fen  
80 Fenchurch Street  
London  
EC3M 4BY

Coordinating office:  
Office 107, WeiWork  
50-60 Station Road  
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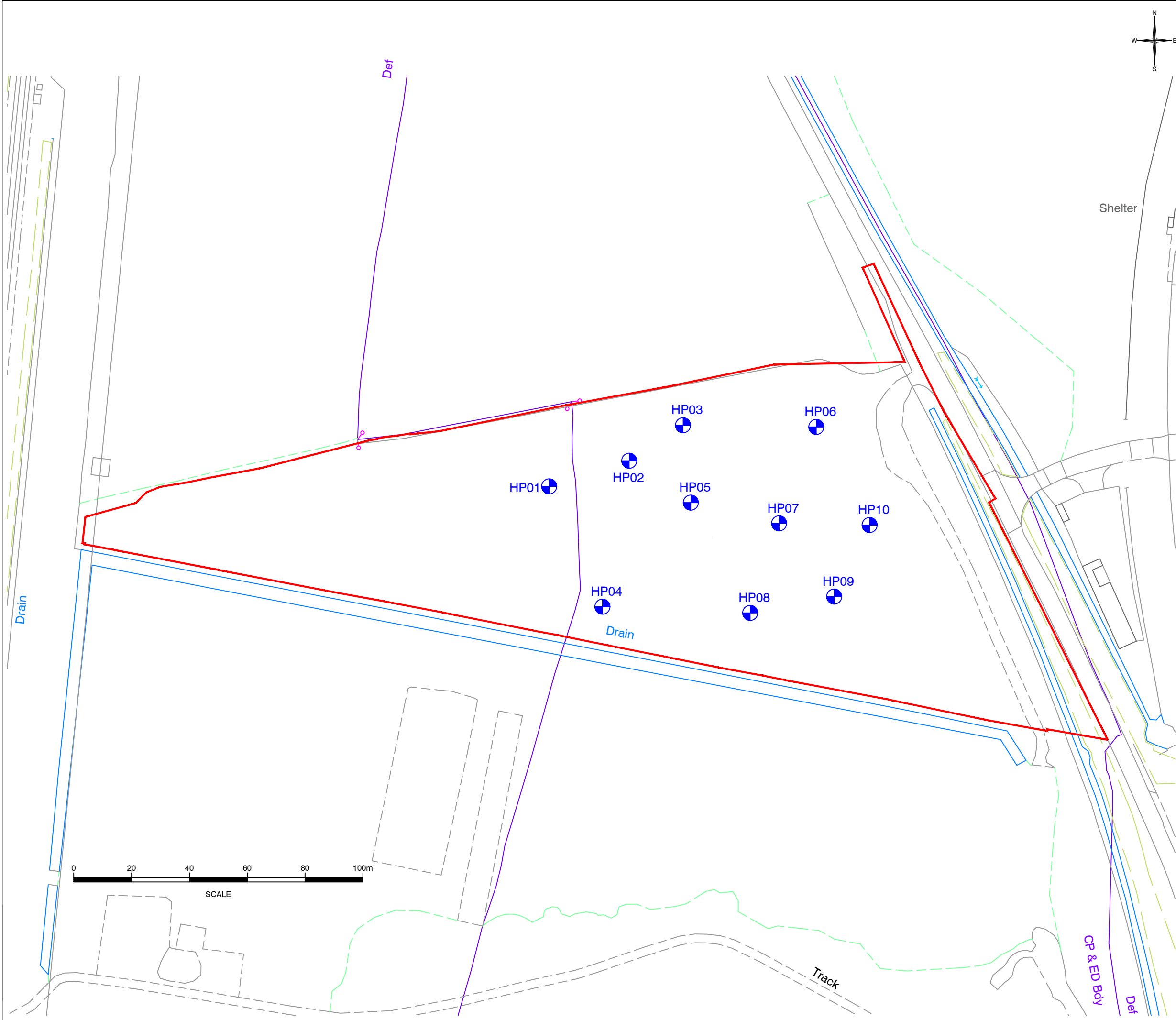
TITLE:  
  
SITE LOCATION PLAN

|                   |             |                    |          |
|-------------------|-------------|--------------------|----------|
| Designed          | B. Brinkman | Date<br>31/07/2026 | Signed   |
| Drawn             | B. Brinkman | Date<br>31/07/2026 | Signed   |
| Checked           | S. Cork     | Date<br>27/08/2026 | Signed   |
| Approved          | K. Baker    | Date<br>27/08/2026 | Signed   |
| Scale:            | 1:1150      | Datum:             | AOD      |
| Original Size:    | A3          | Grid:              | OS       |
| Suitability Code: | S2          | Project Number:    | 30280066 |

Suitability Description:  
For Information

|                                                       |                |
|-------------------------------------------------------|----------------|
| Drawing Number:<br>30280066-AUK-XX-ZZ-DR-ZZ-0057-P002 | Revision:<br>2 |
|-------------------------------------------------------|----------------|

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LEGEND:

— RED LINE BOUNDARY

⊕ HAND PIT LOCATION

NOTES:

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All entities shown on this drawing are to be regarded as approximate and are indicative only. No measurements taken from this drawing should be used for the location of intrusive investigation works on site. Symbols for boreholes, trial pits and other specific features are representations of location only and unless otherwise specified, do not represent the true size of the feature. Contact ARCADIS UK in case of any query.

|     |            |               |       |       |        |
|-----|------------|---------------|-------|-------|--------|
|     |            |               |       |       |        |
|     |            |               |       |       |        |
| 2   | 26/08/2026 | SECOND ISSUED | AP    | SC    | KB     |
| 1   | 10/07/2026 | FIRST ISSUED  | AP    | SC    | KB     |
| Rev | Date       | Description   | Drawn | Check | Approv |

PROJECT:

**LAND OFF KIRTON'S FARM ROAD, READING**

Site

Client

LAND OFF KIRTON'S FARM ROAD  
READING

MAG REAL ESTATE  
10 FENCHURCH AVENUE  
LONDON  
EC3M 5AG

Registered office:  
80 Fen  
80 Fenchurch Street  
London  
EC3M 4BY

Coordinating office:  
Office 107, WellWork  
50-60 Station Road  
Cambridge  
CB1 2JH

www.arcadis.com

TITLE:

**Exploratory Hole Location Plan  
(previously imported soils)**

|                   |          |                 |            |
|-------------------|----------|-----------------|------------|
| Designed          | L Day    | Date            | Dec 2024   |
| Drawn             | A.Petric | Date            | 10/08/2026 |
| Checked           | S Cork   | Date            | Aug 2026   |
| Approved          | K Baker  | Date            | Aug 2026   |
| Scale:            | 1:1250   | Datum:          | AOD        |
| Original Size:    | A3       | Grid:           | OS         |
| Suitability Code: | S2       | Project Number: | 30280066   |

Suitability Description:

**For Information**

Drawing Number:  
**30280066-AUK-XX-ZZ-DR-ZZ-0088-P002**

Revision:  
**2**

## Appendix A

### Study Limitations

This appendix should be read before reliance is placed on any of the information, opinions, advice, recommendations or conclusions contained in this report.

1. This report has been prepared by Arcadis (UK) Limited ('Arcadis'), with all reasonable skill, care and diligence within the terms of the Appointment and with the resources and manpower agreed with M&G Real Estate Limited (M&G) acting on behalf of Prudential Assurance Company Ltd (the 'Client'). Arcadis does not accept responsibility for any matters outside the agreed scope.
2. This report has been prepared for the sole benefit of the Client unless agreed otherwise in writing. The contents of this report may not be used or relied upon by any person other than this party without the express written consent and authorisation of Arcadis.
3. Unless stated otherwise, no consultations with authorities or funders or other interested third parties have been carried out. Arcadis is unable to give categorical assurance that the findings will be accepted by these third parties as such bodies may have unpublished, more stringent objectives. Further work may be required by these parties.
4. All work carried out in preparing this report has used, and is based on, Arcadis' professional knowledge and understanding of current relevant legislation. Changes in legislation or regulatory guidance may cause the opinion or advice contained in this report to become inappropriate or incorrect. In giving opinions and advice, pending changes in legislation, of which Arcadis is aware, have been considered. Following delivery of the report, Arcadis has no obligation to advise the Client or any other party of such changes or their repercussions.
5. This report is only valid when used in its entirety. Any information or advice included in the report should not be relied upon until considered in the context of the whole report.
6. Whilst this report and the opinions made are correct to the best of Arcadis' belief, Arcadis cannot guarantee the accuracy or completeness of any information provided by third parties. provided by third parties. Arcadis has taken reasonable steps to ensure that the information sources used for this assessment provided accurate information and has therefore assumed this to be the case.
7. This report has been prepared based on the information reasonably available during the project programme. All information relevant to the scope may not have been received.
8. This report refers, within the limitations stated, to the condition of the Site at the time of the inspection. No warranty

is given as to the possibility of changes in the condition of the Site since the time of the investigation.

9. The content of this report represents the professional opinion of experienced environmental consultants. Arcadis does not provide specialist legal or other professional advice. The advice of other professionals may be required.
10. Where intrusive investigation techniques have been employed, they have been designed to provide a reasonable level of assurance on the conditions. Given the discrete nature of sampling, no investigation technique is capable of identifying all conditions present in all areas. In some cases, the investigation is further limited by Site operations, underground obstructions and above ground structures. Unless otherwise stated, areas beyond the boundary of the Site have not been investigated.
11. If below ground intrusive investigations have been conducted as part of the scope, safe location of exploratory holes has been carried out with reference to the Arcadis ground disturbances procedure. No guarantee can be given that all services have been identified. Additional services, structures or other below ground obstructions, not indicated on the drawing, may be present on Site.
12. Unless otherwise stated the report provides no comment on the nature of building materials, operational integrity of the facility or on any regulatory compliance issues.
13. Unless otherwise stated, an inspection of the Site has not been undertaken and there may be conditions present at the Site which have not been identified within the scope of this assessment.
14. Unless otherwise stated, samples from the Site (soil, groundwater, building fabric or other samples) have not been obtained.
15. Arcadis has relied upon the accuracy of documents, oral information and other material and information provided by the Client and others, and Arcadis assumes no liability for the accuracy of such data, although in the event of apparent conflicts in information, Arcadis would highlight this and seek to resolve.
16. Unless otherwise stated, the scope of works has not included an environmental compliance review, health and safety compliance review, hazardous building materials assessment, interviews or contacting Local Authority, requests for information to the petroleum officer, sampling or analyses of soil, ground water, surface water, air or hazardous building materials or a chain of title review.
17. Unless otherwise stated, this assessment has considered the ongoing use of the Site and has not been prepared for the purposes of redevelopment which may act as a trigger for Site investigation and remediation works not needed for ongoing use.

## **Appendix B**

### **Ground Investigation Logs**

Project  
**Land at Kirtons Farm Road, Reading**  
Client  
**M&G**

Project No.  
**30250853**  
Easting (OS mE)  
**469672.06**

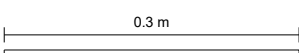
Ground Level (mAOD)  
-  
Northing (OS mN)  
**169725.88**

Start Date  
**13/12/2024**  
End Date  
**13/12/2024**

Scale  
**1:10**

**Sheet 1 of 1**

| SAMPLES      | TESTS                     |             | STRATA                                                                                                                   |                                                                                       | Strike | Depth (Thick) | Level                                                                                 | Install/Backfill                                                                    |
|--------------|---------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|---------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Depth - Type | Type - Depth (m) - Result |             | Description                                                                                                              | Legend                                                                                |        |               |                                                                                       |                                                                                     |
|              |                           |             | Dark brown silty sandy CLAY Occasional gravel, fine to coarse, angular to subrounded flint. Frequent roots and rootlets. |    | 0.05   |               |    |                                                                                     |
|              |                           |             | Brown sandy gravelly CLAY with rare roots. Firm to stiff. Gravel is angular to subrounded, fine to coarse flint.         |    |        |               |                                                                                       |  |
| (ES1) 0.30   | PID                       | 0.30m <1ppm |                                                                                                                          |    | (0.25) |               |    |                                                                                     |
|              |                           |             |                                                                                                                          |    | 0.30   |               |    |                                                                                     |
|              |                           |             |                                                                                                                          |    |        |               |    |                                                                                     |
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| PLAN DETAILS                                                                                                                                                  |  | WATER OBSERVATIONS                                                                          |        |      |      |         | NO MONITORING INSTRUMENTS INSTALLED |      |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------|--------|------|------|---------|-------------------------------------|------|-------|
|                                                                                                                                                               |  | Date/Time                                                                                   | Strike | Rest | Mins | Remarks | Name                                | Type | m AGL |
|  <p>Shoring / Support:</p> <p>Stability:</p> <p>Long Axis Orientation:</p> |  |                                                                                             |        |      |      |         |                                     |      |       |
|                                                                                                                                                               |  | REMARKS                                                                                     |        |      |      |         |                                     |      |       |
|                                                                                                                                                               |  | Surficial layer is 0.05 m thick and has frequent vegetation, roots and rootlets throughout. |        |      |      |         |                                     |      |       |

Unless otherwise stated:  
Depth (m bgl), Diameter (mm), From/To (m bgl),  
Level (m AOD/ASD), Thickness (m), Time (hhmm),  
Height Above Ground Level (m AGL)

**Insulated hand tools**

Termination Depth  
**0.30m**

|           |            |
|-----------|------------|
| Logged By | Checked By |
| <b>LD</b> | <b>SC</b>  |

Project  
**Land at Kirtons Farm Road, Reading**  
Client  
**M&G**

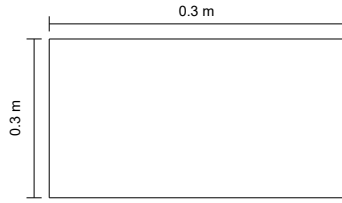
Project No.  
**30250853**  
Easting (OS mE)  
**469699.73**

Ground Level (mAOD)  
-  
Northing (OS mN)  
**169734.76**

Start Date  
**13/12/2024**  
End Date  
**13/12/2024**

Scale  
**1:10**  
Sheet 1 of 1

| SAMPLES      |                           | TESTS |  | STRATA                                                                                                                               |                                                                                     |  | Strike | Depth (Thick) | Level | Install/ Backfill                                                                     |
|--------------|---------------------------|-------|--|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|--------|---------------|-------|---------------------------------------------------------------------------------------|
| Depth - Type | Type - Depth (m) - Result |       |  | Description                                                                                                                          | Legend                                                                              |  |        |               |       |                                                                                       |
| (ES2) 0.30   | PID 0.30m <1ppm           |       |  | Dark brown silty sandy CLAY occasional gravel. Gravel is fine to coarse angular to subrounded of flint. Frequent roots and rootlets. |  |  | 0.05   |               |       |    |
|              |                           |       |  | Brown mottled orange sandy gravelly CLAY with rare roots. Stiff. Moist. Gravel is angular to subrounded, fine to coarse flint.       |  |  |        |               |       |    |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        | (0.25)        |       |                                                                                       |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  | 0.30   |               |       |    |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |    |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |    |
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|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |  |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |  |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |  |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |  |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |  |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |  |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |  |
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|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |  |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |  |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |  |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |  |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |  |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |  |
|              |                           |       |  |                                                                                                                                      |                                                                                     |  |        |               |       |  |

| PLAN DETAILS                                                                        |                                                            | WATER OBSERVATIONS |        |      |      | NO MONITORING INSTRUMENTS INSTALLED |      |      |
|-------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------|--------|------|------|-------------------------------------|------|------|
|  | Shoring / Support:<br>Stability:<br>Long Axis Orientation: | Date/Time          | Strike | Rest | Mins | Remarks                             | Name | Type |
|                                                                                     |                                                            |                    |        |      |      |                                     |      |      |
|                                                                                     |                                                            | REMARKS            |        |      |      |                                     |      |      |

Surficial layer is 0.05 m thick and has frequent vegetation, roots and rootlets throughout.

Unless otherwise stated:  
Depth (m bgl), Diameter (mm), From/To (m bgl),  
Level (m AOD/ASD), Thickness (m), Time (hhmm),  
Height Above Ground Level (m AGL)

Equipment Used  
**Insulated hand tools**

Termination Depth  
**0.30m**

Logged By  
**LD**  
Checked By  
**SC**

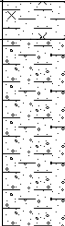
Project  
**Land at Kirtons Farm Road, Reading**  
Client  
**M&G**

Project No.  
**30250853**  
Easting (OS mE)  
**469720.11**

Ground Level (mAOD)  
-  
Northing (OS mN)  
**169746.90**

Start Date  
**13/12/2024**  
End Date  
**13/12/2024**

Scale  
**1:10**  
Sheet 1 of 1

| SAMPLES      | TESTS                     | STRATA                                                                                                                                            |                                                                                     | Depth | Level         | Install/Backfill                                                                    |
|--------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------|---------------|-------------------------------------------------------------------------------------|
| Depth - Type | Type - Depth (m) - Result | Description                                                                                                                                       | Legend                                                                              | Spike | Depth (Thick) |                                                                                     |
| (ES3) 0.30   | PID 0.30m <1ppm           | Dark brown silty very sandy CLAY with occasional gravel. Gravel is angular to subrounded flint, fine to coarse. With frequent roots and rootlets. |  | 0.05  | (0.25)        |  |
|              |                           | Brown very sandy gravelly CLAY with rare roots. Gravel is angular to subrounded flint, fine to coarse.                                            |                                                                                     |       |               |                                                                                     |
|              |                           |                                                                                                                                                   |                                                                                     |       |               |                                                                                     |

| PLAN DETAILS                                                                                |        | WATER OBSERVATIONS |      |         |      | NO MONITORING INSTRUMENTS INSTALLED |       |  |
|---------------------------------------------------------------------------------------------|--------|--------------------|------|---------|------|-------------------------------------|-------|--|
| Date/Time                                                                                   | Strike | Rest               | Mins | Remarks | Name | Type                                | m AGL |  |
| REMARKS                                                                                     |        |                    |      |         |      |                                     |       |  |
| Surficial layer is 0.05 m thick and has frequent vegetation, roots and rootlets throughout. |        |                    |      |         |      |                                     |       |  |

Project  
**Land at Kirtons Farm Road, Reading**  
Client  
**M&G**

Project No.  
**30250853**  
Easting (OS mE)  
**469690.47**

Ground Level (mAOD)  
-  
Northing (OS mN)  
**169684.29**

Start Date  
**13/12/2024**  
End Date  
**13/12/2024**

Scale  
**1:10**  
Sheet 1 of 1

| SAMPLES      | TESTS                     | STRATA                                                                                                                                  |                                                                                     | Spike                                                                               | Depth (Thick) | Level                                                                               | Install/Backfill                                                                    |
|--------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Depth - Type | Type - Depth (m) - Result | Description                                                                                                                             | Legend                                                                              |                                                                                     |               |                                                                                     |                                                                                     |
| (ES4) 0.30   | PID 0.30m <1ppm           | Dark brown silty sandy CLAY with occasional gravel. Gravel is angular to subrounded, fine to coarse flint. Frequent roots and rootlets. |  |  | 0.05          |  |  |
|              |                           | Brown sandy gravelly CLAY with rare roots. Stiff. Gravel is angular to subrounded, fine to coarse flint.                                |                                                                                     |                                                                                     | (0.25)        |                                                                                     |                                                                                     |
|              |                           |                                                                                                                                         |                                                                                     |                                                                                     | 0.30          |                                                                                     |                                                                                     |

| PLAN DETAILS                                                                                |        | WATER OBSERVATIONS |      |         |      |      | NO MONITORING INSTRUMENTS INSTALLED |  |  |
|---------------------------------------------------------------------------------------------|--------|--------------------|------|---------|------|------|-------------------------------------|--|--|
| Date/Time                                                                                   | Strike | Rest               | Mins | Remarks | Name | Type | m AGL                               |  |  |
|                                                                                             |        |                    |      |         |      |      |                                     |  |  |
| REMARKS                                                                                     |        |                    |      |         |      |      |                                     |  |  |
| Surficial layer is 0.05 m thick and has frequent vegetation, roots and rootlets throughout. |        |                    |      |         |      |      |                                     |  |  |

Project  
**Land at Kirtons Farm Road, Reading**  
Client  
**M&G**

Project No.  
**30250853**  
Easting (OS mE)  
**469721.05**

Ground Level (mAOD)  
**-**  
Northing (OS mN)  
**169720.28**

Start Date  
**13/12/2024**  
End Date  
**13/12/2024**

Scale  
**1:10**  
Sheet 1 of 1

| SAMPLES      |                           | TESTS                                                                                                                                                           |  | STRATA                                                                              |      | Strike | Depth (Thick)                                                                         | Level | Install/<br>Backfill |                                                                                     |
|--------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|------|--------|---------------------------------------------------------------------------------------|-------|----------------------|-------------------------------------------------------------------------------------|
| Depth - Type | Type - Depth (m) - Result | Description                                                                                                                                                     |  | Legend                                                                              |      |        |                                                                                       |       |                      |                                                                                     |
| (ES5) 0.30   | PID      0.30m   <1ppm    | Dark brown silty sandy CLAY Occasional gravel. Gravel is fine to coarse angular to subrounded flint. Frequent roots and rootlets.                               |  |  | 0.05 |        |    |       |                      |                                                                                     |
|              |                           | Brown sandy gravelly CLAY with rare roots. Stiff. Gravel is angular to subrounded, fine to coarse flint. Rare concrete cobble (100mm), brick (50mm) and fabric. |  |  |      |        |                                                                                       | 0.25  |                      |  |
|              |                           |                                                                                                                                                                 |  |  |      |        |                                                                                       |       |                      |                                                                                     |
|              |                           |                                                                                                                                                                 |  |                                                                                     |      |        |    |       |                      |                                                                                     |
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|              |                           |                                                                                                                                                                 |  |                                                                                     |      |        |  |       |                      |                                                                                     |
|              |                           |                                                                                                                                                                 |  |                                                                                     |      |        |  |       |                      |                                                                                     |
|              |                           |                                                                                                                                                                 |  |                                                                                     |      |        |  |       |                      |                                                                                     |
|              |                           |                                                                                                                                                                 |  |                                                                                     |      |        |  |       |                      |                                                                                     |
|              |                           |                                                                                                                                                                 |  |                                                                                     |      |        |  |       |                      |                                                                                     |
|              |                           |                                                                                                                                                                 |  |                                                                                     |      |        |  |       |                      |                                                                                     |
|              |                           |                                                                                                                                                                 |  |                                                                                     |      |        |  |       |                      |                                                                                     |
|              |                           |                                                                                                                                                                 |  |                                                                                     |      |        |  |       |                      |                                                                                     |
|              |                           |                                                                                                                                                                 |  |                                                                                     |      |        |  |       |                      |                                                                                     |
|              |                           |                                                                                                                                                                 |  |                                                                                     |      |        |  |       |                      |                                                                                     |
|              |                           |                                                                                                                                                                 |  |                                                                                     |      |        |  |       |                      |                                                                                     |

| PLAN DETAILS                                                                                                                                         |  |  |  | WATER OBSERVATIONS                                                                          |        |      |      |         | NO MONITORING INSTRUMENTS INSTALLED |      |       |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|---------------------------------------------------------------------------------------------|--------|------|------|---------|-------------------------------------|------|-------|--|
| <div><div><div>0.3 m</div><div>0.3 m</div></div><div><div>Shoring / Support:</div><div>Stability:</div><div>Long Axis Orientation:</div></div></div> |  |  |  | Date/Time                                                                                   | Strike | Rest | Mins | Remarks | Name                                | Type | m AGL |  |
|                                                                                                                                                      |  |  |  |                                                                                             |        |      |      |         |                                     |      |       |  |
|                                                                                                                                                      |  |  |  | REMARKS                                                                                     |        |      |      |         |                                     |      |       |  |
|                                                                                                                                                      |  |  |  | Surficial layer is 0.05 m thick and has frequent vegetation, roots and rootlets throughout. |        |      |      |         |                                     |      |       |  |

Project  
**Land at Kirtons Farm Road, Reading**  
Client  
**M&G**

Project No.  
**30250853**  
Easting (OS mE)  
**469766.18**

Ground Level (mAOD)  
-  
Northing (OS mN)  
**169746.30**

Start Date  
**13/12/2024**  
End Date  
**13/12/2024**

Scale  
**1:10**  
Sheet 1 of 1

| SAMPLES      |                           | TESTS | STRATA                                                                                                                        |        | Spike | Depth (Thick) | Level | Install/Backfill |
|--------------|---------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------|--------|-------|---------------|-------|------------------|
| Depth - Type | Type - Depth (m) - Result |       | Description                                                                                                                   | Legend |       |               |       |                  |
| (ES6) 0.30   | PID 0.30m <1ppm           |       | Dark brown clayey sandy GRAVEL Gravel is angular to subangular, fine to coarse flint. Frequent roots and rootlets.            |        |       | 0.05          |       |                  |
|              |                           |       | Brown silty sandy CLAY with occasional gravel, angular to subrounded, fine to coarse flint and occasional roots and rootlets. |        |       | (0.25)        |       |                  |
|              |                           |       |                                                                                                                               |        |       | 0.30          |       |                  |

| PLAN DETAILS                                                                                |        | WATER OBSERVATIONS |      |         |      |      | NO MONITORING INSTRUMENTS INSTALLED |  |  |
|---------------------------------------------------------------------------------------------|--------|--------------------|------|---------|------|------|-------------------------------------|--|--|
| Date/Time                                                                                   | Strike | Rest               | Mins | Remarks | Name | Type | m AGL                               |  |  |
|                                                                                             |        |                    |      |         |      |      |                                     |  |  |
| REMARKS                                                                                     |        |                    |      |         |      |      |                                     |  |  |
| Surficial layer is 0.05 m thick and has frequent vegetation, roots and rootlets throughout. |        |                    |      |         |      |      |                                     |  |  |

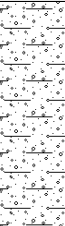
Project  
**Land at Kirtons Farm Road, Reading**  
Client  
**M&G**

Project No.  
**30250853**  
Easting (OS mE)  
**469751.57**

Ground Level (mAOD)  
**-**  
Northing (OS mN)  
**169713.10**

Start Date  
**13/12/2024**  
End Date  
**13/12/2024**

Scale  
**1:10**  
Sheet 1 of 1

| SAMPLES      | TESTS                     | STRATA                                                                                                                   |                                                                                     | Depth         | Level | Install/Backfill                                                                    |
|--------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------|-------|-------------------------------------------------------------------------------------|
| Depth - Type | Type - Depth (m) - Result | Description                                                                                                              | Legend                                                                              | Depth (Thick) |       |                                                                                     |
| (ES7) 0.30   | PID 0.30m <1ppm           | Brown mottled yellow clayey sandy GRAVEL with occasional rootlets. Gravel is angular to subrounded fine to coarse flint. |  | (0.30)        |       |  |
|              |                           |                                                                                                                          |                                                                                     | 0.30          |       |                                                                                     |

### PLAN DETAILS

0.3 m

0.3 m

Shoring / Support:  
Stability:  
Long Axis Orientation:

### WATER OBSERVATIONS

| Date/Time | Strike | Rest | Mins | Remarks |
|-----------|--------|------|------|---------|
|           |        |      |      |         |

### NO MONITORING INSTRUMENTS INSTALLED

| Name | Type | m AGL |
|------|------|-------|
|      |      |       |

### REMARKS

Unless otherwise stated:  
Depth (m bgl), Diameter (mm), From/To (m bgl),  
Level (m AOD/ASD), Thickness (m), Time (hhmm),  
Height Above Ground Level (m AGL)

Equipment Used  
**Insulated hand tools**

Termination Depth  
**0.30m**

Logged By  
**LD**  
Checked By  
**SC**

Project  
**Land at Kirtons Farm Road, Reading**  
Client  
**M&G**

Project No.  
**30250853**  
Easting (OS mE)  
**469743.32**

Ground Level (mAOD)  
-  
Northing (OS mN)  
**169682.00**

Start Date  
**13/12/2024**  
End Date  
**13/12/2024**

Scale  
**1:10**  
Sheet 1 of 1

| SAMPLES            | TESTS                     | STRATA                                                                                                                                                                   |        | Spike | Depth (Thick) | Level | Install/ Backfill |
|--------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------|---------------|-------|-------------------|
| Depth - Type       | Type - Depth (m) - Result | Description                                                                                                                                                              | Legend |       |               |       |                   |
| (ES8)<br>0.00-0.30 |                           | Greyish brown mottled yellow silty gravelly CLAY Gravel is angular to subrounded, fine to coarse flint. With frequent roots and rootlets. Concrete paver cobble (120mm). |        |       | (0.10)        |       |                   |
|                    |                           | Brown mottled orange silty gravelly CLAY Gravel is angular to subrounded, fine to coarse flint (up to 80mm). With rare roots.                                            |        |       | 0.10          |       |                   |
|                    |                           |                                                                                                                                                                          |        |       | (0.20)        |       |                   |
|                    |                           |                                                                                                                                                                          |        |       | 0.30          |       |                   |
|                    | PID 0.30m <1ppm           |                                                                                                                                                                          |        |       |               |       |                   |

| PLAN DETAILS                                                                               |        | WATER OBSERVATIONS |      |         |      |      | NO MONITORING INSTRUMENTS INSTALLED |  |  |
|--------------------------------------------------------------------------------------------|--------|--------------------|------|---------|------|------|-------------------------------------|--|--|
| Date/Time                                                                                  | Strike | Rest               | Mins | Remarks | Name | Type | m AGL                               |  |  |
|                                                                                            |        |                    |      |         |      |      |                                     |  |  |
| REMARKS                                                                                    |        |                    |      |         |      |      |                                     |  |  |
| Surficial layer is 0.1 m thick and has frequent vegetation, roots and rootlets throughout. |        |                    |      |         |      |      |                                     |  |  |

Project  
**Land at Kirtons Farm Road, Reading**  
Client  
**M&G**

Project No.  
**30250853**  
Easting (OS mE)  
**469770.61**

Ground Level (mAOD)  
-  
Northing (OS mN)  
**169687.78**

Start Date  
**13/12/2024**  
End Date  
**13/12/2024**

Scale  
**1:10**  
Sheet 1 of 1

| SAMPLES      | TESTS                     | STRATA                                                                                                                    |        | Spike | Depth (Thick) | Level | Install/ Backfill |
|--------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------|--------|-------|---------------|-------|-------------------|
| Depth - Type | Type - Depth (m) - Result | Description                                                                                                               | Legend |       |               |       |                   |
| (ES9) 0.30   | PID 0.30m <1ppm           | Dark brown silty gravelly CLAY Gravel is fine to medium, angular to subrounded flint. Frequent roots and rootlets.        |        |       | 0.05          |       |                   |
|              |                           | Brown mottled yellow clayey sandy GRAVEL with occasional rootlets. Gravel is angular to subrounded, fine to coarse flint. |        |       | (0.20)        |       |                   |
|              |                           | Dark brown clayey sandy GRAVEL Gravel is angular to subangular, fine to coarse flint.                                     |        |       | 0.25          |       |                   |
|              |                           |                                                                                                                           |        |       | 0.30          |       |                   |

| PLAN DETAILS |        | WATER OBSERVATIONS |      |         |                                                                                             |      | NO MONITORING INSTRUMENTS INSTALLED |  |  |
|--------------|--------|--------------------|------|---------|---------------------------------------------------------------------------------------------|------|-------------------------------------|--|--|
| Date/Time    | Strike | Rest               | Mins | Remarks | Name                                                                                        | Type | m AGL                               |  |  |
|              |        |                    |      |         | REMARKS                                                                                     |      |                                     |  |  |
|              |        |                    |      |         | Surficial layer is 0.05 m thick and has frequent vegetation, roots and rootlets throughout. |      |                                     |  |  |

Project  
**Land at Kirtons Farm Road, Reading**  
Client  
**M&G**

Project No.  
**30250853**  
Easting (OS mE)  
**469782.86**

Ground Level (mAOD)  
-  
Northing (OS mN)  
**169712.53**

Start Date  
**13/12/2024**  
End Date  
**13/12/2024**

Scale  
**1:10**  
Sheet 1 of 1

| SAMPLES      | TESTS                     | STRATA                                                                                                                            |        | Spike | Depth (Thick) | Level | Install/Backfill |
|--------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------|-------|---------------|-------|------------------|
| Depth - Type | Type - Depth (m) - Result | Description                                                                                                                       | Legend |       |               |       |                  |
| (ES10) 0.30  | PID 0.30m <1ppm           | Dark brown silty sandy CLAY occasional gravel. Gravel is fine to coarse angular to subrounded flint. Frequent roots and rootlets. |        |       | 0.05          |       |                  |
|              |                           | Brown silty sandy CLAY with occasional angular subrounded fine to coarse flint. Occasional roots and rootlets.                    |        |       | (0.25)        |       |                  |
|              |                           |                                                                                                                                   |        |       | 0.30          |       |                  |

| PLAN DETAILS |        | WATER OBSERVATIONS |      |         |                                                                                             |      | NO MONITORING INSTRUMENTS INSTALLED |  |  |
|--------------|--------|--------------------|------|---------|---------------------------------------------------------------------------------------------|------|-------------------------------------|--|--|
| Date/Time    | Strike | Rest               | Mins | Remarks | Name                                                                                        | Type | m AGL                               |  |  |
|              |        |                    |      |         | REMARKS                                                                                     |      |                                     |  |  |
|              |        |                    |      |         | Surficial layer is 0.05 m thick and has frequent vegetation, roots and rootlets throughout. |      |                                     |  |  |

## Appendix C

### Photograph Log

Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

**13/12/2024**

**Image ID: ED26**

Onsite, view of  
entrance looking  
north-east



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

**13/12/2024**

**Image ID: B041**

View onsite of  
access track, looking  
south-south-east



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

**13/12/2024 Image ID: EE73**

View looking north  
across previously  
imported soils



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

**13/12/2024**

**Image ID: EA44**

View looking west  
across Site



Client: M&G

Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

## Appendix C Photo Log



13/12/2024

Image ID: 6B1B

View of HP01



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

13/12/2024

Image ID: 0485

View of HP01  
arisings



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

**13/12/2024**

**Image ID: 5558**

View of HP01 looking  
north-west



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

13/12/2024

Image ID: 2B6B

View of HP02 and  
arising



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

**13/12/2024**

**Image ID: 3027**

View of HP02, note  
thin dark brown  
surficial layer with  
frequent organic  
content



Client: M&G

Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

## Appendix C Photo Log



**13/12/2024**

**Image ID: 6BAA**

View of HP02,  
looking south



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

13/12/2024

Image ID: 6471

View of HP03 and  
arisings



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

**13/12/2024**      **Image ID: 3135**

View of HP03 looking  
west



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

13/12/2024

Image ID: 2043

View of HP03 pit



Client: M&G

Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

## Appendix C Photo Log



**13/12/2024**

**Image ID: 95C5**

View of HP03 looking  
east



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

13/12/2024

Image ID: 7500

View of HP04 and  
arisings



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

13/12/2024

Image ID: 8444

View of HP04, note  
thin dark brown  
surficial layer with  
frequent organic  
content



Client: M&G

Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

## Appendix C Photo Log



13/12/2024

Image ID: 424E

View of HP04 looking  
south



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

13/12/2024 Image ID: A1EC

View of HP05 and  
arisings



Client: M&G

Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

## Appendix C Photo Log



**13/12/2024**

**Image ID: 5062**

View of HP05 pit



Client: M&G

Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

13/12/2024

Image ID: A891

View of HP05  
arising, note  
anthropogenic  
inclusions (brick,  
concrete, fabric)



Client: M&G

Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

## Appendix C Photo Log



13/12/2024

Image ID: 04CF

View of HP05 looking  
west



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

13/12/2024

Image ID: CF53

View of HP06 and  
arisings



Client: M&G

Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

## Appendix C Photo Log



13/12/2024

Image ID: ED20

View of HP06 looking  
south



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

**13/12/2024**

**Image ID: D548**

View of HP07 looking  
north



Client: M&G

Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

## Appendix C Photo Log



13/12/2024

Image ID: 0162

View of HP07 and  
arisings



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

13/12/2024

Image ID: 8C68

View of HP08 and  
arisings



Client: M&G

Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

13/12/2024

Image ID: DF77

View of HP08 pit



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

**13/12/2024**

**Image ID: 98A4**

View of HP08 looking  
south



Client: M&G

Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

13/12/2024

Image ID: E390

View HP08 arisings,  
note flint gravels  
present



Client: M&G

Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

13/12/2024

Image ID: 82B0

View of HP09 and  
arising



Client: M&G

Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

## Appendix C Photo Log



13/12/2024

Image ID: 7886

View of HP09 looking  
south



Client: M&G

Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

## Appendix C Photo Log



13/12/2024

Image ID: 3C3D

View of HP10 and  
arising



Client: M&G

## Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

**13/12/2024**

**Image ID: B405**

View of HP10 looking  
south



Client: M&G

Appendix C Photo Log



Site: Land at Kirtons Farm Road, Reading

Project Number: 3025083

**13/12/2024**

**Image ID: 5938**

View of roots in  
HP10 arisings



## **Appendix D**

### **Laboratory Results from Arcadis and Ramboll GI**

Arcadis  
80 Fenchurch Street  
London  
United Kingdom  
EC3M 4BY



4225



**Attention :** Luke Day  
**Date :** 6th January, 2025  
**Your reference :** 30250853  
**Our reference :** Test Report 24/21473 Batch 1  
**Location :** M+G Kennet Valley  
**Date samples received :** 14th December, 2024  
**Status :** Final Report  
**Issue :** 202501060846

Ten samples were received for analysis on 14th December, 2024 of which ten were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

The greenhouse gas emissions generated (in Carbon – Co2e) to obtain the results in this report are estimated as:

Scope 1&2 emissions - 53.938 kg of CO2

Scope 1&2&3 emissions - 127.47 kg of CO2

**Authorised By:**



**Simon Gomery BSc**

Senior Technical Account Manager

Please include all sections of this report if it is reproduced

**Client Name:** Arcadis  
**Reference:** 30250853  
**Location:** M+G Kennet Valley  
**Contact:** Luke Day  
**EMT Job No:** 24/21473

**Solids:** V=60g VOC jar. J=250g glass jar. T=plastic tub

Please see attached notes for all abbreviations and acronyms

**Client Name:** Arcadis  
**Reference:** 30250853  
**Location:** M+G Kennet Valley  
**Contact:** Luke Day  
**EMT Job No:** 24/21473

**Solids:** V=60g VOC jar. J=250g glass jar. T=plastic tub

Please see attached notes for all abbreviations and acronyms

## Element Materials Technology

**Client Name:** Arcadis  
**Reference:** 30250853  
**Location:** M+G Kennet Valley  
**Contact:** Luke Day  
**EMT Job No:** 24/21473

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

| EMT Sample No.                          | 1-6        | 7-9        | 10-15      | 16-18      | 19-24      | 25-27      | 28-33      | 34-37      | 38-43      | 44-48      | Please see attached notes for all abbreviations and acronyms |       |              |
|-----------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------------------------------------------------------|-------|--------------|
| Sample ID                               | HP01       | HP02       | HP03       | HP04       | HP05       | HP06       | HP07       | HP08       | HP09       | HP10       |                                                              |       |              |
| Depth                                   | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       |                                                              |       |              |
| COC No / misc                           |            |            |            |            |            |            |            |            |            |            |                                                              |       |              |
| Containers                              | V J T B    | V J B      | V J T B    | V J B      | V J T B    | V J B      | V J T B    | V J B      | V J T B    | V J T B    |                                                              |       |              |
| Sample Date                             | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 |                                                              |       |              |
| Sample Type                             | Clay       | Clay       | Clay       | Clay       | Clay       | Clay       | Clay       | Clay       | Clay       | Clay       |                                                              |       |              |
| Batch Number                            | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          |                                                              |       |              |
| Date of Receipt                         | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | LOD/LOR                                                      | Units | Method No.   |
| Acid Herbicides                         |            |            |            |            |            |            |            |            |            |            |                                                              |       |              |
| 2,3,6-TBA                               | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| 2,4-D                                   | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| 2,4-DB                                  | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| 2,4,5-T                                 | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| 4-CPA                                   | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Benazolin                               | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Bentazone                               | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Bromoxynil                              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Clopyralid                              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Dicamba                                 | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Dichloroprop                            | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Diclofop                                | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Fenoprop                                | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Flamprop                                | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Flamprop-isopropyl                      | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Ioxynil                                 | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| MCPA                                    | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| MCPB                                    | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Mecoprop                                | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Pentachlorophenol                       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Picloram                                | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Triclopyr                               | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM42/PM8     |
| Mineral Oil (C10-C40) (EH_CU_1D_AL)     | <30        | -          | <30        | -          | <30        | -          | <30        | -          | <30        | <30        | <30                                                          | mg/kg | TM5/PM8/PM16 |
| TPH CWG                                 |            |            |            |            |            |            |            |            |            |            |                                                              |       |              |
| Aliphatics                              |            |            |            |            |            |            |            |            |            |            |                                                              |       |              |
| >C5-C6 (HS_1D_AL) <sup>#M</sup>         | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12    |
| >C6-C8 (HS_1D_AL) <sup>#M</sup>         | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12    |
| >C8-C10 (HS_1D_AL)                      | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12    |
| >C10-C12 (EH_CU_1D_AL) <sup>#M</sup>    | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2                                                         | mg/kg | TM5/PM8/PM16 |
| >C12-C16 (EH_CU_1D_AL) <sup>#M</sup>    | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4                                                           | mg/kg | TM5/PM8/PM16 |
| >C16-C21 (EH_CU_1D_AL) <sup>#M</sup>    | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg | TM5/PM8/PM16 |
| >C21-C35 (EH_CU_1D_AL) <sup>#M</sup>    | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg | TM5/PM8/PM16 |
| Total aliphatics C5-35 (EH_CU+HS_1D_AL) | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19                                                          | mg/kg | TM5/PM8/PM16 |

## Element Materials Technology

**Client Name:** Arcadis  
**Reference:** 30250853  
**Location:** M+G Kennet Valley  
**Contact:** Luke Day  
**EMT Job No:** 24/21473

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

| EMT Sample No.                                            | 1-6               | 7-9        | 10-15      | 16-18      | 19-24      | 25-27      | 28-33      | 34-37      | 38-43      | 44-48      | Please see attached notes for all abbreviations and acronyms |          |                        |
|-----------------------------------------------------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------------------------------------------------------|----------|------------------------|
| Sample ID                                                 | HP01              | HP02       | HP03       | HP04       | HP05       | HP06       | HP07       | HP08       | HP09       | HP10       |                                                              |          |                        |
| Depth                                                     | 0.30              | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       |                                                              |          |                        |
| COC No / misc                                             |                   |            |            |            |            |            |            |            |            |            |                                                              |          |                        |
| Containers                                                | V J T B           | V J B      | V J T B    | V J B      | V J T B    | V J B      | V J T B    | V J B      | V J T B    | V J T B    |                                                              |          |                        |
| Sample Date                                               | 13/12/2024        | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 |                                                              |          |                        |
| Sample Type                                               | Clay              | Clay       | Clay       | Clay       | Clay       | Clay       | Clay       | Clay       | Clay       | Clay       |                                                              |          |                        |
| Batch Number                                              | 1                 | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | LOD/LOR                                                      | Units    | Method No.             |
| Date of Receipt                                           | 14/12/2024        | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 |                                                              |          |                        |
| TPH CWG                                                   |                   |            |            |            |            |            |            |            |            |            |                                                              |          |                        |
| <b>Aromatics</b>                                          |                   |            |            |            |            |            |            |            |            |            |                                                              |          |                        |
| >C5-EC7 (HS_1D_AR) #                                      | <0.1              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg    | TM36/PM12              |
| >EC7-EC8 (HS_1D_AR) #                                     | <0.1              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg    | TM36/PM12              |
| >EC8-EC10 (HS_1D_AR) #M                                   | <0.1              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg    | TM36/PM12              |
| >EC10-EC12 (EH_CU_1D_AR) #                                | <0.2              | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2                                                         | mg/kg    | TM5/PM8/PM16           |
| >EC12-EC16 (EH_CU_1D_AR) #                                | <4                | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4                                                           | mg/kg    | TM5/PM8/PM16           |
| >EC16-EC21 (EH_CU_1D_AR) #                                | <7                | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg    | TM5/PM8/PM16           |
| >EC21-EC35 (EH_CU_1D_AR) #                                | <7                | <7         | 39         | <7         | 22         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg    | TM5/PM8/PM16           |
| Total aromatics C5-35 (EH_CU+HS_1D_AR) #                  | <19               | <19        | 39         | <19        | 22         | <19        | <19        | <19        | <19        | <19        | <19                                                          | mg/kg    | TM5/PM8/PM16/PM12/PM10 |
| Total aliphatics and aromatics(C5-35) (EH_CU+HS_1D_Total) | <38               | <38        | 39         | <38        | <38        | <38        | <38        | <38        | <38        | <38        | <38                                                          | mg/kg    | TM5/PM8/PM16/PM12/PM10 |
| MTBE #                                                    | <5                | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg    | TM36/PM12              |
| Benzene #                                                 | <5                | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg    | TM36/PM12              |
| Toluene #                                                 | <5                | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg    | TM36/PM12              |
| Ethylbenzene #                                            | <5                | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg    | TM36/PM12              |
| m/p-Xylene #                                              | <5                | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg    | TM36/PM12              |
| o-Xylene #                                                | <5                | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg    | TM36/PM12              |
| PCB 28 #                                                  | <5 <sup>SV</sup>  | -          | <5         | -          | <5         | -          | <5         | -          | <5         | <5         | <5                                                           | ug/kg    | TM17/PM8               |
| PCB 52 #                                                  | <5 <sup>SV</sup>  | -          | <5         | -          | <5         | -          | <5         | -          | <5         | <5         | <5                                                           | ug/kg    | TM17/PM8               |
| PCB 101 #                                                 | <5 <sup>SV</sup>  | -          | <5         | -          | <5         | -          | <5         | -          | <5         | <5         | <5                                                           | ug/kg    | TM17/PM8               |
| PCB 118 #                                                 | <5 <sup>SV</sup>  | -          | <5         | -          | <5         | -          | <5         | -          | <5         | <5         | <5                                                           | ug/kg    | TM17/PM8               |
| PCB 138 #                                                 | <5 <sup>SV</sup>  | -          | <5         | -          | <5         | -          | <5         | -          | <5         | <5         | <5                                                           | ug/kg    | TM17/PM8               |
| PCB 153 #                                                 | <5 <sup>SV</sup>  | -          | <5         | -          | <5         | -          | <5         | -          | <5         | <5         | <5                                                           | ug/kg    | TM17/PM8               |
| PCB 180 #                                                 | <5 <sup>SV</sup>  | -          | <5         | -          | <5         | -          | <5         | -          | <5         | <5         | <5                                                           | ug/kg    | TM17/PM8               |
| Total 7 PCBs #                                            | <35 <sup>SV</sup> | -          | <35        | -          | <35        | -          | <35        | -          | <35        | <35        | <35                                                          | ug/kg    | TM17/PM8               |
| Phenol #M                                                 | <0.01             | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01                                                        | mg/kg    | TM26/PM21B             |
| Natural Moisture Content                                  | 15.8              | 17.9       | 20.9       | 20.3       | 20.3       | 14.4       | 21.7       | 19.7       | 12.4       | 23.8       | <0.1                                                         | %        | PM4/PM0                |
| Hexavalent Chromium #                                     | <0.3              | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3                                                         | mg/kg    | TM38/PM20              |
| Sulphate as SO4 (2:1 Ext) #M                              | <0.0015           | <0.0015    | <0.0015    | <0.0015    | <0.0015    | <0.0015    | 0.0224     | <0.0015    | 0.0102     | <0.0015    | <0.0015                                                      | g/l      | TM38/PM20              |
| Total Cyanide #M                                          | <0.5              | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5                                                         | mg/kg    | TM89/PM45              |
| Total Organic Carbon #                                    | 0.92              | 1.10       | 1.25       | 1.15       | 1.17       | 1.13       | 0.76       | 1.36       | 0.64       | 1.67       | <0.02                                                        | %        | TM21/PM24              |
| Organic Matter                                            | 1.6               | 1.9        | 2.2        | 2.0        | 2.0        | 1.9        | 1.3        | 2.3        | 1.1        | 2.9        | <0.2                                                         | %        | TM21/PM24              |
| ANC at pH4                                                | 0.12              | -          | 0.10       | -          | 0.20       | -          | 0.47       | -          | 0.27       | 0.07       | <0.03                                                        | mol/kg   | TM77/PM0               |
| ANC at pH7                                                | <0.03             | -          | <0.03      | -          | <0.03      | -          | <0.03      | -          | <0.03      | NDP        | <0.03                                                        | mol/kg   | TM77/PM0               |
| Loss on Ignition #                                        | 3.9               | 4.9        | 5.1        | 5.1        | 5.2        | 4.3        | 4.3        | 4.1        | 3.2        | 6.3        | <1.0                                                         | %        | TM22/PM0               |
| pH #M                                                     | 8.31              | 7.88       | 7.95       | 7.42       | 8.36       | 7.25       | 8.55       | 8.16       | 8.04       | 7.21       | <0.01                                                        | pH units | TM73/PM11              |

## Element Materials Technology

**Client Name:** Arcadis  
**Reference:** 30250853  
**Location:** M+G Kennet Valley  
**Contact:** Luke Day  
**EMT Job No:** 24/21473

Report : Solid

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

[illegible]

**Client Name:** Arcadis  
**Reference:** 30250853  
**Location:** M+G Kennet Valley  
**Contact:** Luke Day  
**EMT Job No:** 24/21473

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

## Element Materials Technology

**Client Name:** Arcadis  
**Reference:** 30250853  
**Location:** M+G Kennet Valley  
**Contact:** Luke Day  
**EMT Job No:** 24/21473

**Report : CEN 10:1 1 Batch (Duplicate results)**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

[illegible]

|                                   |                                   |                                              |                                                                                    |
|-----------------------------------|-----------------------------------|----------------------------------------------|------------------------------------------------------------------------------------|
| Mass of sample taken (kg)         | 0.1042                            | Moisture Content Ratio (%) =                 | 15.7                                                                               |
| Mass of dry sample (kg) =         | 0.09                              | Dry Matter Content Ratio (%) =               | 86.4                                                                               |
| Particle Size <4mm =              | >95%                              |                                              |                                                                                    |
| EMT Job No                        | 24/21473                          | Landfill Waste Acceptance<br>Criteria Limits |                                                                                    |
| Sample No                         | 4                                 |                                              |                                                                                    |
| Client Sample No                  | HP01                              |                                              |                                                                                    |
| Depth/Other                       | 0.30                              |                                              |                                                                                    |
| Sample Date                       | 13/12/2024                        |                                              |                                                                                    |
| Batch No                          | 1                                 |                                              |                                                                                    |
| Solid Waste Analysis              |                                   | Inert<br>Waste<br>Landfill                   | Stable<br>Non-reactive<br>Hazardous<br>Waste in Non-<br>Hazardous<br>Landfill      |
| Total Organic Carbon (%)          | 0.92                              | 3                                            | 5                                                                                  |
| Loss on Ignition (%)              | 3.9                               | -                                            | 10                                                                                 |
| Sum of BTEX (mg/kg)               | <0.025                            | 6                                            | -                                                                                  |
| Sum of 7 PCBs (mg/kg)             | <0.035                            | 1                                            | -                                                                                  |
| Mineral Oil (mg/kg) (EH_CU_1D_AL) | <30                               | 500                                          | -                                                                                  |
| PAH Sum of 17(mg/kg)              | <0.64                             | 100                                          | -                                                                                  |
| pH (pH Units)                     | 8.31                              | -                                            | >6                                                                                 |
| ANC to pH 7 (mol/kg)              | <0.03                             | -                                            | to be evaluated                                                                    |
| ANC to pH 4 (mol/kg)              | 0.12                              | -                                            | to be evaluated                                                                    |
| Eluate Analysis                   | 10:1 conc <sup>n</sup><br>leached |                                              | Limit values for compliance<br>leaching test using<br>BS EN 12457-2 at L/S 10 l/kg |
|                                   | C <sub>10</sub>                   | A <sub>10</sub>                              |                                                                                    |
|                                   | mg/l                              | mg/kg                                        |                                                                                    |
| Arsenic                           | <0.0025                           | <0.025                                       | 0.5                                                                                |
| Barium                            | 0.008                             | 0.08                                         | 2                                                                                  |
| Cadmium                           | <0.0005                           | <0.005                                       | 100                                                                                |
| Chromium                          | <0.0015                           | <0.015                                       | 0.04                                                                               |
| Copper                            | <0.007                            | <0.07                                        | 1                                                                                  |
| Mercury                           | <0.001                            | <0.01                                        | 5                                                                                  |
| Molybdenum                        | <0.002                            | <0.02                                        | 0.5                                                                                |
| Nickel                            | <0.002                            | <0.02                                        | 10                                                                                 |
| Lead                              | <0.005                            | <0.05                                        | 0.4                                                                                |
| Antimony                          | <0.002                            | <0.02                                        | 10                                                                                 |
| Selenium                          | <0.003                            | <0.03                                        | 0.5                                                                                |
| Zinc                              | <0.003                            | <0.03                                        | 50                                                                                 |
| Chloride                          | <0.3                              | <3                                           | 0.06                                                                               |
| Fluoride                          | 0.5                               | 5                                            | 0.7                                                                                |
| Sulphate as SO <sub>4</sub>       | <0.5                              | <5                                           | 0.1                                                                                |
| Total Dissolved Solids            | 79                                | 790                                          | 0.5                                                                                |
| Phenol                            | <0.01                             | <0.1                                         | 4                                                                                  |
| Dissolved Organic Carbon          | 4                                 | 40                                           | 50                                                                                 |
|                                   |                                   |                                              | 800                                                                                |
|                                   |                                   |                                              | 1000                                                                               |

|                                   |                                   |                                |                                                                                    |                                                                               |                                |
|-----------------------------------|-----------------------------------|--------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|--------------------------------|
| Mass of sample taken (kg)         | 0.1069                            | Moisture Content Ratio (%) =   | 19.0                                                                               |                                                                               |                                |
| Mass of dry sample (kg) =         | 0.09                              | Dry Matter Content Ratio (%) = | 84.0                                                                               |                                                                               |                                |
| Particle Size <4mm =              | >95%                              |                                |                                                                                    |                                                                               |                                |
| EMT Job No                        | 24/21473                          |                                | Landfill Waste Acceptance<br>Criteria Limits                                       |                                                                               |                                |
| Sample No                         | 13                                |                                |                                                                                    |                                                                               |                                |
| Client Sample No                  | HP03                              |                                | Inert<br>Waste<br>Landfill                                                         | Stable<br>Non-reactive<br>Hazardous<br>Waste in Non-<br>Hazardous<br>Landfill | Hazardous<br>Waste<br>Landfill |
| Depth/Other                       | 0.30                              |                                |                                                                                    |                                                                               |                                |
| Sample Date                       | 13/12/2024                        |                                |                                                                                    |                                                                               |                                |
| Batch No                          | 1                                 |                                |                                                                                    |                                                                               |                                |
| Solid Waste Analysis              |                                   |                                |                                                                                    |                                                                               |                                |
| Total Organic Carbon (%)          | 1.25                              |                                |                                                                                    |                                                                               |                                |
| Loss on Ignition (%)              | 5.1                               |                                | -                                                                                  | -                                                                             | 10                             |
| Sum of BTEX (mg/kg)               | <0.025                            |                                | 6                                                                                  | -                                                                             | -                              |
| Sum of 7 PCBs (mg/kg)             | <0.035                            |                                | 1                                                                                  | -                                                                             | -                              |
| Mineral Oil (mg/kg) (EH_CU_1D_AL) | <30                               |                                | 500                                                                                | -                                                                             | -                              |
| PAH Sum of 17(mg/kg)              | <0.64                             |                                | 100                                                                                | -                                                                             | -                              |
| pH (pH Units)                     | 7.95                              |                                | -                                                                                  | >6                                                                            | -                              |
| ANC to pH 7 (mol/kg)              | <0.03                             |                                | -                                                                                  | to be evaluated                                                               | to be evaluated                |
| ANC to pH 4 (mol/kg)              | 0.10                              |                                | -                                                                                  | to be evaluated                                                               | to be evaluated                |
| Eluate Analysis                   | 10:1 conc <sup>n</sup><br>leached |                                | Limit values for compliance<br>leaching test using<br>BS EN 12457-2 at L/S 10 l/kg |                                                                               |                                |
|                                   | C <sub>10</sub>                   | A <sub>10</sub>                |                                                                                    |                                                                               |                                |
|                                   | mg/l                              | mg/kg                          |                                                                                    |                                                                               |                                |
| Arsenic                           | <0.0025                           | <0.025                         | 0.5                                                                                | 2                                                                             | 25                             |
| Barium                            | 0.015                             | 0.15                           | 20                                                                                 | 100                                                                           | 300                            |
| Cadmium                           | <0.0005                           | <0.005                         | 0.04                                                                               | 1                                                                             | 5                              |
| Chromium                          | 0.0018                            | 0.018                          | 0.5                                                                                | 10                                                                            | 70                             |
| Copper                            | <0.007                            | <0.07                          | 2                                                                                  | 50                                                                            | 100                            |
| Mercury                           | <0.001                            | <0.01                          | 0.01                                                                               | 0.2                                                                           | 2                              |
| Molybdenum                        | <0.002                            | <0.02                          | 0.5                                                                                | 10                                                                            | 30                             |
| Nickel                            | <0.002                            | <0.02                          | 0.4                                                                                | 10                                                                            | 40                             |
| Lead                              | <0.005                            | <0.05                          | 0.5                                                                                | 10                                                                            | 50                             |
| Antimony                          | <0.002                            | <0.02                          | 0.06                                                                               | 0.7                                                                           | 5                              |
| Selenium                          | <0.003                            | <0.03                          | 0.1                                                                                | 0.5                                                                           | 7                              |
| Zinc                              | 0.006                             | 0.06                           | 4                                                                                  | 50                                                                            | 200                            |
| Chloride                          | 0.9                               | 9                              | 800                                                                                | 15000                                                                         | 25000                          |
| Fluoride                          | 0.3                               | 3                              | 10                                                                                 | 150                                                                           | 500                            |
| Sulphate as SO4                   | 2.6                               | 26                             | 1000                                                                               | 20000                                                                         | 50000                          |
| Total Dissolved Solids            | 106                               | 1060                           | 4000                                                                               | 60000                                                                         | 100000                         |
| Phenol                            | <0.01                             | <0.1                           | 1                                                                                  | -                                                                             | -                              |
| Dissolved Organic Carbon          | 5                                 | 50                             | 500                                                                                | 800                                                                           | 1000                           |

|                                   |                                   |                                |                                                                                    |                                                                               |                                |
|-----------------------------------|-----------------------------------|--------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|--------------------------------|
| Mass of sample taken (kg)         | -                                 | Moisture Content Ratio (%) =   | 17.9                                                                               |                                                                               |                                |
| Mass of dry sample (kg) =         | 0.09                              | Dry Matter Content Ratio (%) = | 84.8                                                                               |                                                                               |                                |
| Particle Size <4mm =              | >95%                              |                                |                                                                                    |                                                                               |                                |
| EMT Job No                        | 24/21473                          |                                | Landfill Waste Acceptance<br>Criteria Limits                                       |                                                                               |                                |
| Sample No                         | 22                                |                                |                                                                                    |                                                                               |                                |
| Client Sample No                  | HP05                              |                                | Inert<br>Waste<br>Landfill                                                         | Stable<br>Non-reactive<br>Hazardous<br>Waste in Non-<br>Hazardous<br>Landfill | Hazardous<br>Waste<br>Landfill |
| Depth/Other                       | 0.30                              |                                |                                                                                    |                                                                               |                                |
| Sample Date                       | 13/12/2024                        |                                |                                                                                    |                                                                               |                                |
| Batch No                          | 1                                 |                                |                                                                                    |                                                                               |                                |
| Solid Waste Analysis              |                                   |                                |                                                                                    |                                                                               |                                |
| Total Organic Carbon (%)          | 1.17                              |                                |                                                                                    |                                                                               |                                |
| Loss on Ignition (%)              | 5.2                               |                                | -                                                                                  | -                                                                             | 10                             |
| Sum of BTEX (mg/kg)               | <0.025                            |                                | 6                                                                                  | -                                                                             | -                              |
| Sum of 7 PCBs (mg/kg)             | <0.035                            |                                | 1                                                                                  | -                                                                             | -                              |
| Mineral Oil (mg/kg) (EH_CU_1D_AL) | <30                               |                                | 500                                                                                | -                                                                             | -                              |
| PAH Sum of 17(mg/kg)              | <0.64                             |                                | 100                                                                                | -                                                                             | -                              |
| pH (pH Units)                     | 8.36                              |                                | -                                                                                  | >6                                                                            | -                              |
| ANC to pH 7 (mol/kg)              | <0.03                             |                                | -                                                                                  | to be evaluated                                                               | to be evaluated                |
| ANC to pH 4 (mol/kg)              | 0.20                              |                                | -                                                                                  | to be evaluated                                                               | to be evaluated                |
| Eluate Analysis                   | 10:1 conc <sup>n</sup><br>leached |                                | Limit values for compliance<br>leaching test using<br>BS EN 12457-2 at L/S 10 l/kg |                                                                               |                                |
|                                   | C <sub>10</sub>                   | A <sub>10</sub>                |                                                                                    |                                                                               |                                |
|                                   | mg/l                              | mg/kg                          |                                                                                    |                                                                               |                                |
|                                   |                                   |                                |                                                                                    |                                                                               |                                |
| Arsenic                           | <0.0025                           | <0.025                         | 0.5                                                                                | 2                                                                             | 25                             |
| Barium                            | 0.014                             | 0.14                           | 20                                                                                 | 100                                                                           | 300                            |
| Cadmium                           | <0.0005                           | <0.005                         | 0.04                                                                               | 1                                                                             | 5                              |
| Chromium                          | 0.0015                            | 0.015                          | 0.5                                                                                | 10                                                                            | 70                             |
| Copper                            | 0.010                             | 0.10                           | 2                                                                                  | 50                                                                            | 100                            |
| Mercury                           | <0.001                            | <0.01                          | 0.01                                                                               | 0.2                                                                           | 2                              |
| Molybdenum                        | <0.002                            | <0.02                          | 0.5                                                                                | 10                                                                            | 30                             |
| Nickel                            | 0.003                             | 0.03                           | 0.4                                                                                | 10                                                                            | 40                             |
| Lead                              | <0.005                            | <0.05                          | 0.5                                                                                | 10                                                                            | 50                             |
| Antimony                          | <0.002                            | <0.02                          | 0.06                                                                               | 0.7                                                                           | 5                              |
| Selenium                          | <0.003                            | <0.03                          | 0.1                                                                                | 0.5                                                                           | 7                              |
| Zinc                              | 0.008                             | 0.08                           | 4                                                                                  | 50                                                                            | 200                            |
| Chloride                          | 0.5                               | 5                              | 800                                                                                | 15000                                                                         | 25000                          |
| Fluoride                          | 0.6                               | 6                              | 10                                                                                 | 150                                                                           | 500                            |
| Sulphate as SO4                   | 1.0                               | 10                             | 1000                                                                               | 20000                                                                         | 50000                          |
| Total Dissolved Solids            | 91                                | 910                            | 4000                                                                               | 60000                                                                         | 100000                         |
| Phenol                            | <0.01                             | <0.1                           | 1                                                                                  | -                                                                             | -                              |
| Dissolved Organic Carbon          | 4                                 | 40                             | 500                                                                                | 800                                                                           | 1000                           |

|                                   |                                   |                                              |                                                                                    |
|-----------------------------------|-----------------------------------|----------------------------------------------|------------------------------------------------------------------------------------|
| Mass of sample taken (kg)         | 0.1079                            | Moisture Content Ratio (%) =                 | 20.0                                                                               |
| Mass of dry sample (kg) =         | 0.09                              | Dry Matter Content Ratio (%) =               | 83.3                                                                               |
| Particle Size <4mm =              | >95%                              |                                              |                                                                                    |
| EMT Job No                        | 24/21473                          | Landfill Waste Acceptance<br>Criteria Limits |                                                                                    |
| Sample No                         | 31                                |                                              |                                                                                    |
| Client Sample No                  | HP07                              |                                              |                                                                                    |
| Depth/Other                       | 0.30                              |                                              |                                                                                    |
| Sample Date                       | 13/12/2024                        |                                              |                                                                                    |
| Batch No                          | 1                                 |                                              |                                                                                    |
| Solid Waste Analysis              |                                   | Inert<br>Waste<br>Landfill                   | Stable<br>Non-reactive<br>Hazardous<br>Waste in Non-<br>Hazardous<br>Landfill      |
| Total Organic Carbon (%)          | 0.76                              | 3                                            | 5                                                                                  |
| Loss on Ignition (%)              | 4.3                               | -                                            | 10                                                                                 |
| Sum of BTEX (mg/kg)               | <0.025                            | 6                                            | -                                                                                  |
| Sum of 7 PCBs (mg/kg)             | <0.035                            | 1                                            | -                                                                                  |
| Mineral Oil (mg/kg) (EH_CU_1D_AL) | <30                               | 500                                          | -                                                                                  |
| PAH Sum of 17(mg/kg)              | 22.88                             | 100                                          | -                                                                                  |
| pH (pH Units)                     | 8.55                              | -                                            | >6                                                                                 |
| ANC to pH 7 (mol/kg)              | <0.03                             | -                                            | to be evaluated                                                                    |
| ANC to pH 4 (mol/kg)              | 0.47                              | -                                            | to be evaluated                                                                    |
| Eluate Analysis                   | 10:1 conc <sup>n</sup><br>leached |                                              | Limit values for compliance<br>leaching test using<br>BS EN 12457-2 at L/S 10 l/kg |
|                                   | C <sub>10</sub>                   | A <sub>10</sub>                              |                                                                                    |
|                                   | mg/l                              | mg/kg                                        |                                                                                    |
| Arsenic                           | <0.0025                           | <0.025                                       | 0.5                                                                                |
| Barium                            | 0.009                             | 0.09                                         | 2                                                                                  |
| Cadmium                           | <0.0005                           | <0.005                                       | 100                                                                                |
| Chromium                          | <0.0015                           | <0.015                                       | 0.04                                                                               |
| Copper                            | <0.007                            | <0.07                                        | 1                                                                                  |
| Mercury                           | <0.001                            | <0.01                                        | 5                                                                                  |
| Molybdenum                        | 0.008                             | 0.08                                         | 0.5                                                                                |
| Nickel                            | <0.002                            | <0.02                                        | 10                                                                                 |
| Lead                              | <0.005                            | <0.05                                        | 0.4                                                                                |
| Antimony                          | <0.002                            | <0.02                                        | 10                                                                                 |
| Selenium                          | <0.003                            | <0.03                                        | 0.5                                                                                |
| Zinc                              | <0.003                            | <0.03                                        | 10                                                                                 |
| Chloride                          | <0.3                              | <3                                           | 0.06                                                                               |
| Fluoride                          | 0.9                               | 9                                            | 0.7                                                                                |
| Sulphate as SO <sub>4</sub>       | 4.7                               | 47                                           | 5                                                                                  |
| Total Dissolved Solids            | 84                                | 840                                          | 0.1                                                                                |
| Phenol                            | <0.01                             | <0.1                                         | 0.5                                                                                |
| Dissolved Organic Carbon          | 2                                 | 20                                           | 7                                                                                  |
|                                   |                                   |                                              | 4                                                                                  |
|                                   |                                   |                                              | 50                                                                                 |
|                                   |                                   |                                              | 200                                                                                |
|                                   |                                   |                                              | 800                                                                                |
|                                   |                                   |                                              | 15000                                                                              |
|                                   |                                   |                                              | 25000                                                                              |
|                                   |                                   |                                              | 10                                                                                 |
|                                   |                                   |                                              | 150                                                                                |
|                                   |                                   |                                              | 500                                                                                |
|                                   |                                   |                                              | 1000                                                                               |
|                                   |                                   |                                              | 20000                                                                              |
|                                   |                                   |                                              | 50000                                                                              |
|                                   |                                   |                                              | 4000                                                                               |
|                                   |                                   |                                              | 60000                                                                              |
|                                   |                                   |                                              | 100000                                                                             |
|                                   |                                   |                                              | 1                                                                                  |
|                                   |                                   |                                              | -                                                                                  |
|                                   |                                   |                                              | -                                                                                  |
|                                   |                                   |                                              | 500                                                                                |
|                                   |                                   |                                              | 800                                                                                |
|                                   |                                   |                                              | 1000                                                                               |

|                                   |                                   |                                |                                                                                    |                                                                               |                                |
|-----------------------------------|-----------------------------------|--------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|--------------------------------|
| Mass of sample taken (kg)         | 0.104                             | Moisture Content Ratio (%) =   | 16.0                                                                               |                                                                               |                                |
| Mass of dry sample (kg) =         | 0.09                              | Dry Matter Content Ratio (%) = | 86.2                                                                               |                                                                               |                                |
| Particle Size <4mm =              | >95%                              |                                |                                                                                    |                                                                               |                                |
|                                   |                                   |                                |                                                                                    |                                                                               |                                |
| EMT Job No                        | 24/21473                          |                                | Landfill Waste Acceptance<br>Criteria Limits                                       |                                                                               |                                |
| Sample No                         | 41                                |                                |                                                                                    |                                                                               |                                |
| Client Sample No                  | HP09                              |                                | Inert<br>Waste<br>Landfill                                                         | Stable<br>Non-reactive<br>Hazardous<br>Waste in Non-<br>Hazardous<br>Landfill | Hazardous<br>Waste<br>Landfill |
| Depth/Other                       | 0.30                              |                                |                                                                                    |                                                                               |                                |
| Sample Date                       | 13/12/2024                        |                                |                                                                                    |                                                                               |                                |
| Batch No                          | 1                                 |                                |                                                                                    |                                                                               |                                |
| Solid Waste Analysis              |                                   |                                |                                                                                    |                                                                               |                                |
| Total Organic Carbon (%)          | 0.64                              |                                |                                                                                    |                                                                               |                                |
| Loss on Ignition (%)              | 3.2                               |                                | -                                                                                  | -                                                                             | 10                             |
| Sum of BTEX (mg/kg)               | <0.025                            |                                | 6                                                                                  | -                                                                             | -                              |
| Sum of 7 PCBs (mg/kg)             | <0.035                            |                                | 1                                                                                  | -                                                                             | -                              |
| Mineral Oil (mg/kg) (EH_CU_1D_AL) | <30                               |                                | 500                                                                                | -                                                                             | -                              |
| PAH Sum of 17(mg/kg)              | <0.64                             |                                | 100                                                                                | -                                                                             | -                              |
| pH (pH Units)                     | 8.04                              |                                | -                                                                                  | >6                                                                            | -                              |
| ANC to pH 7 (mol/kg)              | <0.03                             |                                | -                                                                                  | to be evaluated                                                               | to be evaluated                |
| ANC to pH 4 (mol/kg)              | 0.27                              |                                | -                                                                                  | to be evaluated                                                               | to be evaluated                |
| Eluate Analysis                   | 10:1 conc <sup>n</sup><br>leached |                                | Limit values for compliance<br>leaching test using<br>BS EN 12457-2 at L/S 10 l/kg |                                                                               |                                |
|                                   | C <sub>10</sub>                   | A <sub>10</sub>                |                                                                                    |                                                                               |                                |
|                                   | mg/l                              | mg/kg                          |                                                                                    |                                                                               |                                |
|                                   |                                   |                                |                                                                                    |                                                                               |                                |
| Arsenic                           | <0.0025                           | <0.025                         | 0.5                                                                                | 2                                                                             | 25                             |
| Barium                            | 0.008                             | 0.08                           | 20                                                                                 | 100                                                                           | 300                            |
| Cadmium                           | <0.0005                           | <0.005                         | 0.04                                                                               | 1                                                                             | 5                              |
| Chromium                          | <0.0015                           | <0.015                         | 0.5                                                                                | 10                                                                            | 70                             |
| Copper                            | <0.007                            | <0.07                          | 2                                                                                  | 50                                                                            | 100                            |
| Mercury                           | <0.001                            | <0.01                          | 0.01                                                                               | 0.2                                                                           | 2                              |
| Molybdenum                        | <0.002                            | <0.02                          | 0.5                                                                                | 10                                                                            | 30                             |
| Nickel                            | <0.002                            | <0.02                          | 0.4                                                                                | 10                                                                            | 40                             |
| Lead                              | <0.005                            | <0.05                          | 0.5                                                                                | 10                                                                            | 50                             |
| Antimony                          | <0.002                            | <0.02                          | 0.06                                                                               | 0.7                                                                           | 5                              |
| Selenium                          | <0.003                            | <0.03                          | 0.1                                                                                | 0.5                                                                           | 7                              |
| Zinc                              | <0.003                            | <0.03                          | 4                                                                                  | 50                                                                            | 200                            |
| Chloride                          | <0.3                              | <3                             | 800                                                                                | 15000                                                                         | 25000                          |
| Fluoride                          | 0.8                               | 8                              | 10                                                                                 | 150                                                                           | 500                            |
| Sulphate as SO4                   | 2.7                               | 27                             | 1000                                                                               | 20000                                                                         | 50000                          |
| Total Dissolved Solids            | 108                               | 1080                           | 4000                                                                               | 60000                                                                         | 100000                         |
| Phenol                            | <0.01                             | <0.1                           | 1                                                                                  | -                                                                             | -                              |
| Dissolved Organic Carbon          | 7                                 | 70                             | 500                                                                                | 800                                                                           | 1000                           |

|                                   |                                |                                |                                                                              |                                                               |                          |
|-----------------------------------|--------------------------------|--------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------|
| Mass of sample taken (kg)         | 0.11                           | Moisture Content Ratio (%) =   | 22.6                                                                         |                                                               |                          |
| Mass of dry sample (kg) =         | 0.09                           | Dry Matter Content Ratio (%) = | 81.6                                                                         |                                                               |                          |
| Particle Size <4mm =              | >95%                           |                                |                                                                              |                                                               |                          |
| EMT Job No                        | 24/21473                       |                                | Landfill Waste Acceptance Criteria Limits                                    |                                                               |                          |
| Sample No                         | 47                             |                                |                                                                              |                                                               |                          |
| Client Sample No                  | HP10                           |                                | Inert Waste Landfill                                                         | Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill | Hazardous Waste Landfill |
| Depth/Other                       | 0.30                           |                                |                                                                              |                                                               |                          |
| Sample Date                       | 13/12/2024                     |                                |                                                                              |                                                               |                          |
| Batch No                          | 1                              |                                |                                                                              |                                                               |                          |
| Solid Waste Analysis              |                                |                                |                                                                              |                                                               |                          |
| Total Organic Carbon (%)          | 1.67                           |                                |                                                                              |                                                               |                          |
| Loss on Ignition (%)              | 6.3                            |                                | -                                                                            | -                                                             | 10                       |
| Sum of BTEX (mg/kg)               | <0.025                         |                                | 6                                                                            | -                                                             | -                        |
| Sum of 7 PCBs (mg/kg)             | <0.035                         |                                | 1                                                                            | -                                                             | -                        |
| Mineral Oil (mg/kg) (EH_CU_1D_AL) | <30                            |                                | 500                                                                          | -                                                             | -                        |
| PAH Sum of 17(mg/kg)              | <0.64                          |                                | 100                                                                          | -                                                             | -                        |
| pH (pH Units)                     | 7.21                           |                                | -                                                                            | >6                                                            | -                        |
| ANC to pH 7 (mol/kg)              | NDP                            |                                | -                                                                            | to be evaluated                                               | to be evaluated          |
| ANC to pH 4 (mol/kg)              | 0.07                           |                                | -                                                                            | to be evaluated                                               | to be evaluated          |
| Eluate Analysis                   | 10:1 conc <sup>n</sup> leached |                                | Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg |                                                               |                          |
|                                   | C <sub>10</sub>                | A <sub>10</sub>                |                                                                              |                                                               |                          |
|                                   | mg/l                           | mg/kg                          |                                                                              |                                                               |                          |
|                                   | mg/kg                          |                                |                                                                              |                                                               |                          |
| Arsenic                           | <0.0025                        | <0.025                         | 0.5                                                                          | 2                                                             | 25                       |
| Barium                            | 0.007                          | 0.07                           | 20                                                                           | 100                                                           | 300                      |
| Cadmium                           | <0.0005                        | <0.005                         | 0.04                                                                         | 1                                                             | 5                        |
| Chromium                          | 0.0015                         | 0.015                          | 0.5                                                                          | 10                                                            | 70                       |
| Copper                            | <0.007                         | <0.07                          | 2                                                                            | 50                                                            | 100                      |
| Mercury                           | <0.001                         | <0.01                          | 0.01                                                                         | 0.2                                                           | 2                        |
| Molybdenum                        | <0.002                         | <0.02                          | 0.5                                                                          | 10                                                            | 30                       |
| Nickel                            | 0.003                          | 0.03                           | 0.4                                                                          | 10                                                            | 40                       |
| Lead                              | <0.005                         | <0.05                          | 0.5                                                                          | 10                                                            | 50                       |
| Antimony                          | <0.002                         | <0.02                          | 0.06                                                                         | 0.7                                                           | 5                        |
| Selenium                          | <0.003                         | <0.03                          | 0.1                                                                          | 0.5                                                           | 7                        |
| Zinc                              | <0.003                         | <0.03                          | 4                                                                            | 50                                                            | 200                      |
| Chloride                          | 0.6                            | 6                              | 800                                                                          | 15000                                                         | 25000                    |
| Fluoride                          | 0.5                            | 5                              | 10                                                                           | 150                                                           | 500                      |
| Sulphate as SO4                   | 0.8                            | 8                              | 1000                                                                         | 20000                                                         | 50000                    |
| Total Dissolved Solids            | 59                             | 590                            | 4000                                                                         | 60000                                                         | 100000                   |
| Phenol                            | <0.01                          | <0.1                           | 1                                                                            | -                                                             | -                        |
| Dissolved Organic Carbon          | 9                              | 90                             | 500                                                                          | 800                                                           | 1000                     |

**Matrix : Solid**

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**Client Name:** Arcadis  
**Reference:** 30250853  
**Location:** M+G Kennet Valley  
**Contact:** Luke Day

**Note:**

Asbestos Screen analysis is carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Detailed Gravimetric Quantification and PCOM Fibre Analysis is carried out in accordance with our documented in-house methods PM042 and TM131 and HSG 248 using Stereo and Polarised Light Microscopy and Phase Contrast Optical Microscopy (PCOM). Asbestos sub-samples are retained for not less than 6 months from the date of analysis unless specifically requested.

The LOQ of the Asbestos Quantification is 0.001% dry fibre of dry mass of sample.

Where the sample is not taken by a Element Materials Technology consultant, Element Materials Technology cannot be responsible for inaccurate or unrepresentative sampling.

Where trace asbestos is reported the amount of asbestos will be <0.1%.

| EMT Job No. | Batch | Sample ID | Depth | EMT Sample No. | Analyst Name      | Date Of Analysis | Analysis                                   | Result             |
|-------------|-------|-----------|-------|----------------|-------------------|------------------|--------------------------------------------|--------------------|
| 24/21473    | 1     | HP01      | 0.30  | 5              | Michael Reilly    | 24/12/2024       | <b>General Description (Bulk Analysis)</b> | Brown soil, stones |
|             |       |           |       |                | Michael Reilly    | 24/12/2024       | <b>Asbestos Fibres</b>                     | NAD                |
|             |       |           |       |                | Michael Reilly    | 24/12/2024       | <b>Asbestos ACM</b>                        | NAD                |
|             |       |           |       |                | Michael Reilly    | 24/12/2024       | <b>Asbestos Type</b>                       | NAD                |
| 24/21473    | 1     | HP02      | 0.30  | 8              | Simon Postlewhite | 27/12/2024       | <b>General Description (Bulk Analysis)</b> | Brown soil/stones  |
|             |       |           |       |                | Simon Postlewhite | 27/12/2024       | <b>Asbestos Fibres</b>                     | NAD                |
|             |       |           |       |                | Simon Postlewhite | 27/12/2024       | <b>Asbestos ACM</b>                        | NAD                |
|             |       |           |       |                | Simon Postlewhite | 27/12/2024       | <b>Asbestos Type</b>                       | NAD                |
| 24/21473    | 1     | HP03      | 0.30  | 14             | Michael Reilly    | 24/12/2024       | <b>General Description (Bulk Analysis)</b> | Brown soil, stones |
|             |       |           |       |                | Michael Reilly    | 24/12/2024       | <b>Asbestos Fibres</b>                     | NAD                |
|             |       |           |       |                | Michael Reilly    | 24/12/2024       | <b>Asbestos ACM</b>                        | NAD                |
|             |       |           |       |                | Michael Reilly    | 24/12/2024       | <b>Asbestos Type</b>                       | NAD                |
| 24/21473    | 1     | HP04      | 0.30  | 17             | Simon Postlewhite | 24/12/2024       | <b>General Description (Bulk Analysis)</b> | Brown soil/stones  |
|             |       |           |       |                | Simon Postlewhite | 24/12/2024       | <b>Asbestos Fibres</b>                     | NAD                |
|             |       |           |       |                | Simon Postlewhite | 24/12/2024       | <b>Asbestos ACM</b>                        | NAD                |
|             |       |           |       |                | Simon Postlewhite | 24/12/2024       | <b>Asbestos Type</b>                       | NAD                |
| 24/21473    | 1     | HP05      | 0.30  | 23             | Michael Reilly    | 24/12/2024       | <b>General Description (Bulk Analysis)</b> | Brown soil, stones |
|             |       |           |       |                | Michael Reilly    | 24/12/2024       | <b>Asbestos Fibres</b>                     | NAD                |
|             |       |           |       |                | Michael Reilly    | 24/12/2024       | <b>Asbestos ACM</b>                        | NAD                |
|             |       |           |       |                | Michael Reilly    | 24/12/2024       | <b>Asbestos Type</b>                       | NAD                |
| 24/21473    | 1     | HP06      | 0.30  | 26             | Simon Postlewhite | 27/12/2024       | <b>General Description (Bulk Analysis)</b> | Brown soil/stones  |
|             |       |           |       |                | Simon Postlewhite | 27/12/2024       | <b>Asbestos Fibres</b>                     | NAD                |
|             |       |           |       |                | Simon Postlewhite | 27/12/2024       | <b>Asbestos ACM</b>                        | NAD                |
|             |       |           |       |                | Simon Postlewhite | 27/12/2024       | <b>Asbestos Type</b>                       | NAD                |
| 24/21473    | 1     | HP07      | 0.30  | 32             | Simon Postlewhite | 24/12/2024       | <b>General Description (Bulk Analysis)</b> | Brown soil/stones  |
|             |       |           |       |                | Simon Postlewhite | 24/12/2024       | <b>Asbestos Fibres</b>                     | NAD                |
|             |       |           |       |                | Simon Postlewhite | 24/12/2024       | <b>Asbestos ACM</b>                        | NAD                |
|             |       |           |       |                | Simon Postlewhite | 24/12/2024       | <b>Asbestos Type</b>                       | NAD                |
| 24/21473    | 1     | HP08      | 0.30  | 35             | Simon Postlewhite | 27/12/2024       | <b>General Description (Bulk Analysis)</b> | Brown soil/stones  |
|             |       |           |       |                | Simon Postlewhite | 27/12/2024       | <b>Asbestos Fibres</b>                     | NAD                |
|             |       |           |       |                | Simon Postlewhite | 27/12/2024       | <b>Asbestos ACM</b>                        | NAD                |
|             |       |           |       |                | Simon Postlewhite | 27/12/2024       | <b>Asbestos Type</b>                       | NAD                |

Arcadis  
30250853  
M+G Kennet Valley  
Luke Day

[illegible]

**Matrix : Solid**

[illegible]

|                     |                   |
|---------------------|-------------------|
| <b>Client Name:</b> | Arcadis           |
| <b>Reference:</b>   | 30250853          |
| <b>Location:</b>    | M+G Kennet Valley |
| <b>Contact:</b>     | Luke Day          |

[illegible]

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating. Only analyses which are accredited are recorded as deviating if set criteria are not met.

It is a requirement under ISO 17025 that we inform clients if samples are deviating i.e. outside what is expected. A deviating sample indicates that the sample 'may' be compromised but not necessarily will be compromised. The result is still accredited and our analytical reports will still show accreditation on the relevant analytes.

# NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 24/21473

## SOILS and ASH

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. Asbestos samples are retained for 6 months.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C. Ash samples are dried at 35°C ±5°C.

Where Mineral Oil is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overestimate when other sulphides such as Barite (Barium Sulphate) are present.

## WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil is quoted, this refers to Total Aliphatics C10-C40.

## STACK EMISSIONS

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation for Dioxins and Furans and Dioxin like PCBs has been performed on XAD-2 Resin, only samples which use this resin will be within our MCERTS scope.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

## DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

## SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

## DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

## BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

**NOTE**

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a requirement of our Accreditation Body for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Laboratory records are kept for a period of no less than 6 years.

**REPORTS FROM THE SOUTH AFRICA LABORATORY**

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

**Measurement Uncertainty**

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

**Customer Provided Information**

Sample ID and depth is information provided by the customer.

**Age of Diesel**

The age of release estimation is based on the nC17/pristane ratio only as prescribed by Christensen and Larsen (1993) and Kaplan, Galperin, Alimi et al., (1996).

Age estimation should be treated with caution as it can be influenced by site specific factors of which the laboratory are not aware.

**Tentatively Identified Compounds (TICs)**

Where Tentatively Identified Compounds (TICs) are reported, up to 10 Tentatively Identified Compounds will be listed where there is found to be a greater than 80% match with the NIST library. The reported concentration is determined semi-quantitatively, with a matrix specific limit of detection.

Note, other compounds may be present but are not reported.

## ABBREVIATIONS and ACRONYMS USED

|         |                                                                                                                                                                          |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #       | ISO17025 (UKAS Ref No. 4225) accredited - UK.                                                                                                                            |
| SA      | ISO17025 (SANAS Ref No.T0729) accredited - South Africa                                                                                                                  |
| B       | Indicates analyte found in associated method blank.                                                                                                                      |
| DR      | Dilution required.                                                                                                                                                       |
| M       | MCERTS accredited.                                                                                                                                                       |
| NA      | Not applicable                                                                                                                                                           |
| NAD     | No Asbestos Detected.                                                                                                                                                    |
| ND      | None Detected (usually refers to VOC and/SVOC TICs).                                                                                                                     |
| NDP     | No Determination Possible                                                                                                                                                |
| SS      | Calibrated against a single substance                                                                                                                                    |
| SV      | Surrogate recovery outside performance criteria. This may be due to a matrix effect.                                                                                     |
| W       | Results expressed on as received basis.                                                                                                                                  |
| +       | AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.                                                               |
| >>      | Results above quantitative calibration range. The result should be considered the minimum value and is indicative only. The actual result could be significantly higher. |
| *       | Analysis subcontracted to an Element Materials Technology approved laboratory.                                                                                           |
| CO      | Suspected carry over                                                                                                                                                     |
| LOD/LOR | Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS                                                                                                |
| ME      | Matrix Effect                                                                                                                                                            |
| NFD     | No Fibres Detected                                                                                                                                                       |
| BS      | AQC Sample                                                                                                                                                               |
| LB      | Blank Sample                                                                                                                                                             |
| N       | Client Sample                                                                                                                                                            |
| TB      | Trip Blank Sample                                                                                                                                                        |
| OC      | Outside Calibration Range                                                                                                                                                |
|         |                                                                                                                                                                          |

## HWOL ACRONYMS AND OPERATORS USED

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

EMT Job No: 24/21473

| Test Method No. | Description                                                                                                                                                                                                        | Prep Method No. (if appropriate) | Description                                                                                                                                                                                       | ISO 17025 (UKAS/ANAS) | MCERTS (UK soils only) | Analysis done on As Received (AR) or Dried (AD) | Reported on dry weight basis |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------|-------------------------------------------------|------------------------------|
| PM4             | Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35 degrees Celsius or 105 degrees Celsius. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.                          | PM0                              | No preparation is required.                                                                                                                                                                       |                       |                        | AR                                              |                              |
| TM4             | Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.                                                                                                                 | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                                                             |                       |                        | AR                                              | Yes                          |
| TM4             | Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.                                                                                                                 | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                                                             | Yes                   |                        | AR                                              | Yes                          |
| TM4             | Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.                                                                                                                 | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                                                             | Yes                   | Yes                    | AR                                              | Yes                          |
| TM5             | Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present. | PM16                             | Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.                                                                                                                      |                       |                        | AR                                              |                              |
| TM5             | Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present. | PM8/PM16                         | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE. |                       |                        | AR                                              | Yes                          |
| TM5             | Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present. | PM8/PM16                         | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE. | Yes                   |                        | AR                                              | Yes                          |
| TM5             | Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present. | PM8/PM16                         | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE. | Yes                   | Yes                    | AR                                              | Yes                          |
| TM5/TM36        | please refer to TM5 and TM36 for method details                                                                                                                                                                    | PM8/PM12/PM16                    | please refer to PM8/PM16 and PM12 for method details                                                                                                                                              |                       |                        | AR                                              | Yes                          |
| TM5/TM36        | please refer to TM5 and TM36 for method details                                                                                                                                                                    | PM8/PM12/PM16                    | please refer to PM8/PM16 and PM12 for method details                                                                                                                                              | Yes                   |                        | AR                                              | Yes                          |

EMT Job No: 24/21473

| Test Method No. | Description                                                                                                                                                                                                                                                                                                                      | Prep Method No. (if appropriate) | Description                                                                                                                                                | ISO 17025 (UKAS/ANAS) | MCERTS (UK soils only) | Analysis done on As Received (AR) or Dried (AD) | Reported on dry weight basis |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------|-------------------------------------------------|------------------------------|
| PM13            | A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.                                                                                                                                                                    | PM0                              | No preparation is required.                                                                                                                                |                       |                        | AR                                              | No                           |
| TM17            | Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.                                                                                                                                                                                                                     | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                      | Yes                   |                        | AR                                              | Yes                          |
| TM20            | Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids                                                                                                                                                                                                            | PM0                              | No preparation is required.                                                                                                                                |                       |                        | AR                                              | Yes                          |
| TM21            | Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil.                     | PM24                             | Preparation of Soil and Marine Sediment Samples for Total Organic Carbon.                                                                                  |                       |                        | AD                                              | Yes                          |
| TM21            | Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil.                     | PM24                             | Preparation of Soil and Marine Sediment Samples for Total Organic Carbon.                                                                                  | Yes                   |                        | AD                                              | Yes                          |
| TM22            | Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)                                                                                                                                                      | PM0                              | No preparation is required.                                                                                                                                | Yes                   |                        | AD                                              | Yes                          |
| TM26            | Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.                                                                                                                                                                                                               | PM0                              | No preparation is required.                                                                                                                                |                       |                        | AR                                              | Yes                          |
| TM26            | Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.                                                                                                                                                                                                               | PM21B                            | As Received samples are extracted in Methanol: Water (60:40) by reciprocal shaker.                                                                         | Yes                   | Yes                    | AR                                              | Yes                          |
| TM30            | Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma-Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996 | PM15                             | Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 degrees Celsius. Samples containing asbestos are not dried and ground. | Yes                   | Yes                    | AD                                              | Yes                          |
| TM36            | Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.  | PM12                             | Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.                                                   |                       |                        | AR                                              | Yes                          |

EMT Job No: 24/21473

| Test Method No. | Description                                                                                                                                                                                                                                                                                                                     | Prep Method No. (if appropriate) | Description                                                                                                                                                                                                                                                                                                           | ISO 17025 (UKAS/S ANAS) | MCERTS (UK soils only) | Analysis done on As Received (AR) or Dried (AD) | Reported on dry weight basis |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------|-------------------------------------------------|------------------------------|
| TM36            | Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested. | PM12                             | Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.                                                                                                                                                                                                              | Yes                     |                        | AR                                              | Yes                          |
| TM36            | Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested. | PM12                             | Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.                                                                                                                                                                                                              | Yes                     | Yes                    | AR                                              | Yes                          |
| TM38            | Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) - All anions comparable to BS ISO 15923-1: 2013I                          | PM0                              | No preparation is required.                                                                                                                                                                                                                                                                                           | Yes                     |                        | AR                                              | Yes                          |
| TM38            | Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) - All anions comparable to BS ISO 15923-1: 2013I                          | PM20                             | Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker. | Yes                     | Yes                    | AD                                              | Yes                          |
| TM38            | Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) - All anions comparable to BS ISO 15923-1: 2013I                          | PM20                             | Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker. | Yes                     |                        | AR                                              | Yes                          |
| TM42            | Modified US EPA method 8270D v5:2014. Pesticides and herbicides by GC-MS                                                                                                                                                                                                                                                        | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                                                                                                                                                                                 |                         |                        | AR                                              | Yes                          |
| TM60            | TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.                                                                                                    | PM0                              | No preparation is required.                                                                                                                                                                                                                                                                                           |                         |                        | AR                                              | Yes                          |
| TM65            | Asbestos Bulk Identification method based on HSG 248 Second edition (2021)                                                                                                                                                                                                                                                      | PM42                             | Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.                                                                                                                            | Yes                     |                        | AR                                              |                              |
| TM73            | Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.                                                                                                                                                                                       | PM11                             | Extraction of as received solid samples using one part solid to 2.5 parts deionised water.                                                                                                                                                                                                                            | Yes                     | Yes                    | AR                                              | No                           |
| TM77            | Modified DDCEN/TS method 15364:2006. Determination of Acid Neutralization Capacity by Metrohm automated probe analyser.                                                                                                                                                                                                         | PM0                              | No preparation is required.                                                                                                                                                                                                                                                                                           |                         |                        | AR                                              | No                           |

EMT Job No: 24/21473

| Test Method No. | Description                                                                                                                                                                                                      | Prep Method No. (if appropriate) | Description                                                                                                                                                                                 | ISO 17025 (UKAS/ANAS) | MCERTS (UK soils only) | Analysis done on As Received (AR) or Dried (AD) | Reported on dry weight basis |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------|-------------------------------------------------|------------------------------|
| TM89            | Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.                           | PM45                             | As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.                                                                      | Yes                   | Yes                    | AR                                              | Yes                          |
| TM170           | Determination of Trace Metals by ICP-MS (Inductively Coupled Plasma-Mass Spectrometry): Modified USEPA Method 200.8, Rev. 5.4, 1994; Modified EPA Method 6020A, Rev.1, Feb 2007; Modified BS EN ISO 17294-2:2016 | PM14                             | Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified                          | Yes                   |                        | AR                                              | Yes                          |
| TM173           | Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)                                                                                                          | PM0                              | No preparation is required.                                                                                                                                                                 |                       |                        | AR                                              | Yes                          |
| NONE            | No Method Code                                                                                                                                                                                                   | PM17                             | Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio. |                       |                        |                                                 |                              |
| NONE            | No Method Code                                                                                                                                                                                                   | PM4                              | Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35 degrees Celsius or 105 degrees Celsius. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.   |                       |                        | AR                                              |                              |
|                 |                                                                                                                                                                                                                  |                                  |                                                                                                                                                                                             |                       |                        |                                                 |                              |
|                 |                                                                                                                                                                                                                  |                                  |                                                                                                                                                                                             |                       |                        |                                                 |                              |
|                 |                                                                                                                                                                                                                  |                                  |                                                                                                                                                                                             |                       |                        |                                                 |                              |
|                 |                                                                                                                                                                                                                  |                                  |                                                                                                                                                                                             |                       |                        |                                                 |                              |
|                 |                                                                                                                                                                                                                  |                                  |                                                                                                                                                                                             |                       |                        |                                                 |                              |

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EC3M 4BY



4225



**Attention :** Luke Day  
**Date :** 14th January, 2025  
**Your reference :** 30250853  
**Our reference :** Test Report 24/21473 Batch 1 Schedule B  
**Location :** M+G Kennet Valley  
**Date samples received :** 14th December, 2024  
**Status :** Final Report  
**Issue :** 202501141243

Ten samples were received for analysis on 14th December, 2024 of which ten were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

The greenhouse gas emissions generated (in Carbon – Co2e) to obtain the results in this report are estimated as:

Scope 1&2 emissions - 1.882 kg of CO2

Scope 1&2&3 emissions - 4.449 kg of CO2

**Authorised By:**



**Simon Gomery BSc**

Senior Technical Account Manager

Please include all sections of this report if it is reproduced

## Element Materials Technology

**Client Name:** Arcadis  
**Reference:** 30250853  
**Location:** M+G Kennet Valley  
**Contact:** Luke Day  
**EMT Job No:** 24/21473

Report : Solid

**Solids:** V=60g VOC jar. J=250g glass jar. T=plastic tub

| EMT Sample No.                      | 1-6        | 7-9        | 10-15      | 16-18      | 19-24      | 25-27      | 28-33      | 34-37      | 38-43      | 44-48      | Please see attached notes for all abbreviations and acronyms |       |            |
|-------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------------------------------------------------------|-------|------------|
| Sample ID                           | HP01       | HP02       | HP03       | HP04       | HP05       | HP06       | HP07       | HP08       | HP09       | HP10       |                                                              |       |            |
| Depth                               | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       | 0.30       |                                                              |       |            |
| COC No / misc                       |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| Containers                          | V J T B    | V J B      | V J T B    | V J B      | V J T B    | V J B      | V J T B    | V J B      | V J T B    | V J T B    |                                                              |       |            |
| Sample Date                         | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 | 13/12/2024 |                                                              |       |            |
| Sample Type                         | Clay       | Clay       | Clay       | Clay       | Clay       | Clay       | Clay       | Clay       | Clay       | Clay       |                                                              |       |            |
| Batch Number                        | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | LOD/LOR                                                      | Units | Method No. |
| Date of Receipt                     | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 | 14/12/2024 |                                                              |       |            |
| Arsenic <sup>#M</sup>               | 5.2        | 6.7        | 6.2        | 6.9        | 8.5        | 4.5        | 10.5       | 5.5        | 11.3       | 6.9        | <0.5                                                         | mg/kg | TM30/PM15  |
| Cadmium <sup>#M</sup>               | <0.1       | <0.1       | 0.1        | <0.1       | 0.1        | <0.1       | <0.1       | 0.1        | <0.1       | 0.1        | <0.1                                                         | mg/kg | TM30/PM15  |
| Chromium <sup>#M</sup>              | 70.9       | 68.9       | 66.9       | 56.9       | 56.1       | 98.9       | 62.3       | 63.2       | 73.9       | 57.4       | <0.5                                                         | mg/kg | TM30/PM15  |
| Copper <sup>#M</sup>                | 9          | 10         | 11         | 9          | 11         | 7          | 22         | 12         | 9          | 10         | <1                                                           | mg/kg | TM30/PM15  |
| Lead <sup>#M</sup>                  | 15         | 21         | 21         | 17         | 24         | 13         | 16         | 19         | 37         | 24         | <5                                                           | mg/kg | TM30/PM15  |
| Mercury <sup>#M</sup>               | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM30/PM15  |
| Nickel <sup>#M</sup>                | 13.3       | 14.0       | 12.6       | 13.1       | 17.2       | 10.2       | 27.8       | 14.8       | 11.5       | 14.0       | <0.7                                                         | mg/kg | TM30/PM15  |
| Selenium <sup>#M</sup>              | <1         | <1         | <1         | <1         | <1         | <1         | <1         | <1         | <1         | <1         | <1                                                           | mg/kg | TM30/PM15  |
| Zinc <sup>#M</sup>                  | 29         | 40         | 37         | 42         | 44         | 24         | 65         | 47         | 32         | 41         | <5                                                           | mg/kg | TM30/PM15  |
| PAH MS                              |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| Naphthalene <sup>#M</sup>           | -          | <0.04      | -          | <0.04      | -          | <0.04      | -          | <0.04      | -          | -          | <0.04                                                        | mg/kg | TM4/PM8    |
| Acenaphthylene                      | -          | <0.03      | -          | <0.03      | -          | <0.03      | -          | <0.03      | -          | -          | <0.03                                                        | mg/kg | TM4/PM8    |
| Acenaphthene <sup>#M</sup>          | -          | <0.05      | -          | <0.05      | -          | <0.05      | -          | <0.05      | -          | -          | <0.05                                                        | mg/kg | TM4/PM8    |
| Fluorene <sup>#M</sup>              | -          | <0.04      | -          | <0.04      | -          | <0.04      | -          | <0.04      | -          | -          | <0.04                                                        | mg/kg | TM4/PM8    |
| Phenanthrene <sup>#M</sup>          | -          | <0.03      | -          | <0.03      | -          | <0.03      | -          | <0.03      | -          | -          | <0.03                                                        | mg/kg | TM4/PM8    |
| Anthracene <sup>#</sup>             | -          | <0.04      | -          | <0.04      | -          | <0.04      | -          | <0.04      | -          | -          | <0.04                                                        | mg/kg | TM4/PM8    |
| Fluoranthene <sup>#M</sup>          | -          | 0.06       | -          | 0.05       | -          | 0.07       | -          | 0.05       | -          | -          | <0.03                                                        | mg/kg | TM4/PM8    |
| Pyrene <sup>#</sup>                 | -          | 0.05       | -          | 0.05       | -          | 0.06       | -          | 0.04       | -          | -          | <0.03                                                        | mg/kg | TM4/PM8    |
| Benzo(a)anthracene <sup>#</sup>     | -          | <0.06      | -          | <0.06      | -          | <0.06      | -          | <0.06      | -          | -          | <0.06                                                        | mg/kg | TM4/PM8    |
| Chrysene <sup>#M</sup>              | -          | 0.04       | -          | <0.02      | -          | 0.06       | -          | 0.04       | -          | -          | <0.02                                                        | mg/kg | TM4/PM8    |
| Benzo(bk)fluoranthene <sup>#M</sup> | -          | <0.07      | -          | <0.07      | -          | 0.08       | -          | <0.07      | -          | -          | <0.07                                                        | mg/kg | TM4/PM8    |
| Benzo(a)pyrene <sup>#</sup>         | -          | <0.04      | -          | <0.04      | -          | <0.04      | -          | <0.04      | -          | -          | <0.04                                                        | mg/kg | TM4/PM8    |
| Indeno(123cd)pyrene <sup>#M</sup>   | -          | <0.04      | -          | <0.04      | -          | <0.04      | -          | <0.04      | -          | -          | <0.04                                                        | mg/kg | TM4/PM8    |
| Dibenzo(ah)anthracene <sup>#</sup>  | -          | <0.04      | -          | <0.04      | -          | <0.04      | -          | <0.04      | -          | -          | <0.04                                                        | mg/kg | TM4/PM8    |
| Benzo(ghi)perylene <sup>#</sup>     | -          | <0.04      | -          | <0.04      | -          | <0.04      | -          | <0.04      | -          | -          | <0.04                                                        | mg/kg | TM4/PM8    |
| PAH 16 Total                        | -          | <0.6       | -          | <0.6       | -          | <0.6       | -          | <0.6       | -          | -          | <0.6                                                         | mg/kg | TM4/PM8    |
| Benzo(b)fluoranthene                | -          | <0.05      | -          | <0.05      | -          | 0.06       | -          | <0.05      | -          | -          | <0.05                                                        | mg/kg | TM4/PM8    |
| Benzo(k)fluoranthene                | -          | <0.02      | -          | <0.02      | -          | 0.02       | -          | <0.02      | -          | -          | <0.02                                                        | mg/kg | TM4/PM8    |
| PAH Surrogate % Recovery            | -          | 91         | -          | 95         | -          | 99         | -          | 93         | -          | -          | <0                                                           | %     | TM4/PM8    |
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**Element Materials Technology** **Notification of Deviating Samples**

|                     |                   |
|---------------------|-------------------|
| <b>Client Name:</b> | Arcadis           |
| <b>Reference:</b>   | 30250853          |
| <b>Location:</b>    | M+G Kennet Valley |
| <b>Contact:</b>     | Luke Day          |

### Notification of Deviating Samples

**Matrix : Solid**

[illegible]

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating. Only analyses which are accredited are recorded as deviating if set criteria are not met.

It is a requirement under ISO 17025 that we inform clients if samples are deviating i.e. outside what is expected. A deviating sample indicates that the sample 'may' be compromised but not necessarily will be compromised. The result is still accredited and our analytical reports will still show accreditation on the relevant analytes.

It is a requirement under ISO 17025 that we inform clients if samples are deviating i.e. outside what is expected. A deviating sample indicates that the sample 'may' be compromised but not necessarily will be compromised. The result is still accredited and our analytical reports will still show accreditation on the relevant analytes.

# NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 24/21473

## SOILS and ASH

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. Asbestos samples are retained for 6 months.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C. Ash samples are dried at 35°C ±5°C.

Where Mineral Oil is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overestimate when other sulphides such as Barite (Barium Sulphate) are present.

## WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil is quoted, this refers to Total Aliphatics C10-C40.

## STACK EMISSIONS

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation for Dioxins and Furans and Dioxin like PCBs has been performed on XAD-2 Resin, only samples which use this resin will be within our MCERTS scope.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

## DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

## SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

## DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

## BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

## NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a requirement of our Accreditation Body for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Laboratory records are kept for a period of no less than 6 years.

## REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

### Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

### Customer Provided Information

Sample ID and depth is information provided by the customer.

### Age of Diesel

The age of release estimation is based on the nC17/pristane ratio only as prescribed by Christensen and Larsen (1993) and Kaplan, Galperin, Alimi et al., (1996).

Age estimation should be treated with caution as it can be influenced by site specific factors of which the laboratory are not aware.

### Tentatively Identified Compounds (TICs)

Where Tentatively Identified Compounds (TICs) are reported, up to 10 Tentatively Identified Compounds will be listed where there is found to be a greater than 80% match with the NIST library. The reported concentration is determined semi-quantitatively, with a matrix specific limit of detection.

Note, other compounds may be present but are not reported.

## ABBREVIATIONS and ACRONYMS USED

|         |                                                                                                                                                                          |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #       | ISO17025 (UKAS Ref No. 4225) accredited - UK.                                                                                                                            |
| SA      | ISO17025 (SANAS Ref No.T0729) accredited - South Africa                                                                                                                  |
| B       | Indicates analyte found in associated method blank.                                                                                                                      |
| DR      | Dilution required.                                                                                                                                                       |
| M       | MCERTS accredited.                                                                                                                                                       |
| NA      | Not applicable                                                                                                                                                           |
| NAD     | No Asbestos Detected.                                                                                                                                                    |
| ND      | None Detected (usually refers to VOC and/SVOC TICs).                                                                                                                     |
| NDP     | No Determination Possible                                                                                                                                                |
| SS      | Calibrated against a single substance                                                                                                                                    |
| SV      | Surrogate recovery outside performance criteria. This may be due to a matrix effect.                                                                                     |
| W       | Results expressed on as received basis.                                                                                                                                  |
| +       | AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.                                                               |
| >>      | Results above quantitative calibration range. The result should be considered the minimum value and is indicative only. The actual result could be significantly higher. |
| *       | Analysis subcontracted to an Element Materials Technology approved laboratory.                                                                                           |
| CO      | Suspected carry over                                                                                                                                                     |
| LOD/LOR | Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS                                                                                                |
| ME      | Matrix Effect                                                                                                                                                            |
| NFD     | No Fibres Detected                                                                                                                                                       |
| BS      | AQC Sample                                                                                                                                                               |
| LB      | Blank Sample                                                                                                                                                             |
| N       | Client Sample                                                                                                                                                            |
| TB      | Trip Blank Sample                                                                                                                                                        |
| OC      | Outside Calibration Range                                                                                                                                                |
|         |                                                                                                                                                                          |

## HWOL ACRONYMS AND OPERATORS USED

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

EMT Job No: 24/21473

| Test Method No. | Description                                                                                                                                                                                                                                                                                                                      | Prep Method No. (if appropriate) | Description                                                                                                                                                | ISO 17025 (UKAS/S ANAS) | MCERTS (UK soils only) | Analysis done on As Received (AR) or Dried (AD) | Reported on dry weight basis |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------|-------------------------------------------------|------------------------------|
| TM4             | Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.                                                                                                                                                                                                                               | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                      |                         |                        | AR                                              | Yes                          |
| TM4             | Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.                                                                                                                                                                                                                               | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                      | Yes                     |                        | AR                                              | Yes                          |
| TM4             | Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.                                                                                                                                                                                                                               | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                      | Yes                     | Yes                    | AR                                              | Yes                          |
| TM30            | Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma-Optical Emission Spectrometry); WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996 | PM15                             | Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 degrees Celsius. Samples containing asbestos are not dried and ground. | Yes                     | Yes                    | AD                                              | Yes                          |
|                 |                                                                                                                                                                                                                                                                                                                                  |                                  |                                                                                                                                                            |                         |                        |                                                 |                              |
|                 |                                                                                                                                                                                                                                                                                                                                  |                                  |                                                                                                                                                            |                         |                        |                                                 |                              |
|                 |                                                                                                                                                                                                                                                                                                                                  |                                  |                                                                                                                                                            |                         |                        |                                                 |                              |
|                 |                                                                                                                                                                                                                                                                                                                                  |                                  |                                                                                                                                                            |                         |                        |                                                 |                              |
|                 |                                                                                                                                                                                                                                                                                                                                  |                                  |                                                                                                                                                            |                         |                        |                                                 |                              |
|                 |                                                                                                                                                                                                                                                                                                                                  |                                  |                                                                                                                                                            |                         |                        |                                                 |                              |



# Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

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|                                |                             |
|--------------------------------|-----------------------------|
| <b>Attention :</b>             | Matt Ingham                 |
| <b>Date :</b>                  | 13th February, 2015         |
| <b>Your reference :</b>        | UK11-20113                  |
| <b>Our reference :</b>         | Test Report 15/3149 Batch 1 |
| <b>Location :</b>              | Green Park                  |
| <b>Date samples received :</b> | 3rd February, 2015          |
| <b>Status :</b>                | Final report                |
| <b>Issue :</b>                 | 1                           |

Twenty samples were received for analysis on 3rd February, 2015 of which twenty were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

## Compiled By:

**Simon Gomery BSc**  
**Project Manager**

**Bob Millward BSc FRSC**  
**Principal Chemist**



**Client Name:** Environ  
**Reference:** UK11-20113  
**Location:** Green Park  
**Contact:** Matt Ingham  
**JE Job No.:** 15/3149

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

| J E Sample No.                     | 1-6        | 7-9        | 10-15      | 16-18      | 19-21      | 22-24      | 25-27      | 28-33      | 34-36      | 37-39      | Please see attached notes for all abbreviations and acronyms |       |            |
|------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------------------------------------------------------|-------|------------|
| Sample ID                          | TP01       | TP02       | TP03       | TP03       | TP04       | TP05       | TP06       | TP07       | TP08       | TP09       |                                                              |       |            |
| Depth                              | 1.00       | 1.20       | 1.50       | 2.50       | 1.00       | 1.50       | 1.50       | 1.50       | 1.00       | 1.50       |                                                              |       |            |
| COC No / misc                      |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| Containers                         | V J T      | V J        | V J T      | V J        | V J        | V J        | V J        | V J T      | V J        | V J        |                                                              |       |            |
| Sample Date                        | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 |                                                              |       |            |
| Sample Type                        | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       |                                                              |       |            |
| Batch Number                       | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          |                                                              |       |            |
| Date of Receipt                    | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | LOD/LOR                                                      | Units | Method No. |
| Pesticides MS                      |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| <b>Organochlorine Pesticides</b>   |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| Aldrin                             | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Alpha-HCH (BHC)                    | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Beta-HCH (BHC)                     | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Dieldrin                           | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Endosulphan I                      | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Endosulphan II                     | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Endosulphan sulphate               | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Endrin                             | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Gamma-HCH (BHC)                    | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Heptachlor                         | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Heptachlor Epoxide                 | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| p,p'-DDE                           | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| p,p'-DDT                           | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| p,p'-TDE                           | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Total Methoxychlor                 | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| <b>Organophosphorus Pesticides</b> |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| Azinphos methyl                    | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Diazinon                           | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Dichlorvos                         | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Disulfoton                         | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Ethion                             | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Ethyl Parathion (Parathion)        | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Fenitrothion                       | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Malathion                          | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Methyl Parathion                   | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Mevinphos                          | -          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| 2,3,6 – TBA                        | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| 2,4 – D                            | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| 2,4 – DB                           | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| 2,4,5 – T                          | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| 4- CPA                             | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Benazolin                          | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Bentazone                          | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Bromoxynil                         | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Clopyralid                         | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Dicamba                            | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Dichloroprop                       | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Diclofop                           | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Fenoprop                           | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Flamprop                           | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Flamprop – isopropyl               | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |

Client Name: Environ  
Reference: UK11-20113  
Location: Green Park  
Contact: Matt Ingham  
JE Job No.: 15/3149

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

| J E Sample No.                        | 1-6        | 7-9        | 10-15      | 16-18      | 19-21      | 22-24      | 25-27      | 28-33      | 34-36      | 37-39      | Please see attached notes for all abbreviations and acronyms |       |               |
|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------------------------------------------------------|-------|---------------|
| Sample ID                             | TP01       | TP02       | TP03       | TP03       | TP04       | TP05       | TP06       | TP07       | TP08       | TP09       |                                                              |       |               |
| Depth                                 | 1.00       | 1.20       | 1.50       | 2.50       | 1.00       | 1.50       | 1.50       | 1.50       | 1.00       | 1.50       |                                                              |       |               |
| COC No / misc                         |            |            |            |            |            |            |            |            |            |            |                                                              |       |               |
| Containers                            | V J T      | V J        | V J T      | V J        | V J        | V J        | V J        | V J T      | V J        | V J        |                                                              |       |               |
| Sample Date                           | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 |                                                              |       |               |
| Sample Type                           | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       |                                                              |       |               |
| Batch Number                          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          |                                                              |       |               |
| Date of Receipt                       | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | LOD/LOR                                                      | Units | Method No.    |
| Ioxynil                               | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8      |
| MCPA                                  | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8      |
| MCPB                                  | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8      |
| Mecoprop                              | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8      |
| Pentachlorophenol                     | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8      |
| Picloram                              | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8      |
| Triclopyr                             | -          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8      |
| TPH CWG                               |            |            |            |            |            |            |            |            |            |            |                                                              |       |               |
| Aliphatics                            |            |            |            |            |            |            |            |            |            |            |                                                              |       |               |
| >C5-C6 #                              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12     |
| >C6-C8 #                              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12     |
| >C8-C10                               | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12     |
| >C10-C12 #                            | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2                                                         | mg/kg | TM5/PM16      |
| >C12-C16 #                            | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4                                                           | mg/kg | TM5/PM16      |
| >C16-C21 #                            | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg | TM5/PM16      |
| >C21-C35 #                            | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg | TM5/PM16      |
| Total aliphatics C5-35                | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19                                                          | mg/kg | TM5/PM16/PM18 |
| Aromatics                             |            |            |            |            |            |            |            |            |            |            |                                                              |       |               |
| >C5-EC7                               | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12     |
| >EC7-EC8                              | <0.1       | <0.1       | <0.1       | 0.1        | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12     |
| >EC8-EC10 #                           | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12     |
| >EC10-EC12                            | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2                                                         | mg/kg | TM5/PM16      |
| >EC12-EC16                            | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4                                                           | mg/kg | TM5/PM16      |
| >EC16-EC21                            | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg | TM5/PM16      |
| >EC21-EC35                            | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg | TM5/PM16      |
| Total aromatics C5-35                 | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19                                                          | mg/kg | TM5/PM16/PM18 |
| Total aliphatics and aromatics(C5-35) | <38        | <38        | <38        | <38        | <38        | <38        | <38        | <38        | <38        | <38        | <38                                                          | mg/kg | TM5/PM16/PM18 |
| MTBE #                                | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12     |
| Benzene #                             | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12     |
| Toluene #                             | <5         | <5         | <5         | 176        | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12     |
| Ethylbenzene #                        | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12     |
| m/p-Xylene #                          | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12     |
| o-Xylene #                            | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12     |
| Phenol #                              | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01                                                        | mg/kg | TM26/PM21     |
| Natural Moisture Content              | 19.7       | 21.5       | 11.7       | 21.5       | 17.1       | 24.2       | 18.0       | 19.6       | 11.3       | 16.2       | <0.1                                                         | %     | PM4/PM0       |
| Hexavalent Chromium #                 | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3                                                         | mg/kg | TM38/PM20     |
| Sulphate as SO4 (2:1 Ext) #           | 0.0058     | 0.0606     | 1.0660     | 0.0229     | <0.0015    | 1.6947     | 0.0629     | 0.0096     | <0.0015    | <0.0015    | <0.0015                                                      | g/l   | TM38/PM20     |
| Total Cyanide #                       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5                                                         | mg/kg | TM89/PM45     |

Please include all sections of this report if it is reproduced





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**Reference:** UK11-20113  
**Location:** Green Park  
**Contact:** Matt Ingham  
**JE Job No.:** 15/3149

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

| J E Sample No.                     | 40-42      | 43-48      | 49-51      | 52-54      | 55-57      | 58-63      | 64-66      | 67-68      | 69-71      | 72-74      | Please see attached notes for all abbreviations and acronyms |       |            |
|------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------------------------------------------------------|-------|------------|
| Sample ID                          | TP10       | TP11       | TP12       | TP13       | TP14       | TP15       | TP16       | TP17       | TP18       | TP19       |                                                              |       |            |
| Depth                              | 1.00       | 1.00       | 1.50       | 1.50       | 1.00       | 1.50       | 1.00       | 1.50       | 1.00       | 1.50       |                                                              |       |            |
| COC No / misc                      |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| Containers                         | V J        | V J T      | V J        | V J        | V J        | V J T      | V J        | V J        | V J        | V J        |                                                              |       |            |
| Sample Date                        | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 |                                                              |       |            |
| Sample Type                        | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       |                                                              |       |            |
| Batch Number                       | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          |                                                              |       |            |
| Date of Receipt                    | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | LOD/LOR                                                      | Units | Method No. |
| Pesticides MS                      |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| <b>Organochlorine Pesticides</b>   |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| Aldrin                             | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Alpha-HCH (BHC)                    | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Beta-HCH (BHC)                     | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Dieldrin                           | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Endosulphan I                      | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Endosulphan II                     | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Endosulphan sulphate               | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Endrin                             | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Gamma-HCH (BHC)                    | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Heptachlor                         | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Heptachlor Epoxide                 | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| p,p'-DDE                           | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| p,p'-DDT                           | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| p,p'-TDE                           | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Total Methoxychlor                 | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| <b>Organophosphorus Pesticides</b> |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| Azinphos methyl                    | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Diazinon                           | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Dichlorvos                         | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Disulfoton                         | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Ethion                             | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Ethyl Parathion (Parathion)        | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Fenitrothion                       | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Malathion                          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Methyl Parathion                   | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Mevinphos                          | -          | -          | -          | <1         | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| 2,3,6 – TBA                        | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| 2,4 – D                            | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| 2,4 – DB                           | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| 2,4,5 – T                          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| 4- CPA                             | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Benazolin                          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Bentazone                          | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Bromoxynil                         | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Clopyralid                         | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Dicamba                            | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Dichloroprop                       | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Diclofop                           | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Fenoprop                           | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Flamprop                           | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Flamprop – isopropyl               | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |

**Client Name:** Environ  
**Reference:** UK11-20113  
**Location:** Green Park  
**Contact:** Matt Ingham  
**JE Job No.:** 15/3149

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

| J E Sample No.                        | 40-42      | 43-48      | 49-51      | 52-54      | 55-57      | 58-63      | 64-66      | 67-68      | 69-71      | 72-74      | Please see attached notes for all abbreviations and acronyms |       |               |
|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------------------------------------------------------|-------|---------------|
| Sample ID                             | TP10       | TP11       | TP12       | TP13       | TP14       | TP15       | TP16       | TP17       | TP18       | TP19       |                                                              |       |               |
| Depth                                 | 1.00       | 1.00       | 1.50       | 1.50       | 1.00       | 1.50       | 1.00       | 1.50       | 1.00       | 1.50       |                                                              |       |               |
| COC No / misc                         |            |            |            |            |            |            |            |            |            |            |                                                              |       |               |
| Containers                            | V J        | V J T      | V J        | V J        | V J        | V J T      | V J        | V J        | V J        | V J        |                                                              |       |               |
| Sample Date                           | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 | 02/02/2015 |                                                              |       |               |
| Sample Type                           | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       |                                                              |       |               |
| Batch Number                          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          |                                                              |       |               |
| Date of Receipt                       | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | LOD/LOR                                                      | Units | Method No.    |
| Ioxynil                               | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8      |
| MCPA                                  | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8      |
| MCPB                                  | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8      |
| Mecoprop                              | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8      |
| Pentachlorophenol                     | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8      |
| Picloram                              | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8      |
| Triclopyr                             | -          | -          | -          | <0.1       | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8      |
| TPH CWG                               |            |            |            |            |            |            |            |            |            |            |                                                              |       |               |
| <b>Aliphatics</b>                     |            |            |            |            |            |            |            |            |            |            |                                                              |       |               |
| >C5-C6 #                              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12     |
| >C6-C8 #                              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12     |
| >C8-C10                               | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12     |
| >C10-C12 #                            | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2                                                         | mg/kg | TM5/PM16      |
| >C12-C16 #                            | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4                                                           | mg/kg | TM5/PM16      |
| >C16-C21 #                            | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg | TM5/PM16      |
| >C21-C35 #                            | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg | TM5/PM16      |
| Total aliphatics C5-35                | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19                                                          | mg/kg | TM5/PM16/PM18 |
| <b>Aromatics</b>                      |            |            |            |            |            |            |            |            |            |            |                                                              |       |               |
| >C5-EC7                               | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12     |
| >EC7-EC8                              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12     |
| >EC8-EC10 #                           | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12     |
| >EC10-EC12                            | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2                                                         | mg/kg | TM5/PM16      |
| >EC12-EC16                            | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4                                                           | mg/kg | TM5/PM16      |
| >EC16-EC21                            | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg | TM5/PM16      |
| >EC21-EC35                            | <7         | <7         | <7         | <7         | 73         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg | TM5/PM16      |
| Total aromatics C5-35                 | <19        | <19        | <19        | <19        | 73         | <19        | <19        | <19        | <19        | <19        | <19                                                          | mg/kg | TM5/PM16/PM18 |
| Total aliphatics and aromatics(C5-35) | <38        | <38        | <38        | <38        | 73         | <38        | <38        | <38        | <38        | <38        | <38                                                          | mg/kg | TM5/PM16/PM18 |
| MTBE #                                | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12     |
| Benzene #                             | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12     |
| Toluene #                             | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12     |
| Ethylbenzene #                        | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12     |
| m/p-Xylene #                          | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12     |
| o-Xylene #                            | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12     |
| Phenol #                              | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01      | <0.01                                                        | mg/kg | TM26/PM21     |
| Natural Moisture Content              | 22.4       | 16.7       | 19.3       | 18.1       | 15.7       | 19.0       | 15.9       | 18.8       | 11.1       | 16.6       | <0.1                                                         | %     | PM4/PM0       |
| Hexavalent Chromium #                 | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3       | <0.3                                                         | mg/kg | TM38/PM20     |
| Sulphate as SO4 (2:1 Ext) #           | 1.7048     | 0.3965     | 0.0633     | 0.0168     | 0.0041     | 0.0454     | 0.4309     | 1.5518     | 0.0912     | <0.0015    | <0.0015                                                      | g/l   | TM38/PM20     |
| Total Cyanide #                       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5       | <0.5                                                         | mg/kg | TM89/PM45     |



**Client Name:** Environ  
**Reference:** UK11-20113  
**Location:** Green Park  
**Contact:** Matt Ingham

**Note:**

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

*Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.*

*If asbestos fibres are reported at trace levels there will not be enough fibres to quantify and will be less than 0.001%.*

Signed on behalf of Jones Environmental Laboratory:

Ryan Butterworth  
 Asbestos Team Leader

| J E Job No. | Batch | Sample ID | Depth | J E Sample No. | Date Of Analysis | Description                | Asbestos Containing Material | Asbestos Results | Asbestos Level | Comments |
|-------------|-------|-----------|-------|----------------|------------------|----------------------------|------------------------------|------------------|----------------|----------|
| 15/3149     | 1     | TP01      | 1.00  | 4              | 04/02/15         | Soil/Stone/Brick/Veg       | None                         | NAD              | NAD            |          |
| 15/3149     | 1     | TP02      | 1.20  | 9              | 04/02/15         | soil/stones                | None                         | NAD              | NAD            |          |
| 15/3149     | 1     | TP03      | 1.50  | 13             | 04/02/15         | Soil/Clay/Stones/Brick/Veg | None                         | NAD              | NAD            |          |
| 15/3149     | 1     | TP03      | 2.50  | 18             | 04/02/15         | soil/stones                | None                         | NAD              | NAD            |          |
| 15/3149     | 1     | TP04      | 1.00  | 21             | 04/02/15         | soil/stones                | None                         | NAD              | NAD            |          |
| 15/3149     | 1     | TP05      | 1.50  | 24             | 04/02/15         | Soil/Stone                 | None                         | NAD              | NAD            |          |
| 15/3149     | 1     | TP06      | 1.50  | 27             | 04/02/15         | Soil/Brick/Stone           | None                         | NAD              | NAD            |          |
| 15/3149     | 1     | TP07      | 1.50  | 31             | 04/02/15         | Soil/Stone                 | None                         | NAD              | NAD            |          |
| 15/3149     | 1     | TP08      | 1.00  | 36             | 04/02/15         | Soil/Stone                 | None                         | NAD              | NAD            |          |
| 15/3149     | 1     | TP09      | 1.50  | 39             | 04/02/15         | Soil/Stone                 | None                         | NAD              | NAD            |          |
| 15/3149     | 1     | TP10      | 1.00  | 42             | 04/02/15         | Soil/Clay/Stones/Brick/Veg | None                         | NAD              | NAD            |          |
| 15/3149     | 1     | TP11      | 1.00  | 46             | 04/02/15         | Soil/Clay/Stones/Brick/Veg | None                         | NAD              | NAD            |          |
| 15/3149     | 1     | TP12      | 1.50  | 51             | 04/02/15         | soil/stones                | None                         | NAD              | NAD            |          |
| 15/3149     | 1     | TP13      | 1.50  | 54             | 04/02/15         | Soil/Clay/Stones/Brick/Veg | None                         | NAD              | NAD            |          |

**Client Name:** Environ  
**Reference:** UK11-20113  
**Location:** Green Park  
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[illegible]

**Client Name:** Environ  
**Reference:** UK11-20113  
**Location:** Green Park  
**Contact:** Matt Ingham

[illegible]

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating. Only analyses which are accredited are recorded as deviating if set criteria are not met.

## NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/3149

### SOILS

Please note we are only MCERTS accredited for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. If we are instructed to keep samples, a storage charge of £1 (1.5 Euros) per sample per month will be applied until we are asked to dispose of them.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

### WATERS

Please note we are not a Drinking Water Inspectorate (DWI) Approved Laboratory . It is important that detection limits are carefully considered when requesting water analysis.

UKAS accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

### DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

### SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

### DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

### NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

## ABBREVIATIONS and ACRONYMS USED

|         |                                                                                                            |
|---------|------------------------------------------------------------------------------------------------------------|
| #       | UKAS accredited.                                                                                           |
| B       | Indicates analyte found in associated method blank.                                                        |
| DR      | Dilution required.                                                                                         |
| M       | MCERTS accredited.                                                                                         |
| NA      | Not applicable                                                                                             |
| NAD     | No Asbestos Detected.                                                                                      |
| ND      | None Detected (usually refers to VOC and/SVOC TICs).                                                       |
| NDP     | No Determination Possible                                                                                  |
| SS      | Calibrated against a single substance                                                                      |
| SV      | Surrogate recovery outside performance criteria. This may be due to a matrix effect.                       |
| W       | Results expressed on as received basis.                                                                    |
| +       | AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page. |
| ++      | Result outside calibration range, results should be considered as indicative only and are not accredited.  |
| *       | Analysis subcontracted to a Jones Environmental approved laboratory.                                       |
| AD      | Samples are dried at 35°C ±5°C                                                                             |
| CO      | Suspected carry over                                                                                       |
| LOD/LOR | Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS                                  |
| ME      | Matrix Effect                                                                                              |
| NFD     | No Fibres Detected                                                                                         |
| OC      | Outside Calibration Range                                                                                  |

JE Job No: 15/3149

| Test Method No. | Description                                                                                                                                                                                                                                                                                                                                         | Prep Method No. (if appropriate) | Description                                                                                                                                          | UKAS | MCERTS (soils only) | Analysis done on As Received (AR) or Dried (AD) | Reported on dry weight basis |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------------|-------------------------------------------------|------------------------------|
| PM4             | Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.                                                                                                                                                                                                      | PM0                              | No preparation is required.                                                                                                                          |      |                     |                                                 |                              |
| PM4             | Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.                                                                                                                                                                                                      | PM0                              | No preparation is required.                                                                                                                          |      |                     | AR                                              | Yes                          |
| TM4             | Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.                                                                                                                                                                                                                                                        | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                |      |                     | AR                                              | Yes                          |
| TM4             | Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.                                                                                                                                                                                                                                                        | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                | Yes  |                     | AR                                              | Yes                          |
| TM5             | Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.                                                                                                                                                                                           | PM16                             | Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.                                                                         |      |                     | AR                                              | Yes                          |
| TM5             | Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.                                                                                                                                                                                           | PM16                             | Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.                                                                         | Yes  |                     | AR                                              | Yes                          |
| TM5/TM36        | TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID.<br>TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID. | PM12/PM16                        | CWG GC-FID                                                                                                                                           |      |                     | AR                                              | Yes                          |
| TM21            | Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO <sub>2</sub> generated is quantified using infra-red detection.                                                                                                                        | PM24                             | Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis. | Yes  |                     | AD                                              | Yes                          |
| TM26            | Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.                                                                                                                                                                                                                                  | PM21                             | As received solid or water samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.                                | Yes  |                     | AR                                              | Yes                          |
| TM30            | Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7                                                                                                                                                                                                         | PM15                             | Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.        | Yes  |                     | AD                                              | Yes                          |

JE Job No: 15/3149

| Test Method No. | Description                                                                                                                             | Prep Method No. (if appropriate) | Description                                                                                                                                                                                                                                                        | UKAS | MCERTS (soils only) | Analysis done on As Received (AR) or Dried (AD) | Reported on dry weight basis |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------------|-------------------------------------------------|------------------------------|
| TM31            | Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.             | PM12                             | Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.                                                                                                                                                                    |      |                     | AR                                              | Yes                          |
| TM31            | Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.             | PM12                             | Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.                                                                                                                                                                    | Yes  |                     | AR                                              | Yes                          |
| TM36            | Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.    | PM12                             | Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.                                                                                                                                                                    |      |                     | AR                                              | Yes                          |
| TM36            | Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.    | PM12                             | Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.                                                                                                                                                                    | Yes  |                     | AR                                              | Yes                          |
| TM38            | Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1 | PM20                             | Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker. | Yes  |                     | AD                                              | Yes                          |
| TM38            | Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1 | PM20                             | Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker. | Yes  |                     | AR                                              | Yes                          |
| TM42            | Modified US EPA method 8270. Pesticides and herbicides by GC-MS                                                                         | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                                                                                                                              |      |                     | AR                                              | Yes                          |
| TM65            | Asbestos Bulk Identification method based on HSG 248.                                                                                   | PM42                             | Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.                                                                                                                                               |      |                     | AR                                              |                              |
| TM65            | Asbestos Bulk Identification method based on HSG 248.                                                                                   | PM42                             | Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.                                                                                                                                               | Yes  |                     | AR                                              |                              |
| TM73            | Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.                                       | PM11                             | Extraction of as received solid samples using one part solid to 2.5 parts deionised water.                                                                                                                                                                         | Yes  |                     | AR                                              | No                           |

JE Job No: 15/3149

| Test Method No. | Description                                                                          | Prep Method No. (if appropriate) | Description                                                                                                  | UKAS | MCERTS (soils only) | Analysis done on As Received (AR) or Dried (AD) | Reported on dry weight basis |
|-----------------|--------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------|------|---------------------|-------------------------------------------------|------------------------------|
| TM89            | Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. | PM45                             | As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis. | Yes  |                     | AR                                              | Yes                          |
|                 |                                                                                      |                                  |                                                                                                              |      |                     |                                                 |                              |
|                 |                                                                                      |                                  |                                                                                                              |      |                     |                                                 |                              |
|                 |                                                                                      |                                  |                                                                                                              |      |                     |                                                 |                              |
|                 |                                                                                      |                                  |                                                                                                              |      |                     |                                                 |                              |
|                 |                                                                                      |                                  |                                                                                                              |      |                     |                                                 |                              |
|                 |                                                                                      |                                  |                                                                                                              |      |                     |                                                 |                              |
|                 |                                                                                      |                                  |                                                                                                              |      |                     |                                                 |                              |
|                 |                                                                                      |                                  |                                                                                                              |      |                     |                                                 |                              |
|                 |                                                                                      |                                  |                                                                                                              |      |                     |                                                 |                              |
|                 |                                                                                      |                                  |                                                                                                              |      |                     |                                                 |                              |



# Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

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|                                |                             |
|--------------------------------|-----------------------------|
| <b>Attention :</b>             | Matt Ingham                 |
| <b>Date :</b>                  | 25th February, 2015         |
| <b>Your reference :</b>        | UK11-20113                  |
| <b>Our reference :</b>         | Test Report 15/3149 Batch 2 |
| <b>Location :</b>              | Green Park                  |
| <b>Date samples received :</b> | 4th February, 2015          |
| <b>Status :</b>                | Final report                |
| <b>Issue :</b>                 | 1                           |

Eighteen samples were received for analysis on 4th February, 2015 of which eighteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

## Compiled By:

**Paul Lee-Boden BSc**  
**Project Manager**

**Bob Millward BSc FRSC**  
**Principal Chemist**



**Client Name:** Environ  
**Reference:** UK11-20113  
**Location:** Green Park  
**Contact:** Matt Ingham  
**JE Job No.:** 15/3149

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

| J E Sample No.                     | 75-77      | 78-83      | 84-86      | 87-89      | 90-92      | 93-98      | 99-101     | 102-104    | 105-107    | 108-113    | Please see attached notes for all abbreviations and acronyms |       |            |
|------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------------------------------------------------------|-------|------------|
| Sample ID                          | TP20       | TP21       | TP22       | TP23       | TP24       | TP25       | TP26       | TP27       | TP28       | TP29       |                                                              |       |            |
| Depth                              | 1.0        | 1.0        | 1.0        | 1.0        | 1.0        | 1.0        | 1.0        | 1.0        | 1.0        | 1.0        |                                                              |       |            |
| COC No / misc                      |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| Containers                         | V J        | V J T      | V J        | V J        | V J        | V J T      | V J        | V J        | V J        | V J T      |                                                              |       |            |
| Sample Date                        | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 |                                                              |       |            |
| Sample Type                        | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       |                                                              |       |            |
| Batch Number                       | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          |                                                              |       |            |
| Date of Receipt                    | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | LOD/LOR                                                      | Units | Method No. |
| Pesticides MS                      |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| <b>Organochlorine Pesticides</b>   |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| Aldrin                             | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Alpha-HCH (BHC)                    | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Beta-HCH (BHC)                     | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Dieldrin                           | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Endosulphan I                      | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Endosulphan II                     | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Endosulphan sulphate               | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Endrin                             | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Gamma-HCH (BHC)                    | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Heptachlor                         | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Heptachlor Epoxide                 | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| p,p'-DDE                           | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| p,p'-DDT                           | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| p,p'-TDE                           | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Total Methoxychlor                 | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| <b>Organophosphorus Pesticides</b> |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| Azinphos methyl                    | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Diazinon                           | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Dichlorvos                         | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Disulfoton                         | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Ethion                             | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Ethyl Parathion (Parathion)        | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Fenitrothion                       | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Malathion                          | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Methyl Parathion                   | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| Mevinphos                          | -          | <1         | -          | -          | -          | -          | -          | -          | -          | -          | <1                                                           | ug/kg | TM42/PM8   |
| 2,3,6 – TBA                        | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| 2,4 – D                            | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| 2,4 – DB                           | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| 2,4,5 – T                          | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| 4- CPA                             | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Benazolin                          | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Bentazone                          | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Bromoxynil                         | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Clopyralid                         | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Dicamba                            | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Dichloroprop                       | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Diclofop                           | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Fenoprop                           | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Flamprop                           | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Flamprop – isopropyl               | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |

**Client Name:** Environ  
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| J E Sample No.                        | 75-77      | 78-83      | 84-86      | 87-89      | 90-92      | 93-98      | 99-101     | 102-104    | 105-107    | 108-113    | Please see attached notes for all abbreviations and acronyms |       |            |
|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------------------------------------------------------|-------|------------|
| Sample ID                             | TP20       | TP21       | TP22       | TP23       | TP24       | TP25       | TP26       | TP27       | TP28       | TP29       |                                                              |       |            |
| Depth                                 | 1.0        | 1.0        | 1.0        | 1.0        | 1.0        | 1.0        | 1.0        | 1.0        | 1.0        | 1.0        |                                                              |       |            |
| COC No / misc                         |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| Containers                            | V J        | V J T      | V J        | V J        | V J        | V J T      | V J        | V J        | V J        | V J T      |                                                              |       |            |
| Sample Date                           | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 |                                                              |       |            |
| Sample Type                           | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       |                                                              |       |            |
| Batch Number                          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          | 2          |                                                              |       |            |
| Date of Receipt                       | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | LOD/LOR                                                      | Units | Method No. |
| Ioxynil                               | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| MCPA                                  | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| MCPB                                  | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Mecoprop                              | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Pentachlorophenol                     | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Picloram                              | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Triclopyr                             | -          | <0.1       | -          | -          | -          | -          | -          | -          | -          | -          | <0.1                                                         | mg/kg | TM42/PM8   |
| Mineral Oil (C10-C40)                 | -          | -          | -          | -          | -          | -          | -          | -          | -          | -          | <30                                                          | mg/kg | TM5/PM16   |
| TPH CWG                               |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| <b>Aliphatics</b>                     |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| >C5-C6 #                              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12  |
| >C6-C8 #                              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12  |
| >C8-C10                               | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12  |
| >C10-C12 #                            | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2                                                         | mg/kg | TM5/PM16   |
| >C12-C16 #                            | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4                                                           | mg/kg | TM5/PM16   |
| >C16-C21 #                            | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg | TM5/PM16   |
| >C21-C35 #                            | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg | TM5/PM16   |
| Total aliphatics C5-35                | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19                                                          | mg/kg | TM5/PM16   |
| <b>Aromatics</b>                      |            |            |            |            |            |            |            |            |            |            |                                                              |       |            |
| >C5-EC7                               | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12  |
| >EC7-EC8                              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12  |
| >EC8-EC10 #                           | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1                                                         | mg/kg | TM36/PM12  |
| >EC10-EC12                            | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2                                                         | mg/kg | TM5/PM16   |
| >EC12-EC16                            | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4         | <4                                                           | mg/kg | TM5/PM16   |
| >EC16-EC21                            | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg | TM5/PM16   |
| >EC21-EC35                            | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7         | <7                                                           | mg/kg | TM5/PM16   |
| Total aromatics C5-35                 | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19        | <19                                                          | mg/kg | TM5/PM16   |
| Total aliphatics and aromatics(C5-35) | <38        | <38        | <38        | <38        | <38        | <38        | <38        | <38        | <38        | <38        | <38                                                          | mg/kg | TM5/PM16   |
| MTBE #                                | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12  |
| Benzene #                             | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12  |
| Toluene #                             | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12  |
| Ethylbenzene #                        | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12  |
| m/p-Xylene #                          | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12  |
| o-Xylene #                            | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5         | <5                                                           | ug/kg | TM31/PM12  |
| PCB 28 #                              | -          | -          | -          | -          | -          | -          | -          | -          | -          | -          | <5                                                           | ug/kg | TM17/PM8   |
| PCB 52 #                              | -          | -          | -          | -          | -          | -          | -          | -          | -          | -          | <5                                                           | ug/kg | TM17/PM8   |
| PCB 101 #                             | -          | -          | -          | -          | -          | -          | -          | -          | -          | -          | <5                                                           | ug/kg | TM17/PM8   |
| PCB 118 #                             | -          | -          | -          | -          | -          | -          | -          | -          | -          | -          | <5                                                           | ug/kg | TM17/PM8   |
| PCB 138 #                             | -          | -          | -          | -          | -          | -          | -          | -          | -          | -          | <5                                                           | ug/kg | TM17/PM8   |
| PCB 153 #                             | -          | -          | -          | -          | -          | -          | -          | -          | -          | -          | <5                                                           | ug/kg | TM17/PM8   |



# *Jones Environmental Laboratory*

Client Name: Environ  
Reference: UK11-20113  
Location: Green Park  
Contact: Matt Ingham  
JE Job No.: 15/3149

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

| J E Sample No.           | 114-116    | 117-119    | 120-122    | 123-128    | 129-134    | 135-137    | 138-139,143 | 140-142    |  |  | Please see attached notes for all abbreviations and acronyms |       |            |
|--------------------------|------------|------------|------------|------------|------------|------------|-------------|------------|--|--|--------------------------------------------------------------|-------|------------|
| Sample ID                | TP30       | TP31       | TP32       | TP33       | TP34       | TP34A      | TP35        | TP36       |  |  |                                                              |       |            |
| Depth                    | 1.0        | 0.7        | 1.0        | 1.0        | 1.0        | 1.0        | 1.0         | 1.0        |  |  |                                                              |       |            |
| COC No / misc            |            |            |            |            |            |            |             |            |  |  |                                                              |       |            |
| Containers               | V J        | V J        | V J        | V J T      | V J T      | V J        | V J         | V J        |  |  |                                                              |       |            |
| Sample Date              | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015  | 03/02/2015 |  |  |                                                              |       |            |
| Sample Type              | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil        | Soil       |  |  |                                                              |       |            |
| Batch Number             | 2          | 2          | 2          | 2          | 2          | 2          | 2           | 2          |  |  |                                                              |       |            |
| Date of Receipt          | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015  | 04/02/2015 |  |  | LOD/LOR                                                      | Units | Method No. |
| Arsenic #                | 6.9        | 6.1        | 6.8        | 7.5        | NDP        | 9.9        | 9.4         | 7.8        |  |  | <0.5                                                         | mg/kg | TM30/PM15  |
| Arsenic                  | -          | -          | -          | -          | 11.2       | -          | -           | -          |  |  | <0.5                                                         | mg/kg | TM30/PM62  |
| Cadmium #                | 0.2        | 0.2        | 0.2        | 0.3        | NDP        | <0.1       | 0.2         | 0.3        |  |  | <0.1                                                         | mg/kg | TM30/PM15  |
| Cadmium                  | -          | -          | -          | -          | 1.3        | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM30/PM62  |
| Chromium #               | 58.0       | 49.2       | 60.1       | 53.2       | NDP        | 60.4       | 141.7       | 52.1       |  |  | <0.5                                                         | mg/kg | TM30/PM15  |
| Chromium                 | -          | -          | -          | -          | 31.3       | -          | -           | -          |  |  | <0.5                                                         | mg/kg | TM30/PM62  |
| Copper #                 | 11         | 11         | 11         | 12         | NDP        | 10         | 12          | 15         |  |  | <1                                                           | mg/kg | TM30/PM15  |
| Copper                   | -          | -          | -          | -          | 80         | -          | -           | -          |  |  | <1                                                           | mg/kg | TM30/PM62  |
| Lead #                   | 26         | 20         | 18         | 31         | NDP        | 15         | 13          | 21         |  |  | <5                                                           | mg/kg | TM30/PM15  |
| Lead                     | -          | -          | -          | -          | 169        | -          | -           | -          |  |  | <5                                                           | mg/kg | TM30/PM62  |
| Mercury #                | <0.1       | <0.1       | <0.1       | <0.1       | NDP        | <0.1       | <0.1        | <0.1       |  |  | <0.1                                                         | mg/kg | TM30/PM15  |
| Mercury                  | -          | -          | -          | -          | <0.1       | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM30/PM62  |
| Nickel #                 | 15.1       | 13.5       | 13.3       | 16.2       | NDP        | 18.3       | 16.5        | 18.0       |  |  | <0.7                                                         | mg/kg | TM30/PM15  |
| Nickel                   | -          | -          | -          | -          | 24.8       | -          | -           | -          |  |  | <0.7                                                         | mg/kg | TM30/PM62  |
| Selenium #               | <1         | <1         | <1         | 1          | NDP        | <1         | <1          | <1         |  |  | <1                                                           | mg/kg | TM30/PM15  |
| Selenium                 | -          | -          | -          | -          | <1         | -          | -           | -          |  |  | <1                                                           | mg/kg | TM30/PM62  |
| Zinc #                   | 45         | 39         | 37         | 48         | NDP        | 37         | 39          | 57         |  |  | <5                                                           | mg/kg | TM30/PM15  |
| Zinc                     | -          | -          | -          | -          | 432        | -          | -           | -          |  |  | <5                                                           | mg/kg | TM30/PM62  |
| PAH MS                   |            |            |            |            |            |            |             |            |  |  |                                                              |       |            |
| Naphthalene #            | <0.04      | <0.04      | <0.04      | <0.04      | <0.04      | <0.04      | <0.04       | <0.04      |  |  | <0.04                                                        | mg/kg | TM4/PM8    |
| Acenaphthylene           | <0.03      | <0.03      | <0.03      | <0.03      | 0.10       | <0.03      | <0.03       | <0.03      |  |  | <0.03                                                        | mg/kg | TM4/PM8    |
| Acenaphthene #           | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      | <0.05      | <0.05       | <0.05      |  |  | <0.05                                                        | mg/kg | TM4/PM8    |
| Fluorene #               | <0.04      | <0.04      | <0.04      | <0.04      | <0.04      | <0.04      | <0.04       | <0.04      |  |  | <0.04                                                        | mg/kg | TM4/PM8    |
| Phenanthrene #           | <0.03      | <0.03      | <0.03      | <0.03      | 0.66       | <0.03      | <0.03       | <0.03      |  |  | <0.03                                                        | mg/kg | TM4/PM8    |
| Anthracene #             | <0.04      | <0.04      | <0.04      | <0.04      | 0.23       | <0.04      | <0.04       | <0.04      |  |  | <0.04                                                        | mg/kg | TM4/PM8    |
| Fluoranthene #           | <0.03      | <0.03      | <0.03      | 0.05       | 1.10       | 0.06       | 0.07        | <0.03      |  |  | <0.03                                                        | mg/kg | TM4/PM8    |
| Pyrene #                 | <0.03      | <0.03      | <0.03      | <0.03      | 0.95       | 0.05       | 0.06        | <0.03      |  |  | <0.03                                                        | mg/kg | TM4/PM8    |
| Benzo(a)anthracene #     | <0.06      | <0.06      | <0.06      | <0.06      | 0.78       | <0.06      | 0.07        | <0.06      |  |  | <0.06                                                        | mg/kg | TM4/PM8    |
| Chrysene #               | <0.02      | <0.02      | <0.02      | <0.02      | 0.52       | 0.05       | 0.05        | <0.02      |  |  | <0.02                                                        | mg/kg | TM4/PM8    |
| Benzo(bk)fluoranthene #  | <0.07      | <0.07      | <0.07      | <0.07      | 0.78       | 0.08       | <0.07       | <0.07      |  |  | <0.07                                                        | mg/kg | TM4/PM8    |
| Benzo(a)pyrene #         | <0.04      | <0.04      | <0.04      | <0.04      | 0.53       | <0.04      | 0.05        | <0.04      |  |  | <0.04                                                        | mg/kg | TM4/PM8    |
| Indeno(123cd)pyrene #    | <0.04      | <0.04      | <0.04      | <0.04      | 0.27       | <0.04      | <0.04       | <0.04      |  |  | <0.04                                                        | mg/kg | TM4/PM8    |
| Dibenzo(ah)anthracene #  | <0.04      | <0.04      | <0.04      | <0.04      | 0.09       | <0.04      | <0.04       | <0.04      |  |  | <0.04                                                        | mg/kg | TM4/PM8    |
| Benzo(ghi)perylene #     | <0.04      | <0.04      | <0.04      | <0.04      | 0.28       | <0.04      | <0.04       | <0.04      |  |  | <0.04                                                        | mg/kg | TM4/PM8    |
| Coronene                 | -          | -          | -          | -          | <0.04      | -          | -           | -          |  |  | <0.04                                                        | mg/kg | TM4/PM8    |
| PAH 16 Total             | <0.6       | <0.6       | <0.6       | <0.6       | 6.3        | <0.6       | <0.6        | <0.6       |  |  | <0.6                                                         | mg/kg | TM4/PM8    |
| PAH 17 Total             | -          | -          | -          | -          | 6.29       | -          | -           | -          |  |  | <0.64                                                        | mg/kg | TM4/PM8    |
| Benzo(b)fluoranthene     | <0.05      | <0.05      | <0.05      | <0.05      | 0.56       | 0.06       | <0.05       | <0.05      |  |  | <0.05                                                        | mg/kg | TM4/PM8    |
| Benzo(k)fluoranthene     | <0.02      | <0.02      | <0.02      | <0.02      | 0.22       | 0.02       | <0.02       | <0.02      |  |  | <0.02                                                        | mg/kg | TM4/PM8    |
| PAH Surrogate % Recovery | 83         | 103        | 83         | 82         | 96         | 82         | 98          | 88         |  |  | <0                                                           | %     | TM4/PM8    |

**Client Name:** Environ  
**Reference:** UK11-20113  
**Location:** Green Park  
**Contact:** Matt Ingham  
**JE Job No.:** 15/3149

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

| J E Sample No.                     | 114-116    | 117-119    | 120-122    | 123-128    | 129-134    | 135-137    | 138-139,143 | 140-142    |  |  | Please see attached notes for all abbreviations and acronyms |       |            |
|------------------------------------|------------|------------|------------|------------|------------|------------|-------------|------------|--|--|--------------------------------------------------------------|-------|------------|
| Sample ID                          | TP30       | TP31       | TP32       | TP33       | TP34       | TP34A      | TP35        | TP36       |  |  |                                                              |       |            |
| Depth                              | 1.0        | 0.7        | 1.0        | 1.0        | 1.0        | 1.0        | 1.0         | 1.0        |  |  |                                                              |       |            |
| COC No / misc                      |            |            |            |            |            |            |             |            |  |  |                                                              |       |            |
| Containers                         | V J        | V J        | V J        | V J T      | V J T      | V J        | V J         | V J        |  |  |                                                              |       |            |
| Sample Date                        | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015  | 03/02/2015 |  |  |                                                              |       |            |
| Sample Type                        | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil        | Soil       |  |  |                                                              |       |            |
| Batch Number                       | 2          | 2          | 2          | 2          | 2          | 2          | 2           | 2          |  |  |                                                              |       |            |
| Date of Receipt                    | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015  | 04/02/2015 |  |  | LOD/LOR                                                      | Units | Method No. |
| Pesticides MS                      |            |            |            |            |            |            |             |            |  |  |                                                              |       |            |
| <b>Organochlorine Pesticides</b>   |            |            |            |            |            |            |             |            |  |  |                                                              |       |            |
| Aldrin                             | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Alpha-HCH (BHC)                    | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Beta-HCH (BHC)                     | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Dieldrin                           | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Endosulphan I                      | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Endosulphan II                     | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Endosulphan sulphate               | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Endrin                             | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Gamma-HCH (BHC)                    | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Heptachlor                         | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Heptachlor Epoxide                 | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| p,p'-DDE                           | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| p,p'-DDT                           | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| p,p'-TDE                           | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Total Methoxychlor                 | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| <b>Organophosphorus Pesticides</b> |            |            |            |            |            |            |             |            |  |  |                                                              |       |            |
| Azinphos methyl                    | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Diazinon                           | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Dichlorvos                         | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Disulfoton                         | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Ethion                             | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Ethyl Parathion (Parathion)        | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Fenitrothion                       | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Malathion                          | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Methyl Parathion                   | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| Mevinphos                          | -          | -          | -          | <1         | -          | -          | -           | -          |  |  | <1                                                           | ug/kg | TM42/PM8   |
| 2,3,6 – TBA                        | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |
| 2,4 – D                            | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |
| 2,4 –DB                            | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |
| 2,4,5 – T                          | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |
| 4- CPA                             | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |
| Benazolin                          | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |
| Bentazone                          | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |
| Bromoxynil                         | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |
| Clopyralid                         | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |
| Dicamba                            | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |
| Dichloroprop                       | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |
| Diclofop                           | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |
| Fenoprop                           | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |
| Flamprop                           | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |
| Flamprop – isopropyl               | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8   |

**Client Name:** Environ  
**Reference:** UK11-20113  
**Location:** Green Park  
**Contact:** Matt Ingham  
**JE Job No.:** 15/3149

**Report : Solid**

**Solids:** V=60g VOC jar, J=250g glass jar, T=plastic tub

| J E Sample No.                        | 114-116    | 117-119    | 120-122    | 123-128    | 129-134    | 135-137    | 138-139,143 | 140-142    |  |  | Please see attached notes for all abbreviations and acronyms |       |                    |
|---------------------------------------|------------|------------|------------|------------|------------|------------|-------------|------------|--|--|--------------------------------------------------------------|-------|--------------------|
| Sample ID                             | TP30       | TP31       | TP32       | TP33       | TP34       | TP34A      | TP35        | TP36       |  |  |                                                              |       |                    |
| Depth                                 | 1.0        | 0.7        | 1.0        | 1.0        | 1.0        | 1.0        | 1.0         | 1.0        |  |  |                                                              |       |                    |
| COC No / misc                         |            |            |            |            |            |            |             |            |  |  |                                                              |       |                    |
| Containers                            | V J        | V J        | V J        | V J T      | V J T      | V J        | V J         | V J        |  |  |                                                              |       |                    |
| Sample Date                           | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015 | 03/02/2015  | 03/02/2015 |  |  |                                                              |       |                    |
| Sample Type                           | Soil       | Soil       | Soil       | Soil       | Soil       | Soil       | Soil        | Soil       |  |  |                                                              |       |                    |
| Batch Number                          | 2          | 2          | 2          | 2          | 2          | 2          | 2           | 2          |  |  |                                                              |       |                    |
| Date of Receipt                       | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015 | 04/02/2015  | 04/02/2015 |  |  | LOD/LOR                                                      | Units | Method No.         |
| Ioxynil                               | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8           |
| MCPA                                  | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8           |
| MCPB                                  | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8           |
| Mecoprop                              | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8           |
| Pentachlorophenol                     | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8           |
| Picloram                              | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8           |
| Triclopyr                             | -          | -          | -          | <0.1       | -          | -          | -           | -          |  |  | <0.1                                                         | mg/kg | TM42/PM8           |
| Mineral Oil (C10-C40)                 | -          | -          | -          | -          | <30        | -          | -           | -          |  |  | <30                                                          | mg/kg | TM5/PM16           |
| TPH CWG                               |            |            |            |            |            |            |             |            |  |  |                                                              |       |                    |
| <b>Aliphatics</b>                     |            |            |            |            |            |            |             |            |  |  |                                                              |       |                    |
| >C5-C6 #                              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1        | <0.1       |  |  | <0.1                                                         | mg/kg | TM36/PM12          |
| >C6-C8 #                              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1        | <0.1       |  |  | <0.1                                                         | mg/kg | TM36/PM12          |
| >C8-C10                               | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1        | <0.1       |  |  | <0.1                                                         | mg/kg | TM36/PM12          |
| >C10-C12 #                            | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2       | <0.2        | <0.2       |  |  | <0.2                                                         | mg/kg | TM5/PM16           |
| >C12-C16 #                            | <4         | <4         | <4         | <4         | <4         | <4         | <4          | <4         |  |  | <4                                                           | mg/kg | TM5/PM16           |
| >C16-C21 #                            | <7         | <7         | <7         | <7         | <7         | <7         | <7          | <7         |  |  | <7                                                           | mg/kg | TM5/PM16           |
| >C21-C35 #                            | <7         | <7         | <7         | <7         | <7         | <7         | <7          | <7         |  |  | <7                                                           | mg/kg | TM5/PM16           |
| Total aliphatics C5-35                | <19        | <19        | <19        | <19        | <19        | <19        | <19         | <19        |  |  | <19                                                          | mg/kg | TM5/PM16/PM12/PM18 |
| <b>Aromatics</b>                      |            |            |            |            |            |            |             |            |  |  |                                                              |       |                    |
| >C5-EC7                               | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1        | <0.1       |  |  | <0.1                                                         | mg/kg | TM36/PM12          |
| >EC7-EC8                              | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1        | <0.1       |  |  | <0.1                                                         | mg/kg | TM36/PM12          |
| >EC8-EC10 #                           | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       | <0.1        | <0.1       |  |  | <0.1                                                         | mg/kg | TM36/PM12          |
| >EC10-EC12                            | <0.2       | 2.8        | <0.2       | <0.2       | <0.2       | <0.2       | <0.2        | <0.2       |  |  | <0.2                                                         | mg/kg | TM5/PM16           |
| >EC12-EC16                            | <4         | 6          | <4         | <4         | <4         | <4         | <4          | <4         |  |  | <4                                                           | mg/kg | TM5/PM16           |
| >EC16-EC21                            | <7         | 12         | <7         | <7         | <7         | <7         | <7          | <7         |  |  | <7                                                           | mg/kg | TM5/PM16           |
| >EC21-EC35                            | <7         | <7         | <7         | <7         | 37         | <7         | <7          | <7         |  |  | <7                                                           | mg/kg | TM5/PM16           |
| Total aromatics C5-35                 | <19        | 21         | <19        | <19        | 37         | <19        | <19         | <19        |  |  | <19                                                          | mg/kg | TM5/PM16/PM12/PM18 |
| Total aliphatics and aromatics(C5-35) | <38        | <38        | <38        | <38        | <38        | <38        | <38         | <38        |  |  | <38                                                          | mg/kg | TM5/PM16/PM12/PM18 |
| MTBE #                                | <5         | <5         | <5         | <5         | <5         | <5         | <5          | <5         |  |  | <5                                                           | ug/kg | TM31/PM12          |
| Benzene #                             | <5         | <5         | <5         | <5         | <5         | <5         | <5          | <5         |  |  | <5                                                           | ug/kg | TM31/PM12          |
| Toluene #                             | <5         | <5         | <5         | <5         | <5         | <5         | <5          | <5         |  |  | <5                                                           | ug/kg | TM31/PM12          |
| Ethylbenzene #                        | <5         | <5         | <5         | <5         | <5         | <5         | <5          | <5         |  |  | <5                                                           | ug/kg | TM31/PM12          |
| m/p-Xylene #                          | <5         | <5         | <5         | <5         | <5         | <5         | <5          | <5         |  |  | <5                                                           | ug/kg | TM31/PM12          |
| o-Xylene #                            | <5         | <5         | <5         | <5         | <5         | <5         | <5          | <5         |  |  | <5                                                           | ug/kg | TM31/PM12          |
| PCB 28 #                              | -          | -          | -          | -          | <5         | -          | -           | -          |  |  | <5                                                           | ug/kg | TM17/PM8           |
| PCB 52 #                              | -          | -          | -          | -          | <5         | -          | -           | -          |  |  | <5                                                           | ug/kg | TM17/PM8           |
| PCB 101 #                             | -          | -          | -          | -          | <5         | -          | -           | -          |  |  | <5                                                           | ug/kg | TM17/PM8           |
| PCB 118 #                             | -          | -          | -          | -          | <5         | -          | -           | -          |  |  | <5                                                           | ug/kg | TM17/PM8           |
| PCB 138 #                             | -          | -          | -          | -          | <5         | -          | -           | -          |  |  | <5                                                           | ug/kg | TM17/PM8           |
| PCB 153 #                             | -          | -          | -          | -          | <5         | -          | -           | -          |  |  | <5                                                           | ug/kg | TM17/PM8           |



|                             |                                   |                                              |                                                                                    |
|-----------------------------|-----------------------------------|----------------------------------------------|------------------------------------------------------------------------------------|
| Mass of sample taken (kg)   | -                                 | Moisture Content Ratio (%) =                 | 21.0                                                                               |
| Mass of dry sample (kg) =   | 0.09                              | Dry Matter Content Ratio (%) =               | 82.6                                                                               |
| Particle Size <4mm =        | >95%                              |                                              |                                                                                    |
| JEFL Job No                 | 15/3149                           | Landfill Waste Acceptance<br>Criteria Limits |                                                                                    |
| Sample No                   | 134                               |                                              |                                                                                    |
| Client Sample No            | TP34                              |                                              |                                                                                    |
| Depth/Other                 | 1.0                               |                                              |                                                                                    |
| Sample Date                 | 03/02/2015                        |                                              |                                                                                    |
| Batch No                    | 2                                 |                                              |                                                                                    |
| Solid Waste Analysis        |                                   | Inert<br>Waste<br>Landfill                   | Stable<br>Non-reactive<br>Hazardous<br>Waste in Non-<br>Hazardous<br>Landfill      |
| Total Organic Carbon (%)    | NDP                               | 3                                            | 5                                                                                  |
| Loss on Ignition (%)        | -                                 | -                                            | 10                                                                                 |
| Sum of BTEX (mg/kg)         | <0.025                            | 6                                            | -                                                                                  |
| Sum of 7 PCBs (mg/kg)       | <0.035                            | 1                                            | -                                                                                  |
| Mineral Oil (mg/kg)         | <30                               | 500                                          | -                                                                                  |
| PAH Sum of 17(mg/kg)        | 6.29                              | 100                                          | -                                                                                  |
| pH (pH Units)               | 8.09                              | -                                            | >6                                                                                 |
| ANC to pH 7 (mol/kg)        | <0.03                             | -                                            | to be evaluated                                                                    |
| ANC to pH 4 (mol/kg)        | 0.57                              | -                                            | to be evaluated                                                                    |
| Eluate Analysis             | 10:1 conc <sup>n</sup><br>leached |                                              | Limit values for compliance<br>leaching test using<br>BS EN 12457-2 at L/S 10 l/kg |
|                             | C <sub>10</sub>                   | A <sub>10</sub>                              |                                                                                    |
|                             | mg/l                              | mg/kg                                        |                                                                                    |
| Arsenic                     | 0.0061                            | 0.061                                        | 0.5                                                                                |
| Barium                      | 0.034                             | 0.34                                         | 20                                                                                 |
| Cadmium                     | <0.0005                           | <0.005                                       | 0.04                                                                               |
| Chromium                    | 0.0051                            | 0.051                                        | 0.5                                                                                |
| Copper                      | 0.013                             | 0.13                                         | 2                                                                                  |
| Mercury                     | <0.001                            | <0.01                                        | 0.01                                                                               |
| Molybdenum                  | <0.002                            | <0.02                                        | 0.5                                                                                |
| Nickel                      | 0.002                             | <0.02                                        | 0.4                                                                                |
| Lead                        | 0.006                             | 0.06                                         | 0.5                                                                                |
| Antimony                    | 0.012                             | 0.12                                         | 0.06                                                                               |
| Selenium                    | <0.003                            | <0.03                                        | 0.1                                                                                |
| Zinc                        | 0.020                             | 0.20                                         | 4                                                                                  |
| Chloride                    | 0.4                               | 4                                            | 800                                                                                |
| Fluoride                    | 0.5                               | 5                                            | 10                                                                                 |
| Sulphate as SO <sub>4</sub> | 3.69                              | 36.9                                         | 1000                                                                               |
| Total Dissolved Solids      | 99                                | 990                                          | 4000                                                                               |
| Phenol                      | <0.01                             | <0.1                                         | 1                                                                                  |
| Dissolved Organic Carbon    | 8                                 | 80                                           | 500                                                                                |

**Client Name:** Environ  
**Reference:** UK11-20113  
**Location:** Green Park  
**Contact:** Matt Ingham

**Note:**

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

*Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.*

*If asbestos fibres are reported at trace levels there will not be enough fibres to quantify and will be less than 0.001%.*

Signed on behalf of Jones Environmental Laboratory:

Ryan Butterworth  
Asbestos Team Leader

| J E Job No. | Batch | Sample ID | Depth | J E Sample No. | Date Of Analysis | Description          | Asbestos Containing Material | Asbestos Results | Asbestos Level | Comments |
|-------------|-------|-----------|-------|----------------|------------------|----------------------|------------------------------|------------------|----------------|----------|
| 15/3149     | 2     | TP20      | 1.0   | 77             | 05/02/15         | Soil/Clay/Stones/Veg | None                         | NAD              | NAD            |          |
| 15/3149     | 2     | TP21      | 1.0   | 81             | 04/02/15         | soil/stones          | None                         | NAD              | NAD            |          |
| 15/3149     | 2     | TP22      | 1.0   | 86             | 04/02/15         | Soil/Stone           | None                         | NAD              | NAD            |          |
| 15/3149     | 2     | TP23      | 1.0   | 89             | 04/02/15         | Soil/Stone           | None                         | NAD              | NAD            |          |
| 15/3149     | 2     | TP24      | 1.0   | 92             | 05/02/15         | soil/stones          | None                         | NAD              | NAD            |          |
| 15/3149     | 2     | TP25      | 1.0   | 96             | 05/02/15         | soil/stones          | None                         | NAD              | NAD            |          |
| 15/3149     | 2     | TP26      | 1.0   | 101            | 05/02/15         | Soil/Stone/Brick     | None                         | NAD              | NAD            |          |
| 15/3149     | 2     | TP27      | 1.0   | 104            | 05/02/15         | Soil/Stone/Clay/Veg  | None                         | NAD              | NAD            |          |
| 15/3149     | 2     | TP28      | 1.0   | 107            | 05/02/15         | Soil/Stone/Clay      | None                         | NAD              | NAD            |          |
| 15/3149     | 2     | TP29      | 1.0   | 111            | 05/02/15         | soil/stones          | None                         | NAD              | NAD            |          |
| 15/3149     | 2     | TP30      | 1.0   | 116            | 05/02/15         | soil/stones          | None                         | NAD              | NAD            |          |
| 15/3149     | 2     | TP31      | 0.7   | 119            | 05/02/15         | Soil/stone           | None                         | NAD              | NAD            |          |
| 15/3149     | 2     | TP32      | 1.0   | 122            | 05/02/15         | Soil/Stone           | None                         | NAD              | NAD            |          |
| 15/3149     | 2     | TP33      | 1.0   | 126            | 05/02/15         | Soil/Stone           | None                         | NAD              | NAD            |          |

**Client Name:** Environ  
**Reference:** UK11-20113  
**Location:** Green Park  
**Contact:** Matt Ingham

[illegible]

**Matrix : Solid**

[illegible]

## NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/3149

### SOILS

Please note we are only MCERTS accredited for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. If we are instructed to keep samples, a storage charge of £1 (1.5 Euros) per sample per month will be applied until we are asked to dispose of them.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

### WATERS

Please note we are not a Drinking Water Inspectorate (DWI) Approved Laboratory . It is important that detection limits are carefully considered when requesting water analysis.

UKAS accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

### DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

### SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

### DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

### NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

## ABBREVIATIONS and ACRONYMS USED

|         |                                                                                                            |
|---------|------------------------------------------------------------------------------------------------------------|
| #       | UKAS accredited.                                                                                           |
| B       | Indicates analyte found in associated method blank.                                                        |
| DR      | Dilution required.                                                                                         |
| M       | MCERTS accredited.                                                                                         |
| NA      | Not applicable                                                                                             |
| NAD     | No Asbestos Detected.                                                                                      |
| ND      | None Detected (usually refers to VOC and/SVOC TICs).                                                       |
| NDP     | No Determination Possible                                                                                  |
| SS      | Calibrated against a single substance                                                                      |
| SV      | Surrogate recovery outside performance criteria. This may be due to a matrix effect.                       |
| W       | Results expressed on as received basis.                                                                    |
| +       | AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page. |
| ++      | Result outside calibration range, results should be considered as indicative only and are not accredited.  |
| *       | Analysis subcontracted to a Jones Environmental approved laboratory.                                       |
| AD      | Samples are dried at 35°C ±5°C                                                                             |
| CO      | Suspected carry over                                                                                       |
| LOD/LOR | Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS                                  |
| ME      | Matrix Effect                                                                                              |
| NFD     | No Fibres Detected                                                                                         |
| OC      | Outside Calibration Range                                                                                  |

JE Job No: 15/3149

| Test Method No. | Description                                                                                                                                                                                                                                                                                                                                         | Prep Method No. (if appropriate) | Description                                                                                                                                          | UKAS | MCERTS (soils only) | Analysis done on As Received (AR) or Dried (AD) | Reported on dry weight basis |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------------|-------------------------------------------------|------------------------------|
| PM4             | Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.                                                                                                                                                                                                      | PM0                              | No preparation is required.                                                                                                                          |      |                     |                                                 |                              |
| PM4             | Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.                                                                                                                                                                                                      | PM0                              | No preparation is required.                                                                                                                          |      |                     | AR                                              | Yes                          |
| TM4             | Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.                                                                                                                                                                                                                                                        | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                |      |                     | AR                                              | Yes                          |
| TM4             | Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.                                                                                                                                                                                                                                                        | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                | Yes  |                     | AR                                              | Yes                          |
| TM5             | Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.                                                                                                                                                                                           | PM16                             | Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.                                                                         |      |                     | AR                                              | Yes                          |
| TM5             | Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.                                                                                                                                                                                           | PM16                             | Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.                                                                         | Yes  |                     | AR                                              | Yes                          |
| TM5/TM36        | TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID.<br>TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID. | PM12/PM16                        | CWG GC-FID                                                                                                                                           |      |                     | AR                                              | Yes                          |
| TM17            | Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.                                                                                                                                                                                                                                                 | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                | Yes  |                     | AR                                              | Yes                          |
| TM20            | Modified USEPA 8163. Gravimetric determination of Total Dissolved Solids/Total Solids                                                                                                                                                                                                                                                               | PM0                              | No preparation is required.                                                                                                                          |      |                     | AR                                              | Yes                          |
| TM21            | Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO <sub>2</sub> generated is quantified using infra-red detection.                                                                                                                        | PM24                             | Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis. | Yes  |                     | AD                                              | Yes                          |

JE Job No: 15/3149

| Test Method No. | Description                                                                                                                                 | Prep Method No. (if appropriate) | Description                                                                                                                                                                         | UKAS | MCERTS (soils only) | Analysis done on As Received (AR) or Dried (AD) | Reported on dry weight basis |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------------|-------------------------------------------------|------------------------------|
| TM26            | Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.                          | PM0                              | No preparation is required.                                                                                                                                                         |      |                     | AR                                              | Yes                          |
| TM26            | Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.                          | PM21                             | As received solid or water samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.                                                               | Yes  |                     | AR                                              | Yes                          |
| TM27            | Modified US EPA method 9056.Determination of water soluble anions using Dionex (Ion-Chromatography).                                        | PM0                              | No preparation is required.                                                                                                                                                         |      |                     | AR                                              | Yes                          |
| TM30            | Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7 | PM15                             | Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.                                       | Yes  |                     | AD                                              | Yes                          |
| TM30            | Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7 | PM17                             | Modified method EN12457-2 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio. | Yes  |                     | AR                                              | Yes                          |
| TM30            | Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7 | PM62                             | Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.                                                                                                  |      |                     | AR                                              | Yes                          |
| TM31            | Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.                 | PM12                             | Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.                                                                                     |      |                     | AR                                              | Yes                          |
| TM31            | Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.                 | PM12                             | Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.                                                                                     | Yes  |                     | AR                                              | Yes                          |
| TM36            | Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.        | PM12                             | Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.                                                                                     |      |                     | AR                                              | Yes                          |
| TM36            | Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.        | PM12                             | Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.                                                                                     | Yes  |                     | AR                                              | Yes                          |

JE Job No: 15/3149

| Test Method No. | Description                                                                                                                                                                                                                                           | Prep Method No. (if appropriate) | Description                                                                                                                                                                                                                                                        | UKAS | MCERTS (soils only) | Analysis done on As Received (AR) or Dried (AD) | Reported on dry weight basis |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------------|-------------------------------------------------|------------------------------|
| TM38            | Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1                                                                                                               | PM0                              | No preparation is required.                                                                                                                                                                                                                                        | Yes  |                     | AR                                              | Yes                          |
| TM38            | Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1                                                                                                               | PM20                             | Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker. | Yes  |                     | AD                                              | Yes                          |
| TM38            | Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1                                                                                                               | PM20                             | Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker. | Yes  |                     | AR                                              | Yes                          |
| TM38            | Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1                                                                                                               | PM60                             | As received solid samples are extracted with deionised water in a 2:1 ratio of water to solid.                                                                                                                                                                     |      |                     | AR                                              | Yes                          |
| TM42            | Modified US EPA method 8270. Pesticides and herbicides by GC-MS                                                                                                                                                                                       | PM8                              | End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.                                                                                                                                              |      |                     | AR                                              | Yes                          |
| TM60            | Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO <sub>2</sub> and then passed through a non-dispersive infrared gas analyser (NDIR). | PM0                              | No preparation is required.                                                                                                                                                                                                                                        |      |                     | AR                                              | Yes                          |
| TM65            | Asbestos Bulk Identification method based on HSG 248.                                                                                                                                                                                                 | PM42                             | Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.                                                                                                                                               |      |                     | AR                                              | Yes                          |
| TM65            | Asbestos Bulk Identification method based on HSG 248.                                                                                                                                                                                                 | PM42                             | Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.                                                                                                                                               |      |                     | AR                                              |                              |
| TM65            | Asbestos Bulk Identification method based on HSG 248.                                                                                                                                                                                                 | PM42                             | Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.                                                                                                                                               | Yes  |                     | AR                                              |                              |
| TM73            | Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.                                                                                                                                                     | PM11                             | Extraction of as received solid samples using one part solid to 2.5 parts deionised water.                                                                                                                                                                         | Yes  |                     | AR                                              | No                           |

JE Job No: 15/3149

| Test Method No. | Description                                                                                                             | Prep Method No. (if appropriate) | Description                                                                                                                                    | UKAS | MCERTS (soils only) | Analysis done on As Received (AR) or Dried (AD) | Reported on dry weight basis |
|-----------------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------------|-------------------------------------------------|------------------------------|
| TM77            | Modified DDCEN/TS method 15364:2006. Determination of Acid Neutralization Capacity by Metrohm automated probe analyser. | PM0                              | No preparation is required.                                                                                                                    |      |                     | AR                                              | No                           |
| TM89            | Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.                                    | PM45                             | As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.                                   | Yes  |                     | AR                                              | Yes                          |
| NONE            | No Method Code                                                                                                          | PM4                              | Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377. |      |                     | AR                                              |                              |
|                 |                                                                                                                         |                                  |                                                                                                                                                |      |                     |                                                 |                              |
|                 |                                                                                                                         |                                  |                                                                                                                                                |      |                     |                                                 |                              |
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|                 |                                                                                                                         |                                  |                                                                                                                                                |      |                     |                                                 |                              |



## Certificate of Analysis

**Client:** JANET JONES  
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**Originator:** JEL 73948  
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 15 3149  
 JEL 73948

**Lab ID:** 63797 - 271754  
**Sample ID:** 144

**Date Received:** 20/03/2015  
**Date Reported:** 30/03/2015

### BS 3882 : 2007 SPECIFICATION FOR TOPSOIL Fails BS 3882

|                                 |                   |       |           | Compliant with range (Y/N) |       |      |      |
|---------------------------------|-------------------|-------|-----------|----------------------------|-------|------|------|
|                                 |                   | Unit  | Result    | Multi-P                    | Low-F | Acid | Calc |
| Texture:                        | Clay              | % w/w | 23        | Y                          | Y     | Y    | Y    |
|                                 | Silt              | % w/w | 32        | Y                          | Y     | Y    | Y    |
|                                 | Sand              | % w/w | 45        | Y                          | Y     | Y    | Y    |
|                                 | Textural Class    |       | Clay Loam |                            |       |      |      |
| Organic Matter:                 |                   | % w/w | 2.7       | N                          | Y     | N    | N    |
| Coarse                          | >2 mm             | % w/w | 20.6      | Y                          | Y     | Y    | Y    |
| Fragment                        | >20 mm            | % w/w | 6.8       | Y                          | Y     | Y    | Y    |
| Content:                        | >50 mm            | % w/w | 0.0       | Y                          | Y     | Y    | Y    |
| Soil pH:                        |                   |       | 7.8       | Y                          | Y     | N    | Y    |
| Carbonate:                      |                   | % w/w | <2        |                            |       |      | Y    |
| Available                       | Nitrogen          | % w/w | 0.18      | Y                          | N     | Y    | Y    |
| Plant                           | Phosphorus        | mg/l  | 35.4 (3)* | Y                          | N     | Y    | Y    |
| Nutrients:                      | Potassium         | mg/l  | 70.5 (1)* | N                          | Y     | N    | N    |
|                                 | Magnesium         | mg/l  | 80.4 (2)* | Y                          | Y     | Y    | Y    |
| Carbon:Nitrogen Ratio:          |                   | :1    | 8.7       | Y                          | Y     | Y    | Y    |
| Exchangeable Sodium Percentage: |                   | %     | 0.5       | Y                          | Y     | Y    | Y    |
| Phytotoxic                      | Total Zinc        | mg/kg | 47.5      | Y                          | Y     | Y    | Y    |
| Contaminants:                   | Total Copper      | mg/kg | 12.6      | Y                          | Y     | Y    | Y    |
|                                 | Total Nickel      | mg/kg | 15.4      | Y                          | Y     | Y    | Y    |
| Visible                         | > 2mm             | % w/w | 0.96      | N                          | N     | N    | N    |
| Contaminants:                   | Plastics          | % w/w | 0.00      | Y                          | Y     | Y    | Y    |
|                                 | Sharps            | % w/w | 0.00      | Y                          | Y     | Y    | Y    |
| Additional Analysis:            | Available Sodium  | mg/l  | 14.5      |                            |       |      |      |
|                                 | Available Calcium | mg/l  | 2425.0    |                            |       |      |      |
|                                 | Conductivity      | uS/cm | 2010      |                            |       |      |      |
| Compliance:                     |                   |       |           | N                          | N     | N    | N    |

Results are expressed on a dry matter basis.

\* Soil indices from RB209

**Released by:**

*J Doyle*

**Date:** 30/03/2015

**DECLARATION:**

I certify that this sample has been analysed by NRM Ltd. in accordance with BS 3882 Specification for Topsoil (2007).

**NRM** Coopers Bridge, Braziers Lane, Bracknell, Berkshire RG42 6NS

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**Lab ID:** 63797 - 271755  
**Sample ID:** 145

**Date Received:** 20/03/2015  
**Date Reported:** 30/03/2015

### BS 3882 : 2007 SPECIFICATION FOR TOPSOIL Fails BS 3882

|                                        |                   |       |           | Compliant with range (Y/N) |       |      |      |
|----------------------------------------|-------------------|-------|-----------|----------------------------|-------|------|------|
|                                        |                   | Unit  | Result    | Multi-P                    | Low-F | Acid | Calc |
| <b>Texture:</b>                        | Clay              | % w/w | 25        | Y                          | Y     | Y    | Y    |
|                                        | Silt              | % w/w | 30        | Y                          | Y     | Y    | Y    |
|                                        | Sand              | % w/w | 45        | Y                          | Y     | Y    | Y    |
|                                        | Textural Class    |       | Clay Loam |                            |       |      |      |
| <b>Organic Matter:</b>                 |                   | % w/w | 2.9       | N                          | Y     | N    | N    |
| <b>Coarse</b>                          | >2 mm             | % w/w | 30.4      | N                          | N     | N    | N    |
| <b>Fragment</b>                        | >20 mm            | % w/w | 17.1      | N                          | N     | N    | N    |
| <b>Content:</b>                        | >50 mm            | % w/w | 0.0       | Y                          | Y     | Y    | Y    |
| <b>Soil pH:</b>                        |                   |       | 7.4       | Y                          | Y     | N    | N    |
| <b>Carbonate:</b>                      |                   | % w/w | <2        |                            |       |      | Y    |
| <b>Available</b>                       | Nitrogen          | % w/w | 0.19      | Y                          | N     | Y    | Y    |
| <b>Plant</b>                           | Phosphorus        | mg/l  | 32.2 (3)* | Y                          | N     | Y    | Y    |
| <b>Nutrients:</b>                      | Potassium         | mg/l  | 83.0 (1)* | N                          | Y     | N    | N    |
|                                        | Magnesium         | mg/l  | 81.4 (2)* | Y                          | Y     | Y    | Y    |
| <b>Carbon:Nitrogen Ratio:</b>          |                   | :1    | 8.8       | Y                          | Y     | Y    | Y    |
| <b>Exchangeable Sodium Percentage:</b> |                   | %     | 0.5       | Y                          | Y     | Y    | Y    |
| <b>Phytotoxic</b>                      | Total Zinc        | mg/kg | 44.1      | Y                          | Y     | Y    | Y    |
| <b>Contaminants:</b>                   | Total Copper      | mg/kg | 11.7      | Y                          | Y     | Y    | Y    |
|                                        | Total Nickel      | mg/kg | 14.0      | Y                          | Y     | Y    | Y    |
| <b>Visible</b>                         | > 2mm             | % w/w | 0.13      | Y                          | Y     | Y    | Y    |
| <b>Contaminants:</b>                   | Plastics          | % w/w | 0.00      | Y                          | Y     | Y    | Y    |
|                                        | Sharps            | % w/w | 0.00      | Y                          | Y     | Y    | Y    |
| <b>Additional</b>                      | Available Sodium  | mg/l  | 15.0      |                            |       |      |      |
| <b>Analysis:</b>                       | Available Calcium | mg/l  | 2595.0    |                            |       |      |      |
|                                        | Conductivity      | uS/cm | 2030      |                            |       |      |      |
| <b>Compliance:</b>                     |                   |       |           | N                          | N     | N    | N    |

Results are expressed on a dry matter basis.  
 \* Soil indices from RB209

**Released by:**

*J Doyle*

**Date:** 30/03/2015

**DECLARATION:**

I certify that this sample has been analysed by NRM Ltd. in accordance with BS 3882 Specification for Topsoil (2007).

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## Certificate of Analysis

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**Originator:** JEL 73948  
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 JEL 73948

**Lab ID:** 63797 - 271756  
**Sample ID:** 146

**Date Received:** 20/03/2015  
**Date Reported:** 30/03/2015

### BS 3882 : 2007 SPECIFICATION FOR TOPSOIL Fails BS 3882

|                                 |                   |       |           | Compliant with range (Y/N) |       |      |      |
|---------------------------------|-------------------|-------|-----------|----------------------------|-------|------|------|
|                                 |                   | Unit  | Result    | Multi-P                    | Low-F | Acid | Calc |
| Texture:                        | Clay              | % w/w | 25        | Y                          | Y     | Y    | Y    |
|                                 | Silt              | % w/w | 29        | Y                          | Y     | Y    | Y    |
|                                 | Sand              | % w/w | 46        | Y                          | Y     | Y    | Y    |
|                                 | Textural Class    |       | Clay Loam |                            |       |      |      |
| Organic Matter:                 |                   | % w/w | 2.6       | N                          | Y     | N    | N    |
| Coarse                          | >2 mm             | % w/w | 27.5      | Y                          | Y     | Y    | Y    |
| Fragment                        | >20 mm            | % w/w | 9.3       | Y                          | Y     | Y    | Y    |
| Content:                        | >50 mm            | % w/w | 0.0       | Y                          | Y     | Y    | Y    |
| Soil pH:                        |                   |       | 7.9       | Y                          | Y     | N    | Y    |
| Carbonate:                      |                   | % w/w | <2        |                            |       |      | Y    |
| Available                       | Nitrogen          | % w/w | 0.18      | Y                          | N     | Y    | Y    |
| Plant                           | Phosphorus        | mg/l  | 27.0 (3)* | Y                          | N     | Y    | Y    |
| Nutrients:                      | Potassium         | mg/l  | 81.4 (1)* | N                          | Y     | N    | N    |
|                                 | Magnesium         | mg/l  | 78.9 (2)* | Y                          | Y     | Y    | Y    |
| Carbon:Nitrogen Ratio:          |                   | :1    | 8.4       | Y                          | Y     | Y    | Y    |
| Exchangeable Sodium Percentage: |                   | %     | 0.3       | Y                          | Y     | Y    | Y    |
| Phytotoxic                      | Total Zinc        | mg/kg | 47.3      | Y                          | Y     | Y    | Y    |
| Contaminants:                   | Total Copper      | mg/kg | 11.5      | Y                          | Y     | Y    | Y    |
|                                 | Total Nickel      | mg/kg | 14.9      | Y                          | Y     | Y    | Y    |
| Visible                         | > 2mm             | % w/w | 1.45      | N                          | N     | N    | N    |
| Contaminants:                   | Plastics          | % w/w | 0.00      | Y                          | Y     | Y    | Y    |
|                                 | Sharps            | % w/w | 0.00      | Y                          | Y     | Y    | Y    |
| Additional Analysis:            | Available Sodium  | mg/l  | 10.5      |                            |       |      |      |
|                                 | Available Calcium | mg/l  | 2575.0    |                            |       |      |      |
|                                 | Conductivity      | uS/cm | 2009      |                            |       |      |      |
| Compliance:                     |                   |       |           | N                          | N     | N    | N    |

Results are expressed on a dry matter basis.

\* Soil indices from RB209

**Released by:**

*J Doyle*

**Date:** 30/03/2015

**DECLARATION:**

I certify that this sample has been analysed by NRM Ltd. in accordance with BS 3882 Specification for Topsoil (2007).

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**Lab ID:** 63797 - 271757  
**Sample ID:** 147

**Date Received:** 20/03/2015  
**Date Reported:** 30/03/2015

### BS 3882 : 2007 SPECIFICATION FOR TOPSOIL Fails BS 3882

|                                        |                   |                 |            | Compliant with range (Y/N) |       |      |      |
|----------------------------------------|-------------------|-----------------|------------|----------------------------|-------|------|------|
|                                        |                   | Unit            | Result     | Multi-P                    | Low-F | Acid | Calc |
| <b>Texture:</b>                        | Clay              | % w/w           | 24         | Y                          | Y     | Y    | Y    |
|                                        | Silt              | % w/w           | 25         | Y                          | Y     | Y    | Y    |
|                                        | Sand              | % w/w           | 51         | Y                          | Y     | Y    | Y    |
|                                        | Textural Class    | Sandy Clay Loam |            |                            |       |      |      |
| <b>Organic Matter:</b>                 |                   | % w/w           | 1.7        | N                          | Y     | N    | N    |
| <b>Coarse</b>                          | >2 mm             | % w/w           | 47.1       | N                          | N     | N    | N    |
| <b>Fragment</b>                        | >20 mm            | % w/w           | 29.3       | N                          | N     | N    | N    |
| <b>Content:</b>                        | >50 mm            | % w/w           | 9.7        | N                          | N     | N    | N    |
| <b>Soil pH:</b>                        |                   |                 | 8.0        | Y                          | Y     | N    | Y    |
| <b>Carbonate:</b>                      |                   | % w/w           | <2         |                            |       |      | Y    |
| <b>Available</b>                       | Nitrogen          | % w/w           | 0.11       | N                          | N     | N    | N    |
| <b>Plant</b>                           | Phosphorus        | mg/l            | 19.2 (2)*  | Y                          | N     | Y    | Y    |
| <b>Nutrients:</b>                      | Potassium         | mg/l            | 115.2 (1)* | N                          | Y     | N    | N    |
|                                        | Magnesium         | mg/l            | 232.3 (4)* | Y                          | Y     | Y    | Y    |
| <b>Carbon:Nitrogen Ratio:</b>          |                   | :1              | 9.0        | Y                          | Y     | Y    | Y    |
| <b>Exchangeable Sodium Percentage:</b> |                   | %               | 0.2        | Y                          | Y     | Y    | Y    |
| <b>Phytotoxic</b>                      | Total Zinc        | mg/kg           | 45.5       | Y                          | Y     | Y    | Y    |
| <b>Contaminants:</b>                   | Total Copper      | mg/kg           | 12.4       | Y                          | Y     | Y    | Y    |
|                                        | Total Nickel      | mg/kg           | 16.8       | Y                          | Y     | Y    | Y    |
| <b>Visible</b>                         | > 2mm             | % w/w           | 0.05       | Y                          | Y     | Y    | Y    |
| <b>Contaminants:</b>                   | Plastics          | % w/w           | 0.00       | Y                          | Y     | Y    | Y    |
|                                        | Sharps            | % w/w           | 0.00       | Y                          | Y     | Y    | Y    |
| <b>Additional</b>                      | Available Sodium  | mg/l            | 8.5        |                            |       |      |      |
| <b>Analysis:</b>                       | Available Calcium | mg/l            | 2610.0     |                            |       |      |      |
|                                        | Conductivity      | uS/cm           | 2238       |                            |       |      |      |
| <b>Compliance:</b>                     |                   |                 |            | N                          | N     | N    | N    |

Results are expressed on a dry matter basis.  
 \* Soil indices from RB209

**Released by:**

*J Doyle*

**Date:** 30/03/2015

**DECLARATION:**

I certify that this sample has been analysed by NRM Ltd. in accordance with BS 3882 Specification for Topsoil (2007).

**NRM** Coopers Bridge, Braziers Lane, Bracknell, Berkshire RG42 6NS  
**Tel:** +44 (0) 1344 886338 **Fax:** +44 (0) 1344 890972 **Email:** enquiries@nrm.uk.com **www:** nrm.uk.com



## Certificate of Analysis

**Client:** JANET JONES  
**(K920)** JONES ENVIRONMENTAL LAB  
 UNIT 3 DEESIDE  
 ZONE 3  
 DEESIDE IND EST  
 DEESIDE CH5 2UA

**Originator:** JEL 73948  
 0586  
 15 3149  
 JEL 73948

**Lab ID:** 63797 - 271758  
**Sample ID:** 148

**Date Received:** 20/03/2015  
**Date Reported:** 30/03/2015

### BS 3882 : 2007 SPECIFICATION FOR TOPSOIL Fails BS 3882

|                                        |                   |       |           | Compliant with range (Y/N) |       |      |      |
|----------------------------------------|-------------------|-------|-----------|----------------------------|-------|------|------|
|                                        |                   | Unit  | Result    | Multi-P                    | Low-F | Acid | Calc |
| <b>Texture:</b>                        | Clay              | % w/w | 28        | Y                          | Y     | Y    | Y    |
|                                        | Silt              | % w/w | 29        | Y                          | Y     | Y    | Y    |
|                                        | Sand              | % w/w | 43        | Y                          | Y     | Y    | Y    |
|                                        | Textural Class    |       | Clay Loam |                            |       |      |      |
| <b>Organic Matter:</b>                 |                   | % w/w | 2.2       | N                          | Y     | N    | N    |
| <b>Coarse</b>                          | >2 mm             | % w/w | 42.8      | N                          | N     | N    | N    |
| <b>Fragment</b>                        | >20 mm            | % w/w | 26.0      | N                          | N     | N    | N    |
| <b>Content:</b>                        | >50 mm            | % w/w | 11.3      | N                          | N     | N    | N    |
| <b>Soil pH:</b>                        |                   |       | 7.6       | Y                          | Y     | N    | Y    |
| <b>Carbonate:</b>                      |                   | % w/w | <2        |                            |       |      | Y    |
| <b>Available</b>                       | Nitrogen          | % w/w | 0.14      | N                          | N     | N    | N    |
| <b>Plant</b>                           | Phosphorus        | mg/l  | 25.6 (3)* | Y                          | N     | Y    | Y    |
| <b>Nutrients:</b>                      | Potassium         | mg/l  | 74.9 (1)* | N                          | Y     | N    | N    |
|                                        | Magnesium         | mg/l  | 89.6 (2)* | Y                          | Y     | Y    | Y    |
| <b>Carbon:Nitrogen Ratio:</b>          |                   | :1    | 9.1       | Y                          | Y     | Y    | Y    |
| <b>Exchangeable Sodium Percentage:</b> |                   | %     | 0.3       | Y                          | Y     | Y    | Y    |
| <b>Phytotoxic</b>                      | Total Zinc        | mg/kg | 46.6      | Y                          | Y     | Y    | Y    |
| <b>Contaminants:</b>                   | Total Copper      | mg/kg | 12.6      | Y                          | Y     | Y    | Y    |
|                                        | Total Nickel      | mg/kg | 20.5      | Y                          | Y     | Y    | Y    |
| <b>Visible</b>                         | > 2mm             | % w/w | 0.00      | Y                          | Y     | Y    | Y    |
| <b>Contaminants:</b>                   | Plastics          | % w/w | 0.00      | Y                          | Y     | Y    | Y    |
|                                        | Sharps            | % w/w | 0.00      | Y                          | Y     | Y    | Y    |
| <b>Additional</b>                      | Available Sodium  | mg/l  | 9.5       |                            |       |      |      |
| <b>Analysis:</b>                       | Available Calcium | mg/l  | 2390.0    |                            |       |      |      |
|                                        | Conductivity      | uS/cm | 2165      |                            |       |      |      |
| <b>Compliance:</b>                     |                   |       |           | N                          | N     | N    | N    |

Results are expressed on a dry matter basis.  
 \* Soil indices from RB209

**Released by:**

*J Doyle*

**Date:** 30/03/2015

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## Certificate of Analysis

**Client:** JANET JONES  
**(K920)** JONES ENVIRONMENTAL LAB  
 UNIT 3 DEESIDE  
 ZONE 3  
 DEESIDE IND EST  
 DEESIDE CH5 2UA

**Originator:** JEL 73948  
 0586  
 15 3149  
 JEL 73948

**Lab ID:** 63797 - 271759  
**Sample ID:** 149

**Date Received:** 20/03/2015  
**Date Reported:** 30/03/2015

### BS 3882 : 2007 SPECIFICATION FOR TOPSOIL Fails BS 3882

|                                 |                   |       |             | Compliant with range (Y/N) |       |      |      |
|---------------------------------|-------------------|-------|-------------|----------------------------|-------|------|------|
|                                 |                   | Unit  | Result      | Multi-P                    | Low-F | Acid | Calc |
| Texture:                        | Clay              | % w/w | 25          | Y                          | Y     | Y    | Y    |
|                                 | Silt              | % w/w | 28          | Y                          | Y     | Y    | Y    |
|                                 | Sand              | % w/w | 47          | Y                          | Y     | Y    | Y    |
|                                 | Textural Class    |       | Clay Loam   |                            |       |      |      |
| Organic Matter:                 |                   | % w/w | 1.8         | N                          | Y     | N    | N    |
| Coarse                          | >2 mm             | % w/w | 41.8        | N                          | N     | N    | N    |
| Fragment                        | >20 mm            | % w/w | 21.2        | N                          | N     | N    | N    |
| Content:                        | >50 mm            | % w/w | 0.0         | Y                          | Y     | Y    | Y    |
| Soil pH:                        |                   |       | 7.6         | Y                          | Y     | N    | Y    |
| Carbonate:                      |                   | % w/w | <2          |                            |       |      | Y    |
| Available                       | Nitrogen          | % w/w | 0.11        | N                          | N     | N    | N    |
| Plant                           | Phosphorus        | mg/l  | 18.6 (2)*   | Y                          | N     | Y    | Y    |
| Nutrients:                      | Potassium         | mg/l  | 132.2 (2-)* | Y                          | N     | Y    | Y    |
|                                 | Magnesium         | mg/l  | 279.0 (5)*  | Y                          | Y     | Y    | Y    |
| Carbon:Nitrogen Ratio:          |                   | :1    | 9.5         | Y                          | Y     | Y    | Y    |
| Exchangeable Sodium Percentage: |                   | %     | 0.4         | Y                          | Y     | Y    | Y    |
| Phytotoxic<br>Contaminants:     | Total Zinc        | mg/kg | 48.2        | Y                          | Y     | Y    | Y    |
|                                 | Total Copper      | mg/kg | 12.9        | Y                          | Y     | Y    | Y    |
|                                 | Total Nickel      | mg/kg | 19.1        | Y                          | Y     | Y    | Y    |
| Visible<br>Contaminants:        | > 2mm             | % w/w | 0.00        | Y                          | Y     | Y    | Y    |
|                                 | Plastics          | % w/w | 0.00        | Y                          | Y     | Y    | Y    |
|                                 | Sharps            | % w/w | 0.00        | Y                          | Y     | Y    | Y    |
| Additional<br>Analysis:         | Available Sodium  | mg/l  | 16.5        |                            |       |      |      |
|                                 | Available Calcium | mg/l  | 3010.0      |                            |       |      |      |
|                                 | Conductivity      | uS/cm | 2313        |                            |       |      |      |
| Compliance:                     |                   |       |             | N                          | N     | N    | N    |

Results are expressed on a dry matter basis.

\* Soil indices from RB209

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