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ground&water

Phase II Site Investigation Report

Old Clayton Kennels and Cattery, Storrington Road, Washington, West Sussex RH20 4AG

On behalf of the Highwood Group

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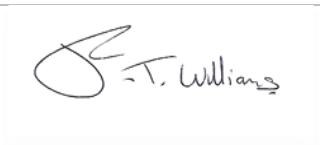
v.3.01			
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EXECUTIVE SUMMARY	
PROPOSED DEVELOPMENT	At the time of reporting, May 2025, the proposed development was understood to comprise the demolition of the existing buildings on-site and the construction of a two storey, 60-bed care home alongside eight (8no.) bungalows with associated vehicle parking, soft landscaping and access roads.
GEOLOGY AND HYDROGEOLOGY	The DEFRA online maps indicated that the majority of the site was located on a Principal Aquifer associated with the bedrock deposits of the Folkestone Formation. The Gault Clay Formation in the south-west corner was classified as Unproductive Strata. From analysis of hydrogeological and topographical maps the groundwater table was anticipated to be encountered at depth within the Folkestone Formation. Perched water was also likely to be found within the Made Ground, especially after periods of intense or prolonged rainfall. It was considered that the groundwater was flowing northwards in alignment with local topography. The nearest surface water feature was a lake noted ~110m to the north-west.
VOLUME CHANGE POTENTIAL	The cohesive soils of the Head Deposits were shown to have a low volume change potential in accordance with BRE240 and NHBC Standards Chapter 4.2 The granular soils of the Folkestone Formation were shown to have no volume change potential in accordance with BRE240 and NHBC Standards Chapter 4.2.
FOUNDATION DESIGN	Shallow foundations for the bungalows should be taken through the Topsoil/Made Ground and into the underlying Head Deposits or Folkestone Formation. Piled foundations for the care home should be taken through the Topsoil/Made Ground and Head Deposits and into the underlying Folkestone Formation. Details are presented in section 6.2. Details are presented in sections 6.2 and 6.3.
SUB-SURFACE CONCRETE	Details are presented in section 6.5.
CONTAMINATION	Details are presented in section 7.3.
WASTE CLASSIFICATION	Based on a risk phase analysis of the chemical laboratory test results, in accordance with EC Hazardous Waste Directive and undertaken by Ground and Water Limited, the sample of Made Ground encountered on-site was NON-HAZARDOUS. Further sampling and classification will be undertaken following demolition of the existing buildings.
REMEDIATION	Details are presented in section 8.1

1. INTRODUCTION

1.1. General

Ground and Water Limited were instructed by the Highwood Group on the 13th November 2024 to conduct a Phase II Investigation on the site at the Old Clayton Kennels and Cattery, Storrington Road, Washington, West Sussex RH20 4AG. The scope of the investigation was detailed within the fee proposal QU-0885v5, dated the 5th November 2024.

1.2. Aims of the Investigation

The aim of this report was to supply the client and their designers with information regarding the ground conditions underlying the site to assist them in preparing an appropriate scheme for development.

The investigation was to be undertaken to provide parameters for the design of foundations by means of in-situ and laboratory geotechnical testing undertaken on soil samples recovered from trial holes.

A contamination assessment was to be undertaken following chemical laboratory testing on soil samples recovered from the site to enable recommendations for the safe redevelopment of the site and the protection of site workers, end-users and the public from any potential contamination identified. The assessment comprise a Tier 2 Generic Quantitative Risk Assessment, under LCRM, with the intention of discharging any relevant planning conditions.

This Site Investigation Report must be read in conjunction with the Omnia Phase I-II Geo-Environmental Site Assessment Report referenced A11530/1.2, dated April 2022. This report referred to a previous desk study reports:

- *Merebrook Consulting Ltd, Phase 1 Assessment (Desk Study), Land at Clayton Kennels, Storrington Road, Washington, (Ref: DS-18373-13-246REVB) Dated February 2014.*

The techniques adopted for the investigation were chosen considering the requirements of the client, anticipated ground conditions, and bearing in mind the nature of the site, limitations to site access and other logistical limitations.

1.3. Conditions and Limitations

This report has been prepared based on the terms, conditions and limitations outlined within Appendix A. Reference has been made to a historical site investigation by another company. Ground and Water Limited cannot be held liable for any shortcomings.

This report has been updated with the results of the additional investigation and contamination testing following demolition of the structures on-site and supersedes the Ground and Water Limited Phase II Ground Investigation Report Ref.: GWPR6344 v2.01, dated April 2025.

1.4. Technical Glossary

Generic technical terms and their description can be viewed within the glossary provided within Appendix B.

2. SITE SETTING

2.1. Site Location

The site comprised a ~1.35ha approximately rectangular shaped plot of land located on the northern side of Storrington Road. The site was located to the north-west of Washington, West Sussex and on the northern boundary of the South downs National Park.

The national grid reference for the centre of the site was approximately TQ 48773 18002. A site location plan can be seen in Figure 1 with the site development area shown in Figure 2.

2.2. Site Description

At the time of site works, May 2025, the buildings of a former kennels and cattery including a reception, dog accommodation, animal training area, and two residential properties – as well as temporary structures which included sheds had been demolished and areas of hardstanding removed.

2.3. Proposed Development

At the time of reporting, May 2025, the proposed development was understood to comprise the demolition of the existing buildings on-site and the construction of a two storey, 60-bed care home alongside eight (8no.) bungalows with associated vehicle parking, soft landscaping and access roads.

The proposed development fell within Geotechnical Design Category 2 in accordance with Eurocode 7. The proposed development plan can be seen within Figure 3.

2.4. Geology

The British Geological Survey Solid and Drift Geology Map for the Washington area (Brighton and Worthing Sheet No. 318/333) revealed that the majority of the site was underlain by the Folkestone Formation. The south-west corner of the site was underlain by the Gault Clay Formation. Superficial Head Deposits were noted ~100m to the north-west of the site. Areas of Worked Ground were noted ~5 – 100m west of the site with Made Ground shown ~20 – 100m to the west.

A BGS borehole record in similar geology ~200m east of the site at Clayton Farm (ref.: TQ11SW8) noted soils of the Folkestone Formation comprising sand for the full depth of the borehole at ~27m bgl. Groundwater was noted to be standing at ~20m bglF

2.5. Hydrogeology and Hydrology

The DEFRA online maps indicated that the majority of the site was located on a Principal Aquifer associated with the bedrock deposits of the Folkestone Formation. The Gault Clay formation in the south-west corner was classified as Unproductive Strata.

From analysis of hydrogeological and topographical maps the groundwater table was anticipated to be encountered at depth within the Folkestone Formation. Perched water was also likely to be found within the Made Ground, especially after periods of intense or prolonged rainfall. It was considered that the groundwater was flowing northwards in alignment with local topography.

The nearest surface water feature was a lake noted ~110m to the north-west.

Examination of the Environment Agency records showed that the site fell within a Flood Zone 1 (an area with a low probability of fluvial or coastal flooding). The site was not protected by flood defences or benefiting from flood storage.

2.6. Radon

A review of the freely available Public Health England radon database, UK Radon, indicated that the site was located within a 1km grid square, where the maximum radon potential of <1% was recorded. The neighbouring 1km grid square to the north-west was noted to have a maximum radon potential of 5 – 10%. Basic radon protection measures are required in areas where more than 3% of houses are at or above the Action Level.

The site was in an area where a risk assessment was not required.

2.7. Internet Search (Site Setting)

2.7.1. Available Unexploded Ordnance (UXO) Map Review

A review of the data available on www.zeticauxo.com/ revealed the site was located within a low-risk area associated with unexploded ordnance (UXO), as indicated by having <15 bombs dropped per 1000 acres. No known Lunftwaffe Bombing Target sites were located in a close proximity of the site.

2.7.2. Historical Landfill Tool Review

A review of the data available on www.groundsure.io/ revealed that areas of Historical Landfilling to the immediate west and just encroaching within the western boundary of the site and another ~120m north of the site. The details of the sites are given as follows:

- RMC Engineering & TSPT Limited, west of RMC Workshops (1989-unknown) – on-site
  - o Type of Site: Landfill taking Non-Biodegradeable Wastes
  - o Size: >= 75000 tonnes
  - o Environmental Permitting Regulations (Waste) Licence Number: RMC001
  - o Operator: RMC Engineering & Transport Ltd
  - o Issue Date: 07/08/1989
  - o Expiry Date: 14/03/1999

- RMC Workshop, Hamper's Lane (1984-1999) – 119m north
  - o Type of Site: Landfill taking Non- Biodegradeable Wastes
  - o Size: 25000 tonnes
  - o Environmental Permitting Regulations (Waste) Licence Number: RMC001
  - o Operator: RMC Engineering & Transport Ltd
  - o Issue Date: 07/08/1989
  - o Expiry Date: 14/03/1999

2.8. Previous Ground Investigation

The results of the previous desk studies and ground investigation were reported in the Omnia Phase I-II Geo-Environmental Site Assessment Report referenced A11530/1.2, dated April 2022.

The main features of the site history were:

- The review of the site history showed that the site was part of Clayton Farm from at least

1875. From 1971, the farm buildings were split into “Kennels” on-site and “Old Clayton” off-site. Since then the construction of new kennels buildings and a connecting road between them has taken place along with landscaping and the installation of a drain along the site’s western boundary.

- The land directly to the north and west of the site has been fields since at least 1875. From 1957-1961, two sand pits were excavated to the north and west of the site, with associated infrastructure (small buildings and roadways) and ponds. By 1971, land immediately north of the site was used by RMC Engineering Works. By 1980, the sand pits were disused, but the ponds remained. By 2001, the western pit had been expanded into Sandgate Park Quarry and the engineering works had constructed two additional buildings. By 2015, the engineering works’ buildings had been demolished and replaced with residential development. In 2021, the houses were complete but the ponds in the northern pit remained.

The key findings of the intrusive investigation were:

- Topsoil and Made Ground were found to a depth of between 0.80 – 1.00m bgl.
- Soils described as weathered Folkestone Formation were found to a maximum depth of 2.00m bgl overlying the unweathered Folkestone Formation to a maximum depth of 3.50m bgl.
- Groundwater was not encountered.

The key findings of the geo-environmental assessment were:

- Elevated concentrations of PAHs were found in one location (SA101) within the Made Ground between 0.80 – 1.00m bgl.
- Chrysotile asbestos fibres were found in the near surface Made Ground in two locations (WS109 and HP108).
- A total of five (5no.) ground gas monitoring rounds were undertaken on the site with one visit being undertaken during a period of low and falling pressure and a further two visits being undertaken during the winter months, typically considered to be ‘worse case’ conditions. Based on the five monitoring rounds, in accordance with BS 8485(2015)+A1(2019), the site was classified as Characteristic Situation 1 CS1 that did not require special ground gas protection measures.

The report concluded that the key findings of the geotechnical assessment were:

- It was proposed that foundations within the natural soils could be founded at a depth of 1.20-2.20m bgl across the site, subject to confirmation of line loadings. As a result of soft/loose soils in the western portion of the site, foundations should be locally deepened onto higher strength soils.

The report recommended the following further investigations:

- Further trial holes to delineate the extent of the asbestos and PAH contamination identified.

- Additional intrusive investigation of the inaccessible areas of the site following demolition of the existing structures.

- The drilling of deeper boreholes to facilitate the design of deeper piles by a specialist piling contractor.

2.9. Preliminary Risk Assessment

The tabulated Conceptual Site Model based upon results of the Updated Conceptual Site Model developed as part of the Omnia Phase I-II Geo-Environmental Site Assessment Report referenced A11530/1.2, dated April 2022 is outlined overleaf. For ease of reference and understanding, the risks have been classified within this risk assessment against four possible levels / categories, summarised in the table below. Any risk deemed to be negligible within the Preliminary Risk Assessment have been excluded from this report.

Risk Categories used in the Tabulated CSM	
Low Risk	Regarding this potential SPR linkage, the site is considered suitable for the proposed end-use and there is not considered to be an unacceptable risk to receptors. However, it is considered that further investigation to confirm this is recommended.
Moderate Risk	Regarding this potential SPR linkage, the site may not be suitable for the proposed end-use in its current condition and there may be an unacceptable risk to receptors. Further investigation is required to confirm this.
High Risk	Regarding this potential SPR linkage, the site is probably or certainly not suitable for proposed end-use and there is likely to be an unacceptable risk to receptors. Contaminants probably or certainly present and urgent action required in the short term.

Tabulated Conceptual Site Model – Pollutant Linkage Summary (On-Site Sources)			
Potential Sources	Potential Absorption Pathways	Potential Receptors	Risk Classification
Made Ground from construction/ demolition activities. Elevated PAHs and asbestos fibres found previously: • Asbestos, • PAHs, • TPHs, • VOCs, • Sulphates, and • Metals.	• Direct ingestion of soil and soil derived dust • Dermal contact of soil and soil derived dust • Inhalation of dust (indoors and outdoors) with elevated concentration of determinands • Ingestion of home-grown produce, and soils attached • Direct ingestion of groundwater • Inhalation of volatile vapour (indoors and outdoors)	**Human Health** • End Users (Residents/Future site visitors) • Construction workers during development • Site operatives during maintenance works • Neighbours and public	**Moderate**
	• Direct uptake of groundwater • Direct uptake of determinands in the soil	**Flora and Fauna** • Vegetation within soft landscaped areas	**Moderate**
	• Anthropogenic (man-made) pathways • Vertical and lateral migration in permeable strata • Surface water runoff	**Controlled Waters** • Principal Aquifer (Folkestone Formation) • Lake ~110m to north-west	**Low**
Aggressive ground conditions with Made Ground and natural ground, including groundwater: • Sulphates, • PAH/TPH. Based on previous investigation, the sulphates fell into Class DS-1 and AC-2z.	• Direct contact with aggressive ground conditions	**Building Materials and Services** • Buried Concrete • Underground services (water pipes)	**Low**
Ground gases generated by area of historical landfilling extending within western boundaries of the site and Made Ground: • Methane, • Carbon Dioxide, • Hydrogen Sulphide, and • Carbon Monoxide. Based on previous ground-gas monitoring, the site falls into the CS1 classification.	• Migration through anthropogenic & natural pathways • Inhalation of Asphyxiating gases • Explosion (methane only)	**Human Health** • End Users (Residents/Future site visitors) • Construction workers during development (especially in confined spaces) • Site operatives during maintenance works in confined spaces • Neighbours and public	**Low**
	• Migration through anthropogenic & natural pathways • Explosion (methane only)	**Building Materials and Services** • Buildings • Confined spaces • Underground services	**Low**

Tabulated Conceptual Site Model – Pollutant Linkage Summary		(Off-Site Sources)	
Potential Sources	Potential Absorption Pathways	Potential Receptors	Risk Classification
Made Ground from adjacent historical area of landfilling. Elevated PAHs and asbestos fibres found previously: • Asbestos, • PAHs, • TPHs, • VOCs, • Sulphates, and • Metals.	• Direct ingestion of soil and soil derived dust • Dermal contact of soil and soil derived dust • Inhalation of dust (indoors and outdoors) with elevated concentration of determinands • Direct ingestion of groundwater • Inhalation of volatile vapour (indoors and outdoors)	**Human Health** • End Users (Residents/Future site visitors) • Construction workers during development • Site operatives during maintenance works • Neighbours and public	**Moderate**
	• Direct uptake of groundwater	**Flora and Fauna** • Vegetation within soft landscaped areas	**Low**
Aggressive ground conditions associated with impacted groundwater; • Sulphates, • PAH/TPH. Based on previous investigation, the sulphates fell into Class DS-1 and AC-2z.	• Direct contact with aggressive ground conditions	**Building Materials and Services** • Buried Concrete • Underground services (water pipes)	**Low**
Ground gases generated by adjacent areas of historical landfilling to the immediate west and ~119m to the north: • Methane, • Carbon Dioxide, • Hydrogen Sulphide, and • Carbon Monoxide. Based on previous ground-gas monitoring, the site falls into the CS1 Classification.	• Migration through anthropogenic & natural pathways • Inhalation of Asphyxiating gases • Explosion (methane only)	**Human Health** • End Users (Residents/Future site visitors) • Construction workers during development (especially in confined spaces) • Site operatives during maintenance works in confined spaces • Neighbours and public	**Low**
	• Migration through anthropogenic & natural pathways • Explosion (methane only)	**Building Materials and Services** • Buildings • Confined spaces • Underground services	**Low**

3. SITE WORKS

3.1. Scope of Works

Site works were undertaken in five phases.

Phase I was undertaken between 27th – 29th November 2024. Seven trial pits (TP1 – TP7) were machine excavated to depths of between 1.20 - 2.00m bgl. Infiltration tests in accordance with the principles of BRE365 were undertaken in the trial pits. In addition, 5No. Windowless Sampler Boreholes (WS1 – WS5) to a depth of between 2.00 – 3.00m bgl. The density of the soils prevented further progress of Ws1 and WS2 below 2.50m and 2.00m bgl respectively. Standard Penetration Tests were carried out at 1.00m intervals within the boreholes. A combined ground-gas/groundwater monitoring standpipe, with an internal diameter of 50mm, was installed to a depth of between 2.00m and 3.00m bgl within the boreholes. The installation details can be viewed within the table below.

Combined Ground-gas and Groundwater Monitoring Well Construction					
Trial Hole	Depth of Installation (m bgl)	Thickness of slotted piping with gravel filter pack (m)	Depth of plain piping with bentonite seal (m bgl)	Response Zone (m bgl)	Piping internal diameter (mm)
WS1	2.50	1.50	1.00	1.00 – 2.50	50
WS2	2.00	1.00	1.00	1.00 – 2.00	50
WS3	3.00	2.00	1.00	1.00 – 3.00	50
WS4	3.00	2.00	1.00	1.00 – 3.00	50
WS5	3.00	2.00	1.00	1.00 – 3.00	50

In addition, 7No. Trial Pits (CPC - CPG) were hand excavated to a maximum depth of 0.50m bgl .in order to obtain samples for contamination purposes in order to delineate three areas of contamination identified during the earlier investigation. Due to the presence of a hard surfaced access road, it was not possible to excavate the proposed CPB.

Phase II was undertaken between 6th and 10th January 2025 and comprised the drilling of 2No. Cable Percussion Boreholes (BH1 and BH2) to a depth of 20.00m bgl. Standard Penetration Tests were carried out at 1.00m intervals to a depth of 5.00m bgl and at 1.50m intervals for the remainder of the boreholes.

Phase III was undertaken on the 5th February 2025, when TP1 and TP3 – TP7 were re-excavated and had their depths extended by ~0.50m bgl to enable a repeat of the BRE 365 infiltration tests.

Phase IV was undertaken on the 31st March 2025 and comprised the machine excavation of 10No. trial pits (TP201 - TP210) to obtain samples of the Topsoil from across the site to confirm its suitability for reuse in the soft landscaped areas of the proposed development.

Phase V was undertaken on the 5th May 2025 and comprised the machine excavation of 5No. trial pits (TP301 – TP305) under the footprint of the demolished buildings to obtain soil samples for additional contamination testing.

Trial hole location plans can be viewed within Figures 4, 5 and 6.

Prior to commencing the ground investigation, a walkover survey was carried out to identify the presence of underground services and drainage. Where underground services/drainage were suspected and/or positively identified, the exploratory position was relocated away from these areas.

As a further precautionary measure, the borehole was hand excavated to 1.20m below the local ground level (bgl) and scanned with a Cable Avoidance Tool (CAT scanner) to minimise the risk to services.

Upon completion of the drilling works, the trial holes were backfilled and made good, in relation to the surrounding area.

3.2. Sampling Procedures

Small disturbed samples and environmental samples were recovered from the trial holes at the depths shown on the trial hole records. Soil samples were generally retrieved from each change of strata and/or at specific areas of concern. Samples were also taken at approximately 0.5m intervals during broad homogenous soil horizons.

A selection of samples were despatched to a laboratory for both geotechnical and chemical testing purposes.

4. ENCOUNTERED GROUND CONDITIONS

4.1. Soil Conditions

The trial holes were logged by a Ground and Water Limited representative, generally in accordance with BS EN 14688 'Geotechnical Investigation and Testing – Identification and Classification of Soil'.

The ground conditions encountered within the trial holes constructed on the site did generally conform to that anticipated from examination of the geology map. A capping of Made Ground was noted to overlie the superficial Head Deposits and the bedrock deposits of the Folkestone Formation.

The succession of conditions and description of soils encountered in the trial holes in descending order is tabulated below.

Summary of Strata Encountered			
Strata	**Top Depth (m bgl)**	**Base Depth (m bgl)**	**Thickness (m)**
TOPSOIL (BH1 - BH2, WS3 - WS5, TP2 - TP3 and TP5 - TP7, CPE – CPH, TP201 – TP210 only): Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint.	GL	0.15 – 1.10m	0.15 – 1.10m
MADE GROUND (WS1, WS and TP4 only): Tarmac.	GL	0.10 – 0.15m	0.10 – 0.15m
MADE GROUND (WS1 - WS2, TP1 and TP4, CPA, CPC, CPD only): Dark brown clayey sandy GRAVEL. The sand was fine to coarse and the gravel was fine to coarse, sub-angular to sub-rounded flint (60%) and concrete (40%).	GL – 0.10m	>0.10 – 0.70m	0.20 – 0.60m
MADE GROUND (TP301 – 305 only): Pale brown sandy gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse brick (40%), concrete (40%), flint (10%), slate (5%) and metal (5%).	GL	0.30 – 1.40m	0.30 – 1.40m
HEAD DEPOSITS (BH1 - BH2, WS1 - WS2, TP1 - TP4 and TP6 - TP7, CPD – CPH, TP201 – TP210, TP301 - 305 only): Brown sandy CLAY, light brown silty slightly sandy slightly gravelly CLAY to brown clayey gravelly SAND. The sand was fine to medium grained. Gravel is sub-angular to subrounded fine to medium flint.	0.15 – 1.40m	0.25 – 1.80m	0.25 – 1.45m
FOLKESTONE FORMATION (BH1 - BH2, WS1 - WS4, TP1 – TP7 only): Reddish brown or orangish brown to light brown fine to medium grained SAND.	0.30 – 1.80m	>1.00 - >20.00m	>0.20 – >18.50m

For details of the composition of the soils encountered at particular points, reference must be made to the individual trial hole logs within Appendix C of this report. Trial hole location plans can be viewed within Figures 4, 5 and 6.

4.2. Roots Encountered

Roots were noted to a depth of 0.10 – 1.50m bgl within the majority of the trial holes. No roots were noted in the window sampler boreholes (WS1 – WS5) and trial pits TP301, TP302, TP304 and TP305.

A summary of the depth of root penetration can be viewed below.

Root Depth	
Trial Hole	Fresh Root Penetration (m bgl)
BH1	0.15m
BH2	0.15m
WS1	None
WS2	None
WS3	None
WS4	None
WS5	None
TP1	1.00m
TP2	1.00m
TP3	0.80m
TP4	1.20m
TP5	0.50m
TP6	1.20m
TP7	1.50m
CPA	0.30m
CPC	0.10m
CPD	0.50m
CPE	0.50m
CPF	0.50m
CPG	0.50m
CPH	0.50m
TP201	0.20m
TP202	0.20m
TP203	0.60m
TP204	0.35m
TP205	0.60m
TP206	0.40m
TP207	0.30m
TP208	0.20m
TP209	0.60m
TP210	0.60m
TP301	None
TP302	None
TP303	0.80m
TP304	None
TP305	None

It must be noted that the chance of determining actual depth of root penetration through a narrow diameter borehole is low. Roots may be found to greater depths at other locations on the site, particularly close to trees and/or trees that have been removed both within the site and its close environs.

4.3. Groundwater Conditions

Groundwater was not encountered during the intrusive investigation. It should be noted that groundwater strikes may be obscured by the drilling/excavation process.

Changes in groundwater level occur for a number of reasons including seasonal effects and variations in drainage. The investigation was undertaken in November 2024 and February 2025 when groundwater levels are likely to be approaching their annual maximum (highest elevation) and in

March and May 2025 when groundwater levels are likely to be falling from their annual maximum (highest elevation). Exact groundwater levels may only be determined through long term measurements from monitoring wells installed on-site.

Groundwater monitoring has been undertaken on five occasions. The results can be seen tabulated below.

Groundwater Observations			
Trial Hole	Date	Water Level	Final Well Depth
WS1	29/11/2024	Dry	2.32
	11/12/2024	Dry	2.30
	08/01/2024	Dry	2.32
	03/02/2025	Dry	2.30
	03/03/2025	Dry	2.30
WS2	29/11/2024	Dry	1.80
	11/12/2024	Dry	1.80
	08/01/2024	Dry	1.80
	03/02/2025	Dry	1.80
	03/03/2025	Dry	1.80
WS3	29/11/2024	Dry	2.72
	11/12/2024	Dry	2.70
	08/01/2024	Dry	2.72
	03/02/2025	Dry	2.70
	03/03/2025	Dry	2.70
WS4	29/11/2024	Dry	2.66
	11/12/2024	Dry	2.70
	08/01/2024	Dry	2.66
	03/02/2025	Dry	2.66
	03/03/2025	Dry	2.66
WS5	29/11/2024	Dry	3.02
	11/12/2024	Dry	3.00
	08/01/2024	Dry	3.02
	03/02/2025	Dry	3.00
	03/03/2025	Dry	2.98

4.4. Obstructions

The density of the soils prevented further progress of WS1 and WS2 below 2.50m and 2.00m bgl respectively.

No other artificial or natural sub-surface obstructions were noted during the intrusive investigation.

5. IN-SITU AND LABORATORY TESTING

5.1. In-situ Strength Testing

Standard Penetration Tests (SPTs) were undertaken as part of the site investigation. The results of the SPT's have not been amended to consider hammer efficiency, rod lengths and overburden pressure in accordance with Eurocode 7. The test results are presented on the borehole logs within Appendix C. An interpretation of the in-situ geotechnical testing results is given in the table below.

Interpretation of In-situ Geotechnical Testing Results					
Strata	**SPT "N" Blow Counts**	**Equivalent Undrained Shear Strength (Cu) (kPa) (Stroud (1974))**	**Soil Type**		**Trial Hole/s**
			Granular (Density)	**Cohesive (Cu)**	
Head Deposits (cohesive)	5 14 19 6	25 70 95 30	-	Low Medium High Low	BH1/0.15 – 1.60 BH2/0.20 – 1.50 WS2/060 – 1.70 WS5/0.30 – 1.80
Head Deposits (granular)	4 3	-	Loose	-	WS3/0.35 – 1.30 WS4/1.10 – 1.80
Folkestone Formation	33 – >50 43 – >50 24 – 34 63 22 – 56 30 – 49 25 – >50	-	Dense – Extremely Dense Dense – Extremely Dense Medium Dense – Dense Extremely Dense Medium Dense – Very Dense Dense – Extremely Dense	-	BH1/1.60 – 20.00 BH2/1.50 – 20.00 WS1/1.10 – 2.50 WS2/1.70 – 2.00 WS3/1.30 – 3.00 WS4/1.80 – 3.00 WS5/1.80 – 3.00

It must be noted that field measurements of undrained shear strength (Cu) are dependent on a number of variables including disturbance of sample, method of investigation and also the size of specimen or test zone.

5.2. Geotechnical Laboratory Testing

A programme of geotechnical laboratory testing, scheduled by Ground and Water Limited and carried out by an accredited geotechnical testing laboratory was undertaken on samples recovered. Details of the specific tests used in each case are given below.

Standard Methodology for Laboratory Geotechnical Testing		
Test	Standard	Number of Tests
Atterberg Limit Tests	BS1377:2016:Part 2:Clauses 3.2, 4.3 & 5	1
Particle Size Distribution Tests	BS1377:2016:Part 2:Clause 9	9
Water Soluble Sulphate and pH Test	BS1377:2018:Part 3:Clause 5	1
BRE Special Digest 1 Tests	BRE Special Digest 1 "Concrete in Aggressive Ground (BRE, 2005).	2

5.2.1. Atterberg Limit Testing

A précis of Atterberg limit testing undertaken can be seen tabulated below. The test results are presented within Appendix D.

Atterberg Limit Tests Results Summary							
Stratum	Moisture Content (%)	Passing 425 µm sieve (%)	Modified PI (%)	Soil Class	Consistency Index (Ic)	Volume Change Potential	
						BRE	NHBC
Head Deposits	25	90	19.80	CI	Stiff	Low	Low

- NP – Non-plastic
- BRE Volume Change Potential refers to BRE Digest 240 (based on Atterberg results)
- Soil Classification based on British Soil Classification System.
- Consistency Index (Ic) based on BS EN IS0 14688-2:2018.

5.2.2. Moisture Deficit Assessment

The results of the Atterberg Limit tests were analysed to determine the Liquidity Index of the sample, to give an indication as to whether the sample recovered showed a moisture deficit as well assessing their degree of consolidation. Liquid Limit analyses was undertaken to assess whether there were any potentially significant moisture deficits within the sample tested.

No potential moisture deficit was noted within BH1 at 1.00m bgl.

5.2.3. Particle Size Distribution Testing

The results of particle size distribution (PSD) testing undertaken show that the granular soils of the Folkestone Formation have no volume change potential in accordance with both BRE240 and NHBC Standards Chapter 4.2. The results of the PSD testing can be viewed within Appendix D and summarised below.

Atterberg Limit Tests Results Summary			
Stratum	Range Passing 63µm Sieve (%)	Volume Change Potential	
		BRE	NHBC
Folkestone Formation	3 - 10	No	No

- Volume Change Potential refers to BRE Digest 240 (based on Grading test results).
- Shrinkability refers to NHBC Standards Chapter 4.2 (based on Grading test results).
- BRE 240 states that a soil has a volume change potential when the clay fraction exceeds 15%. Only the silt and clay combined fraction are determined by sieving therefore the volume change potential is estimated from the percentage passing the 63µm sieve.
- NHBC Standards Chapter 4.2 states that a soil is shrinkable if the percentage of silt and clay passing the 63µm sieve is greater than 35% and the Plasticity Index is greater than 10%.

6. ENGINEERING CONSIDERATIONS

6.1. Soil Characteristics and Foundation Considerations

A summary of the soil characteristics following the intrusive site investigation and laboratory testing and the relevant foundation considerations has been provided below. The following information from the ground investigation was considered pertinent to the design of foundations.

- Foundations should be taken through any Made Ground/Topsoil and either into, or onto a suitable underlying natural stratum of adequate bearing characteristics.
- Shallow foundations should be designed in accordance with soils of low volume change potential.
- Given the presence of cohesive soils at shallow depth, special foundation precautions may be required to prevent possible future shrinkage/swelling of the soils affecting the integrity of the faces of foundations (underfloor void diameter/compressible material/void formers etc.).
- For piling, the design of each structural element (slab/piles/beams) should be designed in accordance with the appropriate volume change potential of the respective bearing stratum. Special foundation precautions may be required to prevent possible future shrinkage/swelling of the soils affecting the integrity of the faces of foundations and/or structural element (underfloor void diameter/compressible material/void formers etc.). Heave protection measures are also recommended for all structural elements of the design to account for the volume change potential of the respective stratum and heave resulting from any soil removal.
- The loads of proposed foundations should not exceed the allowable bearing capacity of the soils they are founding upon.
- If loose/soft spots are encountered, they should be bypassed.
- Foundations must not be placed within fresh root penetrated and/or desiccated soils with volume change potential. It is recommended that foundations are taken at least 300mm into non-fresh root penetrated strata if the soils have volume change potential, or into soils of no volume change potential.
- The influence of trees on or surrounding the site will need to be taken into account in final design (NHBC Standards Chapter 4. 2) (tree rings).
- Any water ingress must be prevented from entering foundation trenches and excavations must be kept dry and either concreted or blinded as soon after excavation as possible. If water were allowed to accumulate within the excavation for even a short period of time, an increase in heave occur. The shear strength will also be reduced, resulting in lower bearing capacities, resulting in increased settlements. Instability issues may arise within the foundation trenches, in case of perched water being present.

6.2. Shallow Foundations

Based on the previous section, foundations for the bungalows should bypass any Made Ground/Topsoil and soft spots/loose granular soils, before extending 300mm below the proved depth of root penetration. Foundations would therefore be constructed on competent, moisture stable soils of the Head Deposits and/or Folkestone Formation. A tabulated summary showing the minimum foundation depth based on each trial hole drilled in the area planned for the bungalows can be viewed below.

Summary of Minimum Foundation Depths			
Trial Hole	**Minimum Foundation Depth (m bgl)**	**Founding Geological Formation**	**Reason**
WS2	0.75	Cohesive Head Deposits	Foundations should bypass Made Ground/Topsoil and before founding on competent soils at a moisture stable depth.
WS3	1.80	Folkestone Formation	Foundations should bypass Made Ground/Topsoil and the loose spot to 1.50m bgl, before founding on competent soils at a moisture stable depth.
WS4	1.80	Folkestone Formation	Foundations should bypass Made Ground/Topsoil and the loose spot to 1.50m bgl, before founding on competent soils at a moisture stable depth.
WS5	1.80	Folkestone Formation	Foundations should bypass Made Ground/Topsoil and the soft spot to 1.50m bgl, before founding on competent soils at a moisture stable depth.

Foundations must not be placed within cohesive root penetrated and/or desiccated soils and the influence of the trees surrounding the site must be taken into account, in case of soils with volume change potential. The base of foundation excavations must extend at least 300mm into non-root penetrated soils.

Foundations should be taken through any Topsoil or Made Ground, below any loose or soft spots and found on moisture stable, competent soils of the Head Deposits and/or Folkestone Formation at a minimum depth of 0.75 – 1.80m bgl.

The bearing capacity is anticipated generally to be quite variable, based on the results of the ground investigation, material and depth of foundations. Once the initial soft / loose soils are bypassed (usually to 1.00 – 1.50m), then foundations can be designed based on a general design allowable bearing capacity of ~125kN/m^2 with the strength generally increasing with depth. Higher bearing capacities can be achieved within the deeper competent granular soils (e.g. > 1.80m bgl), with values of 150 - 200kN/m^2 being considered as safe, taking into account some variability.

This is based on trial hole records, the results of in-situ testing, inspection of samples recovered, and based on a 5m long by 1m wide foundation and a maximum settlement of 25mm. Settlements on loading are likely to be moderate.

Additional Comments

A number of comments and recommendations has been provided below.

- It is prudent to avoid having a foundation spanning across materials of different consistency, like clay and gravel, in order to avoid potential differential settlements. If unavoidable, foundations must be reinforced to allow for such potential differential movement. It should be noted that differential settlement may also occur between strip and isolated pad foundations.
- Foundation excavations must be carefully bottomed out and any loose soil or soft spots removed prior to the foundation concrete or blinding being placed. Failure to ensure that foundation excavations are suitably bottomed out could result in additional settlements.

- Inspection of foundation excavations, prior to concreting, must be made by a competent and suitably qualified person to check for soft spots and to check for the presence of roots.
- Foundations must not be cast over foundations of former structures and/or other hard spots.
- Given soils of volume change potential were encountered and Topsoil/Made Ground was noted to be deeper than 0.60m bgl, a suspended slab is required.
- Isolated Pad Foundations must be at least 1.5 times the width of the widest pad apart to keep to the anticipated settlements.
- Final designs for the foundations should be carried out by a suitably qualified Engineer based on the findings of this investigation and with reference to the anticipated loadings, serviceability requirements for the structure and the developments proximity to former, present, and proposed trees. Where trees are mentioned in the text this means existing trees, recently removed trees (approximately 15 years to full recovery on cohesive soils) and those planned as part of the site landscaping.

6.3. Piled Foundation

Given the results of the ground investigation, a piled foundation system was deemed more suitable.

The construction of a piled foundation is a specialist job, and the advice of a reputable contractor, familiar with the type of ground and groundwater conditions encountered on this site, should be sought prior to finalising the foundation design. The actual pile working load will depend on the particular type of pile and method of installation adopted.

The foundation would comprise a piled foundation with reinforced ground beams or a piled slab. In general, for the cumulative pile capacity calculations, shaft friction over desiccated levels should be ignored and piles should not be terminated within desiccated soils where moisture recovery following tree removal could occur.

Indicative/guidance limit loads and settlements for a bored pile have been given within the table below have been based on an average of the deep boreholes BH1 and BH2. An allowance for no friction to occur within the top 3.00m of the soil has been included within the calculations where it could pass through any Made Ground and Head Deposits. An adhesion factor of 0.45m has been applied to all natural cohesive units.

The bearing values may be limited by the maximum permissible stress allowable on a concrete pile. To achieve the full bearing value a pile should penetrate the bearing stratum by at least five times the pile diameter.

An FOS of 3 has been used below.

Bored Pile – Limit Loads and Settlement Parameters				
Depth (m bgl)	**Diameter (m)**	**Limited Load (kN)**	**Load (kN)**	**Settlement (mm)**
8.00	0.30	130	125	5.6
	0.45	295	290	7.0
	0.60	525	500	9.1
10.00	0.30	205	200	14.7
	0.45	430	425	12.4
	0.60	820	500*	8.7

12.00	0.30	240	220	20.6
	0.45	555	500*	17.8
	0.60	990	500*	9.1

*The allowable individual pile loads should generally be limited to 500kN in a concrete pile and for the method adopted. Various contractors will have their own requirements.

The loads above are indicative and the advice of a specialist piling contractor should be sought. The analysis was focused on the geotechnical aspects and the capacity of the soils. The actual pile loads permitted may be further limited for structural reasons (i.e. the concrete strength and the overall structural capacity of the pile, buckling etc). The structural engineer and the piling contractor are to perform the final design.

The bearing values given in the table above are applicable to single piles. Where piles are to be constructed in groups the bearing value of each individual pile should be reduced by a factor of approximately 0.8 and a calculation made to check the factor of safety against block failure.

The piles will need to be designed in accordance with the volume change potential of the soils encountered, depth of desiccation and root penetration. Temporary casing may be required where the upper portion of the pile passes through the Made Ground, particularly where perched water is encountered, to prevent necking of the concrete.

6.4. Excavations and Stability

Shallow excavations in the Topsoil/Made Ground and Head Deposits are likely to be marginally stable at best. Long, deep excavations, through these strata and into the underlying Folkestone Formation are likely to become unstable.

Unsupported earth faces formed during excavation may be liable to collapse without warning and suitable safety precautions should therefore be taken to ensure that such earth faces are adequately supported before excavations are entered by personnel.

6.5. Sub-Surface Concrete Design

Concrete to be placed in contact with soil or groundwater must be designed in accordance with the recommendations of Building Research Establishment Special Digest 1, 2005, *'Concrete in Aggressive Ground'* considering the pH of the soils. For the classification given below, the "mobile" and "natural" land use case was adopted given the geology encountered and the residential use of the site.

Made Ground

The water-soluble sulphates in the Made Ground were noted to be 24.7 – 1960mg/l, with a pH of 6.0 – 11.5 from chemical laboratory testing.

Topsoil

The water-soluble sulphates in the Topsoil were noted to be 8.2 – 65mg/l, with a pH of 5.2 – 7.7, from chemical laboratory testing.

Folkestone Formation

According to Box C6 of BRE Special Digest 1, 2005, 'Concrete in Aggressive Ground' the Folkestone Formation did not fall within a list of UK geological formations known to contain pyrite. It was therefore it was not required to consider the levels of total potential sulphate in the classification

process.

The water-soluble sulphates in the Folkestone Formation were noted to be 3.7 - 19mg/l, with a pH of 6.2 – 8.8, from chemical laboratory testing.

According to BRE Special Digest 1, 2005, 'Concrete in Aggressive Ground' a Sulphate Design Class of DS-1 could be used for sub-surface concrete in contact with the Folkestone Formation. Table C1 of the Digest indicated an ACEC (Aggressive Chemical Environment for Concrete) classification of AC-1. **However, AC-2z was the recommendation based on previous results, therefore that should be adopted.**

6.6. Roads and Hardstanding Design

This section provides information relating to the construction of roads and hardstanding for the Made Ground, Aeolian Deposits and River Terrace Deposits that could be encountered at shallow depth.

6.6.1. Anticipated CBR Values and Frost Susceptibility

Topsoil

Roads and hardstanding should bypass Topsoil given the likely low strength, high compressibility and general variability.

Made Ground

Where roads and hardstanding are to be founded on Made Ground, a CBR value of 1% should be adopted, as a result of the variable nature of Made Ground in terms of consistency, strength and compressibility.

Head Deposits

Roads and hardstanding constructed on the cohesive Head Deposits should be designed based on a CBR value of 4.0%. This is based on reference to Table C1 of TRL1132 and average construction conditions. Based on wet conditions a CBR of 2.5% should be adopted, with dry conditions a CBR of 4.5% being applicable.

These clay-based soils (poorly drained) with plasticity indexes generally less than 20% are likely to be frost susceptible.

Head Deposits

Roads and hardstanding constructed on the granular Head Deposits should be designed based on a CBR value of 40%. This is based on reference to Table C1 of TRL1132 and average construction conditions. Based on wet conditions a CBR of 20% should be adopted, with dry conditions a CBR of 60% being applicable. Given that the soils encountered beneath the site had a clay content of <10% these deposits are likely to be non frost susceptible.

All formation levels for roads and hardstanding should be proof rolled to highlight any soft areas which should then be dug out and replaced with selected granular material compacted in thin layers to a suitable specification.

6.7. Surface Water Disposal

Soakaway testing in accordance with BRE365 was undertaken within TP1 – TP7, with the results tabulated below.

Soakage Testing Results						
Trial Hole	Test Number	Depth (m bgl)	**Start Depth (m bgl)**	**Finish Depth (m bgl)**	**Time Taken (mins)**	**Infiltration Rate (m/sec)**
TP1	1	1.50	GL	1.45	1153	9.46×10^{-7}
	2	1.50	GL	1.21	980	8.72×10^{-7}
	3	1.50	GL	1.24	1014	1.05×10^{-6}
TP2	1	1.20	GL	1.20*	1035	1.35×10^{-6}
	2	1.20	GL	1.20*	1055	1.18×10^{-6}
	3	1.20	GL	1.20*	1014	1.23×10^{-6}
TP3	1	1.40	GL	1.20	1140	8.11×10^{-7}
	2	1.40	GL	1.26	1100	9.75×10^{-7}
	3	1.40	GL	1.40*	1055	1.05×10^{-6}
TP4	1	2.50	GL	2.00*	1095	8.32×10^{-7}
	2	2.50	GL	1.88	190	4.92×10^{-6}
	3	2.50	GL	2.00*	1020	9.71×10^{-7}
TP5	1	1.20	GL	0.93	110	7.18×10^{-6}
	2	1.20	GL	0.95	120	7.42×10^{-6}
	3	1.20	GL	0.98	120	7.77×10^{-6}
TP6	1	2.00	GL	1.52	1035	8.17×10^{-7}
	2	2.00	GL	1.89	1045	1.02×10^{-6}
	3	2.00	GL	1.59	1050	1.02×10^{-6}
TP7	1	1.00	GL	1.45	1050	1.18×10^{-6}
	2	1.00	GL	1.15	210	1.26×10^{-6}
	3	1.00	GL	1.50*	1035	1.26×10^{-6}

*The trial pit had drained dry over night, hence the calculated infiltration rate may be quicker than the calculated rate

On the 5th February 2025, TP1 and TP3 – TP7 were re-excavated and had their depths extended by ~0.50m bgl to enable a repeat of the BRE 365 infiltration tests without the granular infill and the results are tabulated below. It should be noted that in most cases the base of the pit has collapsed within the sand below the waterline and this reduced the overall depth of the trial pit.

Soakage Testing Results						
Trial Hole/ Starting Depth	Test Number	Depth (m bgl)	**Start Depth (m bgl)**	**Finish Depth (m bgl)**	**Time Taken (mins)**	**Infiltration Rate (m/sec)**
TP1/1.95m bgl	1	1.75	1.05	1.73	180	1.47×10^{-5}
	2	1.60	1.20	1.62	130	2.04×10^{-5}
	3	1.60	1.20	1.60	150	1.92×10^{-5}
TP3/1.70m bgl	1*	1.70	0.90	1.09	292	2.52×10^{-6}
	2		-	-	-	-
	3		-	-	-	-
TP4/2.35m bgl	1	2.20	1.40	2.15	105	2.84×10^{-5}
	2	2.05	1.38	2.20	120	3.27×10^{-5}
	3	2.05	1.10	1.96	120	3.76×10^{-5}
TP5/1.60m bgl	1	1.45	1.00	1.35	165	1.32×10^{-5}
	2*	1.22	0.95	1.16	145	8.33×10^{-6}
	3		-	-	-	-
TP6/2.45m bgl	1	2.30	1.82	2.30	95	3.31×10^{-5}

	2	2.20	1.67	2.09	120	2.20×10^{-5}
	3	2.20	1.80	2.10	120	2.02×10^{-5}
TP7/1.90m bgl	1	1.70	1.45	1.70	65	3.14×10^{-5}
	2	1.63	1.40	1.62	105	2.22×10^{-5}
	3	1.50	1.08	1.40	100	1.98×10^{-5}

*The test failed to reach the 75% water level and was therefore not BRE365 compliant.

Based upon the results of the infiltration tests, it was considered that the soils of the Head Deposits and underlying Folkestone Formation encountered in the trial pits to a maximum depth of 2.50m bgl would provide a suitable medium for soakaway installation.

The submission of a Sustainable Urban Drainage Scheme (SUDS) is likely to be required for this site due to the proposed development increasing the amounts of hardstanding.

Consultation with the Environment Agency must be sought regarding any use that may have an impact on groundwater resources, abstractions and surface water features/watercourses.

7. CONTAMINATION RISK ASSESSMENT

7.1. Results of the Preliminary Risk Assessment

The tabulated Conceptual Site Model based upon results of the Updated Conceptual Site Model developed as part of the Omnia Phase I-II Geo-Environmental Site Assessment Report referenced A11530/1.2, dated April 2022 is reproduced in section 2.8. For the complete information please see the referenced report.

No additional source of contamination, pathway or receptor was identified between the desk study and the ground investigation and as such, it was not necessary to modify the CSM.

In the UK, the assessment of risk from contamination follows the source-pathway-receptor (SPR) approach. For a risk to be present there must be a source of contamination, a receptor or receptors, and a pathway for contaminants to migrate or be absorbed. If there is a linkage between any given source and receptor, then a quantitative risk assessment is used to assess the significance or impact of the pollutant linkage.

7.2. Sampling Locations

The synopsis for the trial hole locations and their final depth can be seen tabulated below. A trial hole location plan is provided within Figure 3. The table also indicates whether any locations targeted a source of contamination as well as the proposed end-use. The proposed development can be seen in Figure 2.

Trial Hole Location Synopsis		
Trial Hole/Final Depth	**Sampling Strategy**	**Proposed End-Use**
BH1/20.00m	Random	Footprint of Proposed Care Home
BH2/20.00m	Random	Footprint of Proposed Care Home
WS1/2.50m	Random	Communal Garden
WS2/2.00m	Random	Access Road
WS3/3.00m	Random	Footprint of Proposed Bungalow
WS4/3.00m	Random	Private Garden
WS5/3.00m	Random	Soft Landscaping
TP1/1.50m	Random	Communal Garden
TP2/1.20m	Random	Private Garden
TP3/1.40m	Random	Communal Garden
TP4/2.50m	Random	Access Road
TP5/1.20m	Random	Private Garden
TP6/2.00m	Random	Private Garden
TP7/1.00m	Random	Access Road
CPA/030m	Targeted at PAH hotspot	Access Road
CPC/0.10m	Targeted at PAH hotspot	Access Road
CPD/0.50m	Targeted at asbestos hotspot	Footprint of Proposed Care Home
CPE/0.50m	Targeted at asbestos hotspot	Footprint of Proposed Care Home
CPF/0.50m	Targeted at asbestos hotspot	Soft Landscaping
CPG/0.50m	Targeted at asbestos hotspot	Soft Landscaping
CPH/0.50m	Targeted at asbestos hotspot	Soft Landscaping
TP201/0.60m	Targeted at rear garden to Plot 3	Private Garden
TP202/0.60m	Targeted at rear gardens to Plots 4/5	Private Garden
TP203/0.60m	Targeted at rear garden to Plot 6	Private Garden
TP204/0.60m	Targeted at rear gardens to Plots 7/8	Private Garden

TP205/0.60m	Targeted at area of soft landscaping	Soft Landscaping
TP206/0.60m	Targeted at area of soft landscaping	Soft Landscaping
TP207/0.60m	Targeted at rear gardens to Plots 1/2	Private Garden
TP208/0.60m	Targeted at Care Home Communal Garden	Communal Garden
TP209/0.60m	Targeted at Care Home Communal Garden	Communal Garden
TP210/0.60m	Targeted at Care Home Communal Garden	Communal Garden
TP301/1.60m	Targeted below former structure	Footprint of Proposed Care Home
TP302/1.00m	Targeted below former structure	Footprint of Proposed Care Home
TP303/0.80m	Targeted below former structure	Private Garden
TP304/0.80m	Targeted below former structure	Footprint of Proposed Care Home
TP305/0.80m	Targeted below former structure	Proposed Car Parking Area

The investigation area totals approximately 13,500m^2 and with thirty six sampling locations during the current ground investigations undertaken by Ground and Water Limited, given an unknown hotspot shape, the sampling density means that a hotspot with an area of approximately 562m^2 and a radius of approximately 13.4m would be encountered (CLR 4).

7.3. Soil Risk Assessment

Sampling depths were chosen to reflect the receptor of concern (e.g. human health, controlled waters and vegetation). Two samples of Made Ground (CPA/0.20m and CPC/0.10m bgl) underwent targeted scheduling for PAHs. Four samples of Made Ground (CPD/0.15m, TP1/0.15m, WS1/0.20m and WS2/0.20m bgl) and four samples of Topsoil (CPE/0.15m, CPF/0.15m, CPG/0.15m and CPH/0.15m bgl) underwent targeted scheduling for asbestos. Two samples of Topsoil (BH1/0.20m and BH2/0.20m bgl) were scheduled under a random strategy and ten samples of Topsoil (TP201/0.20m, TP202/0.20m, TP203/0.20m, TP204/0.20m, TP205/0.20m, TP206/0.20m, TP207/0.20m, TP208/0.20m, TP209/0.20m and TP210/0.20m bgl) were scheduled under a targeted strategy during Phase IV. Five samples of Made Ground (TP301/0.50m, TP302/0.30m, TP303/0.15m, TP304/0.15m and TP305/0.20m bgl) were scheduled under a targeted strategy during Phase V. The receptors relevant to the sampling depths are tabulated below.

Summary of Receptors per Sample Depth	
Depth	**Receptors**
Shallow Samples (< 0.75m bgl)	• End Users (Residents/Future site visitors) • Construction workers during development • Site operatives during maintenance works • Neighbours and public • Vegetation within soft landscaped areas (shallow rooted) • Principal Aquifer (Folkestone Formation) • Buried Concrete • Receiving landfill

Chemical laboratory testing, scheduled by Ground and Water Limited, and carried out by i2 Analytical Limited, was undertaken on the samples of Topsoil and Made Ground listed above. The samples were subjected to a combination of analysis that comprised:

- Asbestos screen;
- Semi-metals and heavy metals incl. Arsenic, Cadmium, Chromium (incl. Hexavalent Chromium), Copper, Lead, Mercury, Nickel, Selenium, Vanadium, Zinc;
- Polycyclic Aromatic Hydrocarbons (PAH's) incl. Naphthalene, Acenaphthylene,

Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(ghi)perylene;

- Speciated TPH including full aliphatic/aromatic split; and
- BTEX compounds (Benzene, Toluene, Ethylbenzene, Xylene) and MTBE – used as marker compounds for Volatile Organic Compounds (VOCs).

A breakdown of the number of tests undertaken for each determinand is discussed in further sections. The chemical laboratory results are presented in Appendix E.

7.3.1. Soil Assessment Criteria and Results

At the time of reporting, May 2025, the proposed development was understood to comprise the demolition of the existing buildings on-site and the construction of a two storey, 60-bed care home alongside eight (8no.) bungalows with associated vehicle parking, soft landscaping and access roads. The proposed development plan is shown in Figure 2.

Based on the proposed development, the results of the chemical laboratory testing were compared to the Generic Assessment Criteria (GAC) for a ***'Residential with homegrown produce'*** land-use scenario, as this was considered the most appropriate land-use scenario.

Where a contaminant of concern's GAC varies according to the Soil's Organic Matter (SOM), the SOM recorded for each uncontaminated soil type was used to derive the appropriate GAC for each soil type. A SOM value of 1%, the most conservative value, was utilised.

A summary of the analytical results and the comparison to the determinands adopted screening value are presented in the table below and overleaf.

Soil Contamination Test Results and Screening Values					
Determinand	**Number of Samples**	**Minimum Concentration (mg/kg)**	**Maximum Concentration (mg/kg)**	**Adopted Screening Value (mg/kg)**	**Was the adopted screening value exceeded for relevant land-use scenario?**
INORGANICS					
Asbestos	25	ND	ND	ND	**TP204/0.20m – loose fibres of chrysotile (<0.001%)**
Cyanide (total)	17	< 2	< 2	24	No
Phenols	17	< 1.0	< 1.0	280	No
METALS					
Arsenic	17	6.5	13	37	No
Boron	17	0.4	1.5	290	No
Cadmium	17	< 0.2	0.4	11	No
Chromium (III)	17	12	18	910	No
Chromium (Hexavalent)	17	< 1.8	< 1.8	6	No
Copper	17	7.1	95	2,400	No
Lead	17	12	170	200	No
Mercury	17	< 0.3	0.8	1.2	No
Nickel	17	6.5	18	130	No
Selenium	17	< 1.0	1.1	250	No
Vanadium	17	21	28	410	No

Zinc	17	30	270	3,700	No
TOTAL PETROLEUM HYDROCARBONS (TPHs)					
Aliphatic >C5 - C6	9	< 0.01	< 0.01	42	No
Aliphatic >C6 - C8	9	< 0.01	< 0.01	100	No
Aliphatic >C8 - C10	9	< 0.01	< 0.01	27	No
Aliphatic >C10 - C12	9	< 1	< 1	130	No
Aliphatic >C12 - C16	9	< 2	< 2	1,100	No
Aliphatic >C16 - C21	9	< 8	< 8	65,000	No
Aliphatic >C21 - C34	9	< 8	< 8	65,000	No
Aliphatic >C35 – C40	9	<10	19	65,000	No
Aromatic >C5 - C7	9	< 0.01	< 0.01	70	No
Aromatic >C7 - C8	9	< 0.01	< 0.01	130	No
Aromatic >C8 - C10	9	< 0.02	< 0.02	34	No
Aromatic >C10 - C12	9	< 1	< 1	74	No
Aromatic >C12 - C16	9	< 1	2.8	140	No
Aromatic >C16 - C21	9	< 10	< 10	260	No
Aromatic >C21 - C35	9	< 10	37	1,100	No
Aromatic >C35 – C40	9	< 10	54	1,100	No
Benzene	9	< 0.005	< 0.005	0.087	No
Toluene	9	< 0.005	< 0.005	130	No
Ethylbenzene	9	< 0.005	< 0.005	47	No
m,p-Xylene	9	< 0.008	< 0.008	56	No
o-Xylene	9	< 0.005	< 0.005	60	No
POLYCYCLIC-AROMATIC HYDROCARBONS					
Acenapthene	19	< 0.05	0.19	210	No
Acenapthylene	19	< 0.05	< 0.05	170	No
Anthracene	19	< 0.05	0.92	2,400	No
Benzo(a)anthracene	19	< 0.05	0.18	7.2	No
Benzo(a)pyrene	19	< 0.05	0.11	2.2	No
Benzo(b)fluoranthene	19	< 0.05	0.14	2.6	No
Benzo(ghi)perylene	19	< 0.05	0.09	320	No
Benzo(k)fluoranthene	19	< 0.05	< 0.05	77	No
Chrysene	19	< 0.05	0.31	15	No
Dibenzo(a,h)anthracene	19	< 0.05	< 0.05	0.24	No
Fluoranthene	19	< 0.05	0.83	280	No
Fluorene	19	< 0.05	0.37	170	No
Indeno(1,2,3-cd)pyrene	19	< 0.05	0.08	27	No
Naphthalene	19	< 0.05	< 0.05	2.3	No
Phenanthrene	19	< 0.05	1.60	95	No
Pyrene	19	< 0.05	0.60	620	No
MARKER FOR VOLATILE ORGANIC COMPOUND					
Methyl tert-butyl ether (MTBE)	9	< 0.005	< 0.005	49	No
The derivation of the Soil Assessment Criteria used within this report can be seen within Appendix F. The soil concentrations were typically compared to the LQM/CIEH Suitable for Use Levels (S4UL) (2014), based upon the assumption of 1% soil organic matter. A screening value for Lead is based on the Category 4 Screening Levels (C4SLs). Where no S4UL or C4SL is available for Cyanide, a SoBRA acute GAC is assigned. Where no S4UL or C4SL is available for MTBE, a CL:AIRE 2010 GAC is assigned. Where exceedances are noted, the trial hole and depth of sample is recorded.					

The proposed development includes areas of soft-landscaping, where shallow rooted vegetation may be exposed to aggressive ground conditions. The previous table compares the results of the laboratory

analysis to GAC that is protective of Human Health and therefore different GAC is required for vegetation.

Soil Contamination Test Results and Screening Value					
Determinand	**Number of Samples**	**Minimum Concentration (mg/kg)**	**Maximum Concentration (mg/kg)**	**Adopted Screening Value (mg/kg)**	**Was the adopted screening value exceeded for relevant land-use scenario?**
Copper	17	7.1	95	250	No
Zinc	17	30	270	1,000	No
The derivation of the Soil Assessment Criteria used within this report can be seen within Appendix F. The soil concentrations were compared to the ICRCL 70/90: *Notes on the restoration and aftercare of metalliferous mining sites for pasture and grazing*. Where exceedances are noted, the trial hole and depth of sample is recorded.					

7.3.2. Soil Assessment

The comparison between the laboratory analysis from the current investigation and the assessment criteria indicates that the determinands were identified at below the adopted screening value and are not considered to represent an unacceptable risk to future receptors.

Two samples of Made Ground (CPA/0.20m and CPC/0.10m bgl) were targeted at delineating where elevated concentrations of PAHs were identified in the previous investigation. The results indicated that the location of the elevated PAHs can be treated as a localised hotspot. Likewise, four samples of Made Ground (CPD/0.15m, TP1/0.15m, WS1/0.20m and WS2/0.20m bgl) and four samples of Topsoil (CPE/0.15m, CPF/0.15m, CPG/0.15m and CPH/0.15m bgl) were targeted at delineating an area where asbestos was found during the previous investigation. Since no asbestos was found, this location can also be treated as a localised hotspot. Appropriate remedial measures are discussed in Section 8 of this report.

Asbestos

Loose fibres of chrysotile asbestos were identified in one sample of the Topsoil during Phase IV of the current investigation (TP204/0.20m bgl). Quantification was undertaken on the sample and indicated that asbestos was present at < 0.001%.

A quantification risk assessment was carried out for the concentration recorded, in accordance with the guidance within CIRIA 733. The background, considerations taken, and the calculations can be seen in Appendix G. A summary of the results is shown in the table below.

Asbestos Risk Assessment				
Sample	**Mesothelioma Accumulated Risk (fibres/ml.year)**	**Mesothelioma Risk**	**Lung Cancer Accumulated Risk (fibres/ml.year)**	**Lung Cancer Risk**
TP204/0.20m	0.00091	Insignificant	0.00065	Insignificant

Based on CIRIA Table 14.1 for Mesothelioma and CIRIA Table 14.3 for Lung Cancer, the risk for TP204/0.20m bgl was considered to be insignificant.

No asbestos has been identified in the remaining samples in which fibres were noted during Phase IV.

No fibres were identified during the earlier phases of the current investigation.

An **Asbestos Management Strategy** should be put in place so that any potentially asbestos containing materials are identified and removed from site in a suitable manner to prevent cross-contamination.

7.3.3. Water Supply Pipe Risk Assessment

As part of the proposed development it is expected that new water supply pipes will be installed at the site. Water supply pipes have the potential to be exposed to contaminants in the ground that can lead to unacceptable concentrations within the drinking water. If a risk is identified, specialist pipes that are protective of the drinking water are required.

A pipe selection risk assessment should be submitted to the water supply company as part of the development based on the supplier's assessment criteria. An indication of whether there is likely to be a risk can be seen tabulated below, where the PE pipe thresholds are based on *UKWIR Contaminated Land Assessment Guidance, 2014*.

Pipe Selection Risk Assessment			
Determinand	**PE Pipe Threshold (mg/kg)**	**Laboratory Analysis Range (mg/kg)**	**Was the Threshold Exceeded?**
Total BTEX and MTBE	0.1	LOD	No
Total VOCs	0.5	-	No
Total SVOCs	2	-	No
Phenols	2	< 2	No
TPH EC5 – EC10 (aliphatics and aromatics)	2	LOD	No
TPH EC10 – EC16 (aliphatics and aromatics)	10	< 1 – 2.8	No
TPH EC16 – EC40 (aliphatics and aromatics)	500	< 10 – 91	No
Naphthalene	5	LOD	No

The results from the current investigation indicate that no determinands were above the threshold for the use of a PE pipe at the site.

7.4. Groundwater Risk Assessment

In the UK, the water environment is protected under a number of regulatory regimes, mainly governed by the Environment Agency. The Environment Agency is consulted when there may be a risk to Controlled Waters, or where a pollution incident has occurred historically. The Water Framework Directive is implemented in various guises covering groundwater, surface water and drinking water supply.

The DEFRA online maps indicated that the majority of the site was located on a Principal Aquifer associated with the bedrock deposits of the Folkestone Formation. The Gault Clay formation in the south-west corner was classified as Unproductive Strata.

From analysis of hydrogeological and topographical maps the groundwater table was anticipated to be encountered at depth within the Folkestone Formation. Perched water was also likely to be found within the Made Ground, especially after periods of intense or prolonged rainfall. It was considered that the groundwater was flowing northwards in alignment with local topography.

The nearest surface water feature was a lake noted ~110m to the north-west.

During the original investigation reported in the Omnia Phase I-II Geo-Environmental Site Assessment Report referenced A11530/1.2, dated April 2022, Topsoil and Made Ground were found to a depth of between 0.80 – 1.00m bgl. Soils described as weathered Folkestone Formation were found to a maximum depth of 2.00m bgl overlying the unweathered Folkestone Formation to a maximum depth of 3.50m bgl. Groundwater was not encountered.

During the current site investigations undertaken by Ground and Water Limited, Topsoil and Made Ground was encountered to 0.70m bgl, overlying sandy gravelly clay and gravelly clayey sand of the Head Deposits overlying the fine to medium sand of the Folkestone Formation to the base of the deep boreholes (20.00m bgl). Groundwater was not encountered during the ground investigation.

Given anticipated low mobility of the contaminants found and not excessive exceedances, moderately deep groundwater conditions and the conceptual site model showing the nearest surface water receptor was 110m from the site, it is not expected that the soils on-site represent an unacceptable risk to controlled water receptors. No further action is considered necessary.

7.5. Ground Gas Risk Assessment

Ground-gas risk assessment was beyond the scope of the current investigation.

A period of ground-gas monitoring was undertaken as part of the previous ground investigation and reference should be made to the Omnia Phase I-II Geo-Environmental Site Assessment Report referenced A11530/1.2, dated April 2022. The site was classified as Characteristic Situation CS1 where no specific gas protection measures are required. **However, the report suggested further ground-gas monitoring to confirm the classification given.**

7.6. Vapour Risk Assessment

The CSM identified limited sources of contamination that may pose an unacceptable risk to receptors through vapours. BTEX/MTBE were at LOD during the chemical laboratory testing.

7.7. Updated Conceptual Site Model

Following completion of the Phase 2 Site Investigation, the CSM, inclusive of associated risk, within Section 2.8 of this report was re-evaluated.

For ease of reference and understanding, the risks have been re-assigned within this risk assessment against three possible levels / categories, summarised in the table below.

Risk Categories used in the Tabulated CSM	
Low Risk	Regarding this potential SPR linkage, the site is considered suitable for the proposed end-use and there is not considered to be an unacceptable risk to receptors.
Moderate Risk	Regarding this potential SPR linkage, the site is suitable for the proposed end-use however remediation and/or further investigation is required.
High Risk	Regarding this potential SPR linkage, the site is not suitable for proposed end-use and there is an unacceptable risk to receptors. Urgent action required in the short term.

Tabulated Conceptual Site Model – Pollutant Linkage Summary (On-Site Sources)			
Potential Sources	Potential Absorption Pathways	Potential Receptors	Risk Classification
Made Ground from construction/ demolition activities. Elevated PAHs and asbestos fibres found previously: • Asbestos, • PAHs, • TPHs, • VOCs, • Sulphates, and • Metals. Risk assessment revealed an insignificant risk from chrysotile asbestos fibres in one sample TP204/0.20m bgl. Asbestos Management Strategy required.	• Direct ingestion of soil and soil derived dust • Dermal contact of soil and soil derived dust • Inhalation of dust (indoors and outdoors) with elevated concentration of determinands • Ingestion of home-grown produce, and soils attached • Direct ingestion of groundwater • Inhalation of volatile vapour (indoors and outdoors)	**Human Health** • End Users (Residents/Future site visitors) • Construction workers during development • Site operatives during maintenance works • Neighbours and public	**Low**
	• Direct uptake of groundwater • Direct uptake of determinands in the soil	**Flora and Fauna** • Vegetation within soft landscaped areas	**Low**
	• Anthropogenic (man-made) pathways • Vertical and lateral migration in permeable strata • Surface water runoff	**Controlled Waters** • Principal Aquifer (Folkestone Formation) • Lake ~110m to north-west	**Low**
Aggressive ground conditions with Made Ground and natural ground, including groundwater: • Sulphates, • PAH/TPH. Based on previous investigation, the sulphates fell into Class DS-1 and AC-2z.	• Direct contact with aggressive ground conditions	**Building Materials and Services** • Buried Concrete • Underground services (water pipes)	**Low**
Ground gases generated by area of historical landfilling extending within western boundaries of the site and Made Ground: • Methane, • Carbon Dioxide,	• Migration through anthropogenic & natural pathways • Inhalation of Asphyxiating gases • Explosion (methane only)	**Human Health** • End Users (Residents/Future site visitors) • Construction workers during development (especially in confined spaces) • Site operatives during maintenance works in confined spaces • Neighbours and public	**Low**

• Hydrogen Sulphide, and • Carbon Monoxide. Based on previous ground-gas monitoring, the site falls into the CS1 classification. The original report suggested further monitoring to confirm the classification	• Migration through anthropogenic & natural pathways • Explosion (methane only)	**Building Materials and Services** • Buildings • Confined spaces • Underground services	**Low**

Tabulated Conceptual Site Model – Pollutant Linkage Summary (Off-Site Sources)			
Potential Sources	**Potential Absorption Pathways**	**Potential Receptors**	**Risk Classification**
Made Ground from adjacent historical area of landfilling. Elevated PAHs and asbestos fibres found previously: why is this repeated – if this is offsite table it needs header? • Asbestos, • PAHs, • TPHs, • VOCs, • Sulphates, and • Metals. Risk assessment revealed an insignificant risk from chrysotile asbestos fibres in one sample TP204/0.20m bgl.	• Direct ingestion of soil and soil derived dust • Dermal contact of soil and soil derived dust • Inhalation of dust (indoors and outdoors) with elevated concentration of determinands • Direct ingestion of groundwater • Inhalation of volatile vapour (indoors and outdoors)	**Human Health** • End Users (Residents/Future site visitors) • Construction workers during development • Site operatives during maintenance works • Neighbours and public	**Low**
	• Direct uptake of groundwater	**Flora and Fauna** • Vegetation within soft landscaped areas	**Low**
Aggressive ground conditions associated with impacted groundwater; • Sulphates, • PAH/TPH. Based on previous investigation, the sulphates fell into Class DS-1 and AC-2z.	• Direct contact with aggressive ground conditions	**Building Materials and Services** • Buried Concrete • Underground services (water pipes)	**Low**
Ground gases generated by adjacent areas of historical landfilling to the immediate west and ~119m to the north: • Methane,	• Migration through anthropogenic & natural pathways • Inhalation of Asphyxiating gases • Explosion (methane only)	**Human Health** • End Users (Residents/Future site visitors) • Construction workers during development (especially in confined spaces) • Site operatives during maintenance works in confined spaces	**Low**

Tabulated Conceptual Site Model – Pollutant Linkage Summary (Off-Site Sources)			
Potential Sources	**Potential Absorption Pathways**	**Potential Receptors**	**Risk Classification**
• Carbon Dioxide, • Hydrogen Sulphide, and • Carbon Monoxide. Based on previous ground-gas monitoring, the site falls into the CS1 classification. The original report suggested further monitoring to confirm the classification.		• Neighbours and public	
	• Migration through anthropogenic & natural pathways • Explosion (methane only)	**Building Materials and Services** • Buildings • Confined spaces • Underground services	**Low**

8. CONTAMINATION RECOMMENDATIONS AND REMEDIATION STRATEGY

Based on the results of the intrusive works, chemical analyses and risk assessments undertaken, the following has been identified that requires further action:

- Two samples of Made Ground (CPA/0.20m and CPC/0.10m bgl) were targeted at delineating where elevated concentrations of PAHs were identified in the previous investigation in SA101. The results indicated that the location of the elevated PAHS can be treated as a localised hotspot. Likewise, four samples of Made Ground (CPD/0.15m, TP1/0.15m, WS1/0.20m and WS2/0.20m bgl) and four samples of Topsoil (CPE/0.15m, CPF/0.15m, CPG/0.15m and CPH/0.15m bgl) were targeted at delineating the areas surrounding trial holes WS109 and HP108 where asbestos was found during the previous investigation. Since no asbestos was found this location can also be treated as a localised hot spot.

- Loose fibres of chrysotile asbestos were identified in one sample of the Topsoil during Phase IV of the current investigation (TP204/0.20m bgl). Quantification was undertaken on the sample and indicated that asbestos was present at < 0.001%. Risk assessment confirmed there was an insignificant risk from the asbestos fibres identified and no remediation was required.

- Based upon the earlier investigation the site was classified as Characteristic Situation CS1 where no specific gas protection measures are required. **However, the report suggested further ground-gas monitoring to confirm the classification given.**

An Asbestos Management Strategy should be put in place so that any potentially asbestos containing materials are identified and removed from site in a suitable manner to prevent cross-contamination.

8.1. Soils

Based on the available information within this report it was proposed that the following remedial methodology should be undertaken around the three locations of contamination centred on trial holes SA101, WS109 and HP108 with the area delineated by the holes excavated/drilled during the current investigation.

In the vicinity of hotspot centred on WS109:

- A reduce dig of 500mm in the vicinity of WS109 to expose the natural soils;
- Placement of 500mm certified clean capping of Subsoil and Topsoil;
- Validation of the clean capping system by a suitably trained Ground and Water Limited engineer.

In the vicinity of hotspot centred on HP108 which is located close to a tree protection zone TPZ:

- In areas outside the TPZ a reduce dig of 800mm to expose the natural soils;
- Placement of 800mm certified clean capping of Subsoil and Topsoil;
- Validation of the clean capping system by a suitably trained Ground and Water Limited Engineer.
- In areas within the TPZ, a reduced dig of a maximum of 100mm by hand to avoid damage to any roots;

- Placement of a geotextile membrane;
- Placement of 100mm certified clean capping of Topsoil;
- Validation of the membrane and clean capping system by a suitably trained Ground and Water Limited Engineer.

In the vicinity of hotspot centred on SA101 which is located close to a tree protection zone TPZ:

- In areas outside the TPZ a reduce dig of 10000mm to expose the natural soils;
- Placement of 800mm certified clean capping of Subsoil and Topsoil;
- Validation of the clean capping system by a suitably trained Ground and Water Limited Engineer.
- In areas within the TPZ, a reduced dig of a maximum of 100mm by hand to avoid damage to any roots;
- Placement of a geotextile membrane;
- Placement of 100mm certified clean capping of Topsoil;
- Validation of the membrane and clean capping system by a suitably trained Ground and Water Limited Engineer.

8.1.1. Reduce Dig

Made Ground and Topsoil should be removed to the minimum depth for the relevant hotspot in a 5m radius centred on the relevant trial hole location to allow for the placement of clean soils. Samples must be taken from the base and walls of the excavation and tested for PAHs in the case of SA101 or asbestos in the case of WS109 and HPA108 to enable validation that the unacceptable concentrations have been removed. Should these samples indicate unacceptable concentrations, further removal is required.

Materials should be removed and stockpiled on an impermeable liner with raised edges and covered at all times. This contamination stockpile destined for removal from site should be stored away from imported soils to avoid cross-contamination. Materials to be removed off-site must be classified by carrying out Waste Acceptance Criteria (WAC) testing. A registered contractor must undertake the removal of waste. Consignment notes for the removal of waste must be obtained and kept for inclusion within the final validation Report.

8.1.2. Clean Capping of Soil

The resulting void should be backfilled with clean certified soils. In areas outside the TPZ, it is recommended that at least the top 150mm of the clean capping should comprise suitable Topsoil for use as a growing medium. It is a requirement that this should be no less than 100mm thick.

Inside the TPZ the 100mm should comprise Topsoil overlying a geotextile marker membrane between the clean soils above and the potentially contaminated soils below.

All subsoil and topsoil must be fit for purpose to ensure that the receptors cannot come into contact with determinands that could be detrimental to their health, see ‘Imported Material’ Section 8.6.

8.1.3. Validation

The remediation works outlined above will need to be inspected and independently validated by a Ground and Water Limited Engineer. All excavations will need to be inspected, documented and photographed.

The remediation works should be validated through a site visit, sampled and photographed by a suitably trained Ground and Water Limited Engineer following the reduce dig, and after placement of the clean soils.

Validation samples of the backfill material should be taken at a ratio of 1 sample per 50m^3 soil.

8.2. Water Supply Pipes

The Water Supply pipe risk assessment indicated that the use of PE pipes is appropriate at the site and no further measures are required.

8.3. Groundwater

No risk to controlled waters was considered to be present from the site.

8.4. Ground Gas and Vapours

Based on the monitoring previously undertaken, the site warrants classification as **Characteristic Situation CS1**, where no precautions to prevent the ingress of ground-gas are needed. **However, the report suggested further ground-gas monitoring to confirm the classification given.**

With regards to the risk from vapours, BTEX-MTBE analysis did not show elevated levels that may indicate further testing may be needed.

8.5. Discovery Strategy

There may be areas of contamination that have not been identified during the course of the intrusive investigation (e.g. underground storage tanks). Such occurrences may be discovered during the construction phases for the redevelopment of the site.

Groundworkers should be instructed to report to the Site Manager any evidence for such contamination; this may comprise visual indicators, such as fibrous materials within the soil, discolouration, or odours and emission. Upon discovery advice must be taken from a suitably qualified person and then the Local Authority will need to be informed.

8.6. Imported Material

Any soil which is to be imported onto the site must undergo chemical analysis to prove that it is suitable for the purpose for which it is intended.

The soil must be fit for purpose and must either be supplied with traceable chemical laboratory test certificates or be tested, prior to placing (ideally) and after placing, to ensure that the future receptors (human health and vegetation) cannot come into contact with compounds that could be detrimental to their health. The compounds that are to be tested for are those given in the Generic Assessment Criteria, which can be viewed in Appendix F of this report.

8.7. Waste Disposal

The excavation of foundations and other soils is likely to produce waste which will require classification and then recycling or removal from site.

Under the Landfill (England and Wales) Regulations 2002 (as amended), prior to disposal, all waste must be classified as either: Inert; Non-hazardous; or Hazardous.

The Environment Agency's Hazardous Waste Technical Guidance (WM3) document outlines the methodology for classifying wastes. Once classified the waste can be removed to the appropriately licensed facilities, with some waste requiring pre-treatments prior to disposal.

Following the investigation, two samples from Phase II, ten samples from Phase IV and five samples from Phase V were submitted to the analytical laboratory to undergo a suite of testing for contamination testing, as discussed in the previous sections. Sampling depths were chosen to reflect the receptor of concern, human health, and typically comprised a surface or near surface sample and periodically to 1.00m bgl. Any horizon where olfactory or visual evidence of contamination was present was also sampled.

Based on a risk phase analysis of the chemical laboratory test results, in accordance with EC Hazardous Waste Directive and undertaken by Ground and Water Limited, the majority of the samples of Topsoil and all samples of Made Ground encountered on-site were NON-HAZARDOUS. One sample of Made Ground at TP304/0.15m bgl during Phase V was classified as **HAZARDOUS** due to the recorded pH of 11.5 which was equal to the corrosive threshold of 11.5. This sample is unlikely to be representative of the bulk of the Made Ground. The results of the assessment are given within Appendix H.

The presence of cement bound Chrysotile Asbestos Fibres within the Topsoil of TP204 may mean the waste classification of this material is increased to **HAZARDOUS**. Hazardous waste requires pre-treatment prior to removal. The site may need to be registered as a Hazardous waste producer should such waste be removed from the site.

It is important to note that whilst we consider our in-house assessment tool to be an accurate interpretation of the requirements of WM3, therefore producing an initial classification in accordance with the guidance, this method classifies soils as either non-hazardous or hazardous and landfill operators have their own assessment tools and can often come to different conclusions. As a result, some landfill operators could refuse to take apparently suitable waste. It is recommended that the receiving landfill views the results of this assessment and the chemical laboratory results to determine their own classification.

In addition to the samples described above, one sample of Made Ground from Phase V (TP305/0.20m bgl) was scheduled to undergo Waste Acceptance Criteria (WAC) testing with single batch leachate from the sample. The results indicate that sample conformed to the Inert Waste Classification.

It should be noted that the receiving landfill may see the presence of Made Ground within the soils to be indicative of a non-hazardous classification despite the presence of the WAC testing certificates indicating that it is inert. Therefore, it should be considered that all Made Ground is classified as Non-hazardous, subject to finalising with the receiving landfill.

Where contaminated soils are to be removed, they should be placed on an impermeable membrane (visqueen or similar) to ensure that no cross-contamination of soils occurs.

8.8. Duty of Care

All works associated with construction will need to take into account the presence of asbestos fibres within the Made Ground at the concentrations noted within the report. The Method Statements must ensure that not only site operative/workers are protected from any potential release of asbestos fibres but also that local residents are not affected.

All future maintenance workers/service operatives, working within areas of hardstanding (including beneath the footprint of building), will need to take into account the presence of Made Ground potentially containing fibrous asbestos within their work Method Statements.

Groundworkers must maintain a good standard of personal hygiene including the wearing of overalls, boots, gloves and eye protectors and the use of dust masks during periods of dry weather.

To prevent exposure to airborne dust by both the general public and construction personnel the site should be kept damp during dry weather and at other times when dust were generated as a result of construction activities.

The site should be securely fenced at all times to prevent unauthorised access. Washing facilities should be provided and eating restricted to mess huts.

The presence of loose Asbestos fibres within the Made Ground will need to be take into account when producing Method Statement for construction and remedial works. Dampening down of excavation is likely to be required along with PP3 marks, gloves and overalls for all site operatives. Perimeter dust monitoring may be required.

FIGURES

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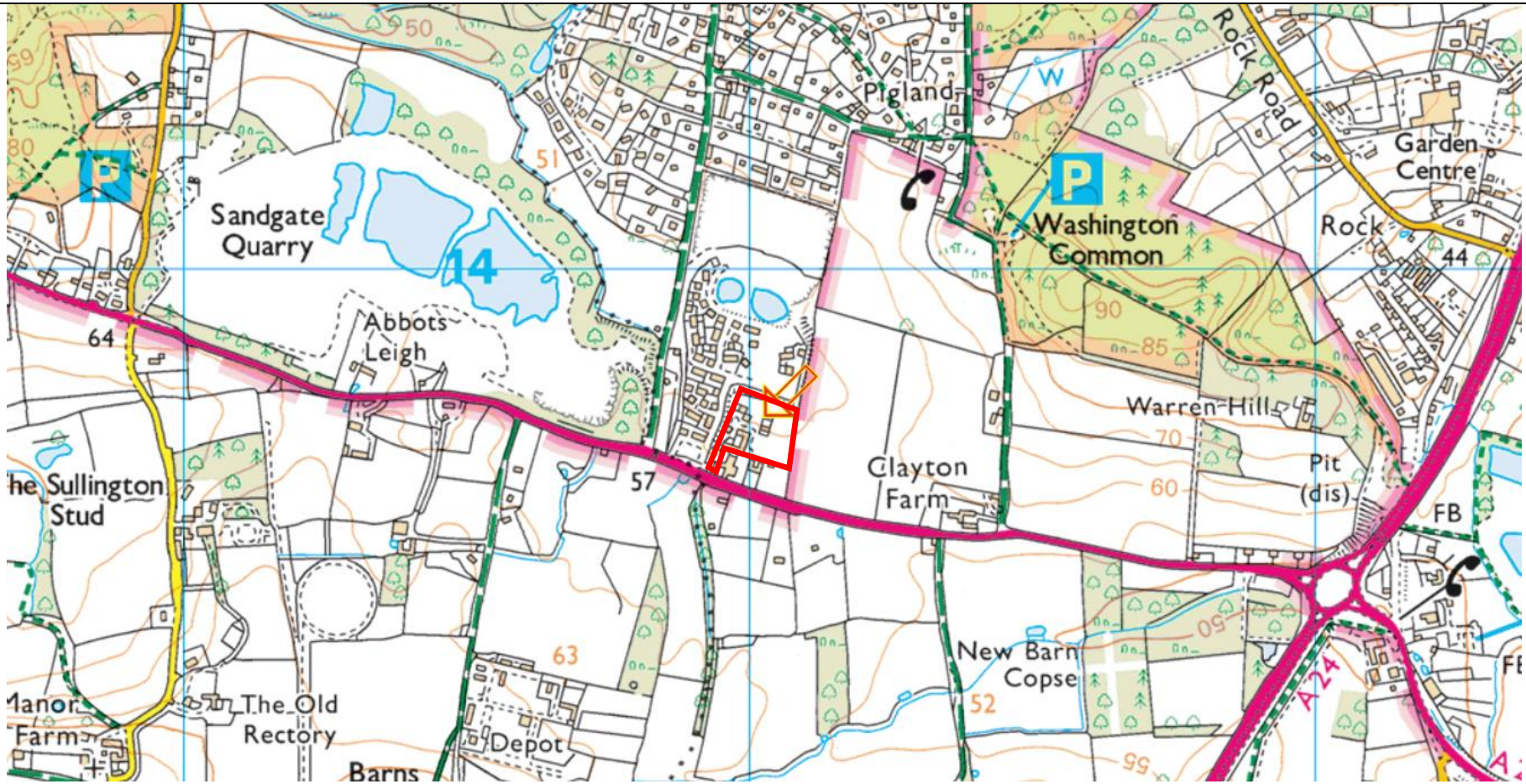

Project: Old Clayton Kennels and Cattery Storrington Rd Washington West Sussex RH20 4AG		**Figure 1**
Client: Highwood Group	**Date:** May 2025	
Site Location Plan	**Ref:** GWPR6344	



APPROXIMATE SITE BOUNDARY

Project: Old Clayton Kennels and Cattery Storrington Rd Washington West Sussex RH20 4AG		**Figure 2**
Client: Highwood Group	**Date:** May 2025	
Site Development Area	**Ref:** GWPR6344	



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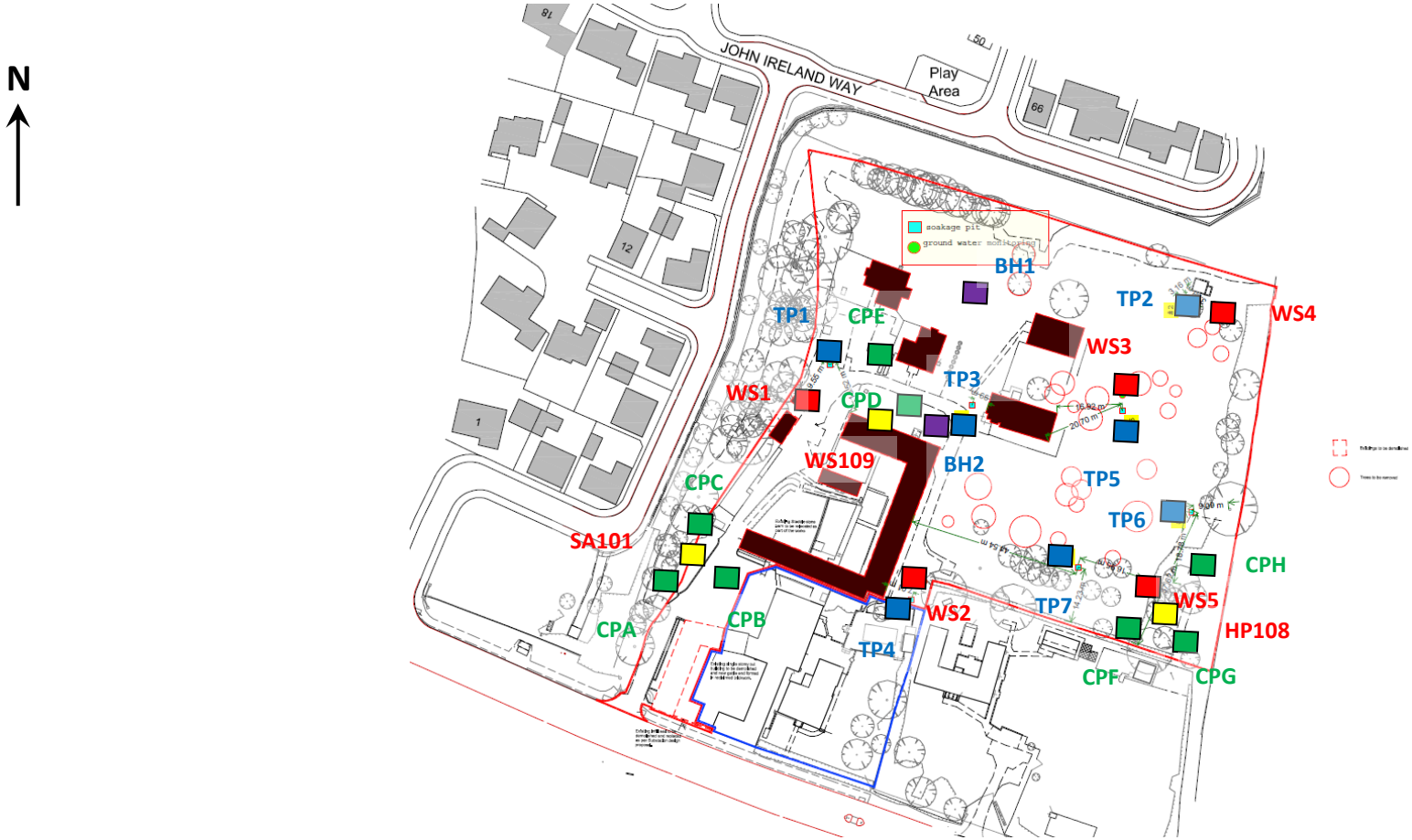
APPROXIMATE SITE BOUNDARY

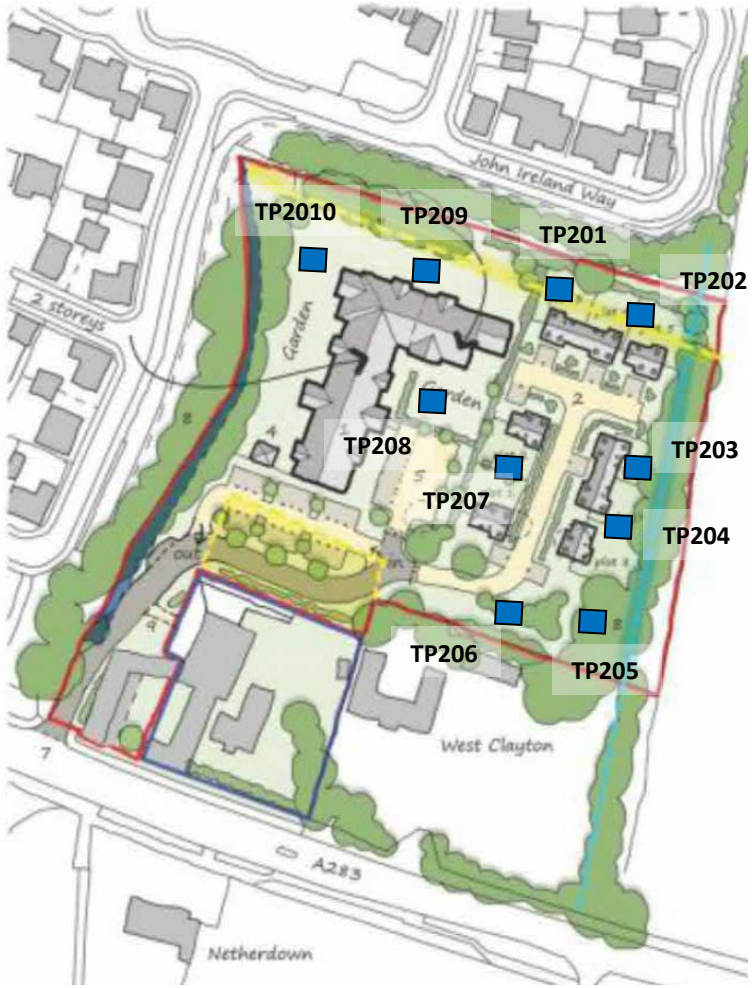
Project: Old Clayton Kennels and Cattery Storrington Rd Washington West Sussex RH20 4AG	**Figure 3**
Client: Highwood Group	**Date:** May 2025
Proposed Development Plan	**Ref:** GWPR6344

ground&water



Project: Old Clayton Kennels and Cattery Storrington Rd Washington West Sussex RH20 4AG	**Figure 4**
Client: Highwood Group	**Date:** May 2025
Trial Hole Location Plan	**Ref:** GWPR6344

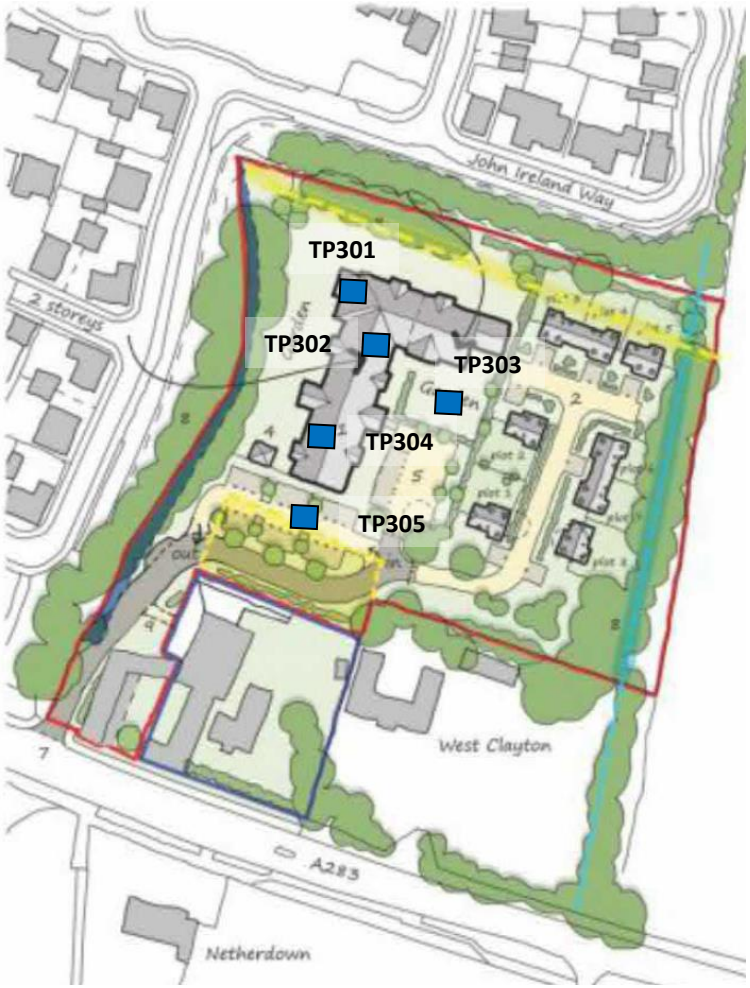
ground&water



N

APPROXIMATE SITE BOUNDARY

Project: Old Clayton Kennels and Cattery Storrington Rd Washington West Sussex RH20 4AG		**Figure 5**
Client: Highwood Group	**Date:** May 2025	
Phase IV Trial Hole Location Plan	**Ref:** GWPR6344	



N

APPROXIMATE SITE BOUNDARY

Project: Old Clayton Kennels and Cattery Storrington Rd Washington West Sussex RH20 4AG	**Figure 6**
Client: Highwood Group	**Date:** May 2025
Phase V Trial Hole Location Plan	**Ref:** GWPR6344

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APPENDIX A: Conditions and Limitations

2 The Long Barn, Norton Farm, Selborne Road, Alton, Hampshire GU34 3NB
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Registered Office: Kineton House, 31 Horse Fair, Banbury, Oxfordshire OX16 0AE Registered in England No. 07032001

The ground is a product of continuing natural and artificial processes. As a result, the ground will exhibit a variety of characteristics that vary from place to place across a site, and also with time. Whilst a ground investigation will mitigate to a greater or lesser degree against the resulting risk from variation, the risks cannot be eliminated.

The report has been prepared on the basis of information, data and materials which were available at the time of writing. Accordingly, any conclusions, opinions or judgements made in the report should not be regarded as definitive or relied upon to the exclusion of other information, opinions and judgements.

The investigation, interpretations, and recommendations given in this report were prepared for the sole benefit of the client in accordance with their brief; as such these do not necessarily address all aspects of ground behaviour at the site. No liability is accepted for any reliance placed on it by others unless specifically agreed in writing.

Any decisions made by you, or by any organisation, agency or person who has read, received or been provided with information contained in the report ("you" or "the Recipient") are decisions of the Recipient and we will not make, or be deemed to make, any decisions on behalf of any Recipient. We will not be liable for the consequences of any such decisions.

Current regulations and good practice were used in the preparation of this report. An appropriately qualified person must review the recommendations given in this report at the time of preparation of the scheme design to ensure that any recommendations given remain valid in light of changes in regulation and practice, or additional information obtained regarding the site.

Any Recipient must take into account any other factors apart from the Report of which they and their experts and advisers are or should be aware. The information, data, conclusions, opinions and judgements set out in the report may relate to certain contexts and may not be suitable in other contexts. It is your responsibility to ensure that you do not use the information we provide in the wrong context.

This report is based on readily available geological records, the recorded physical investigation, the strata observed in the works, together with the results of completed site and laboratory tests. Whilst skill and care has been taken to interpret these conditions likely between or below investigation points, the possibility of other characteristics not revealed cannot be discounted, for which no liability can be accepted. The impact of our assessment on other aspects of the development required evaluation by other involved parties.

The opinions expressed cannot be absolute due to the limitations of time and resources within the context of the agreed brief and the possibility of unrecorded previous in ground activities. The ground conditions have been sampled or monitored in recorded locations and tests for some of the more

common chemicals generally expected. Other concentrations of types of chemicals may exist. It was not part of the scope of this report to comment on environment/contaminated land considerations.

The conclusions and recommendations relate to the Old Clayton Kennels and Cattery, Storrington Road, Washington, West Sussex RH20 4AG.

Trial hole is a generic term used to describe a method of direct investigation. The term trial pit, borehole or window sampler borehole implies the specific technique used to produce a trial hole.

The depth to roots and/or of desiccation may vary from that found during the investigation. The client is responsible for establishing the depth to roots and/or of desiccation on a plot-by-plot basis prior to the construction of foundations. Where trees are mentioned in the text this means existing trees, recently removed trees (approximately 15 years to full recovery on cohesive soils) and those planned as part of the site landscaping.

Ownership of copyright of all printed material including reports, laboratory test results, trial pit and borehole log sheets, including drillers log sheets, remain with Ground and Water Limited. Licence is for the sole use of the client and may not be assigned, transferred or given to a third party.

Only our client may rely on this report and should this report or any information contained in it be provided to any third party we accept no responsibility to the third party for the contents of this report save to the extent expressly outlined by us in writing in a reliance letter addressed from us to the third party.

Recipients are not permitted to publish this report outside of their organisation without our express written consent.

APPENDIX B: Technical Glossary

2 The Long Barn, Norton Farm, Selborne Road, Alton, Hampshire GU34 3NB
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TECHNICAL GLOSSARY

The list of possible definitions within the report may be seen below. Please note that some definitions may not be relevant to this report.

HYDROGEOLOGY:

A **Principal Aquifer** is a layer of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.

Secondary aquifers include a wide range of drift deposits with an equally wide range of water permeability and storage capacities.

Secondary (A) Aquifers consist of deposits with permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as Minor Aquifers.

Secondary (B) Aquifers consist of deposits with predominantly lower permeability layers with may stoke and yield limited amounts of groundwater due to localised features such as fissures, think permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers.

Secondary Aquifers (Undifferentiated) are assigned in cases where it has not been possible to attribute either category A or B to a rock type. In most cases, this means that the layer in question has previously been designated as both a minor aquifer and non-aquifer in different locations due to the variable characteristics of the rock type.

Unproductive Strata are rock layers with low permeability that have negligible significance for water supply or river base flow. These were formerly classified as non-aquifers.

FLOOD ZONES:

Environment Agency Flood Zone 2, defined as; land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding.

Environment Agency Flood Zone 3 shows the extent of a river flood with a 1 in 100 (1%0 or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year.

Environment Agency Flood Zone 3 area that benefits from flood defences, defined as; land and property in this flood zone would have a high probability of flooding without the local flood defences. These protect the area against a river flood with a 1% chance of happening each year, or a flood from the sea with a 0.5% chance of happening each year.

GROUNDWATER SOURCE PROTECTION ZONES (SPZS):

Inner zone (SPZ1): This zone is 50 day travel time of pollutant to source with a 50 metres default minimum radius.

Outer zone (SPZ2): This zone is 400 day travel time of pollutant to source. This has a 250 or 500 metres minimum radius around the source depending on the amount of water taken.

Total catchment (SPZ3): This is the area around a supply source within which all the groundwater ends up at the abstraction point. This is the point from where the water is taken. This could extend some distance from the source point.

Zone of special interest (SPZ4): This zone is where local conditions require additional protection.

IN-SITU STRENGTH GEOTECHNICAL TESTING:

Windowless Sample and/or Cable Percussion and/or Rotary Boreholes provide samples of the ground for assessment but they do not give any engineering data. The standard penetration test (SPT) is an in-situ dynamic penetration test designed to provide information on the geotechnical engineering properties of soil. The test uses a thick-walled sample tube, with an outside diameter of 50mm and an inside diameter of 35mm, and a length of around 650mm. This is driven into the ground at the bottom of a borehole by blows from a slide hammer with a weight of 63.5kg falling through a distance of 760mm. The sample tube is driven 150mm into the ground and then the number of blows needed for the tube to penetrate each 75mm up to a depth of 450mm is recorded. The sum of the number of blows is termed the "standard penetration resistance" or the "N-value".

Dynamic Probing involves the driving of a metal cone into the ground via a series of steel rods. These rods are driven from the surface by a hammer system that lifts and drops a 63.5kg (SHDP) hammer onto the top of the rods through a set height, thus ensuring a consistent energy input. The number of hammer blows that are required to drive the cone down by each 100mm increment are recorded. These blow counts then provide a comparative assessment from which correlations have been published, based on dynamic energy, which permits engineering parameters to be generated. (The Dynamic Probe 'Super Heavy' (SHDP) Tests were conducted in accordance with BS 1377; 1990; Part 9, Clause 3.2).

APPENDIX C: Trial Hole Logs

2 The Long Barn, Norton Farm, Selborne Road, Alton, Hampshire GU34 3NB
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Percussion Drilling Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Drilling Equipment:

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS1	WLS			1:50	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.10			Tarmac. (MADE GROUND).
		0.50	D					Dark brown sandy gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse brick (30%) and concrete (70%). (MADE GROUND).
		0.80	D		0.70			Brown silty slight sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to subrounded fine to medium flint. (HEAD DEPOSITS).
		1.00	D					
		1.00	SPT	N=24 (3,6/6,6,6,6)	1.10			Light brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		1.50	D					
		2.00	D					
		2.00	SPT	N=34 (5,5/6,8,10,10)				
		2.50	D		2.50			End of Borehole at 2.500m

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	2.50	90	0

Remarks

No roots were noted. Groundwater was encountered.

Percussion Drilling Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Drilling Equipment:

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS2	WLS			1:50	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.15			Tarmac. (MADE GROUND).
		0.50	D		0.60			Dark brown sandy gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse brick (30%) and concrete (70%). (MADE GROUND).
		0.80	D					
		1.00	D					Brown silty slight sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to subrounded fine to medium flint. (HEAD DEPOSITS).
		1.00	SPT	N=19 (2,4/4,4,6,5)				
		1.50	D					
					1.70			Light brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		2.00	D		2.00			End of Borehole at 2.000m
		2.00	SPT	N=63 (8,8/12,16,17,18)				

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	2.00	90	0

Remarks

No roots were noted. Groundwater was encountered.

Percussion Drilling Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Drilling Equipment:

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS3	WLS			1:50	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D					Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint. (TOPSOIL).
		0.50	D		0.55			
		0.80	D					Brown clayey slightly gravelly SAND. Sand is fine to medium grained. Gravel is sub-angular to subrounded fine to medium flint. (HEAD DEPOSITS).
		1.00	D					
		1.00	SPT	N=4 (0,0/1,1,1,1)	1.30			Light brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		1.50	D					
		2.00	D					
		2.00	SPT	N=22 (3,3/4,6,6,6)				
		2.50	D					
		3.00	D		3.00			End of Borehole at 3.000m
		3.00	SPT	N=56 (4,6/6,16,16,18)				

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	3.00	90	0

Remarks

No roots were noted. Groundwater was encountered.

Percussion Drilling Log

Project Name: Old Clayton Kennels and Cattery		Client: Highwood Group	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG		Contractor:	
Project No. : GWPR6344		Crew Name:	Drilling Equipment:
Borehole Number: WS4	Hole Type: WLS	Level:	Logged By:
Scale: 1:50	Page Number: Sheet 1 of 1		

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		0.20	D					Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint. (TOPSOIL).
		0.50	D					
		0.80	D					
		1.00	D					
		1.00	SPT	N=3 (0,0/1,0,1,1)	1.10			Brown clayey fine to medium grained SAND. (HEAD DEPOSITS).
		1.50	D					
					1.80			Light brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		2.00	D					
		2.00	SPT	N=30 (3,4/7,7,8,8)				
		2.50	D					
		3.00	D		3.00			End of Borehole at 3.000m
		3.00	SPT	49 (7,15/49 for 190mm)				

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

No roots were noted. Groundwater was encountered.

Percussion Drilling Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Drilling Equipment:

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS5	WLS			1:50	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.30			Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint. (TOPSOIL).
		0.50	D					
		0.80	D					
		1.00	D					Brown silty slight sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to subrounded fine to medium flint. (HEAD DEPOSITS).
		1.00	SPT	N=6 (2,3/2,2,1,1)				
		1.50	D					
					1.80			
		2.00	D					Light brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		2.00	SPT	N=25 (6,5/6,7,6,6)				
		2.50	D					
		3.00	D		3.00			End of Borehole at 3.000m
		3.00	SPT	50 (50 for 100mm/50 for 115mm)				

1 2 3 4 5 6 7 8 9 10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

No roots were noted. Groundwater was encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client:	Date: 27/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP1	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.25			MADE GROUND: Dark brown sandy gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse brick (30%) and concrete (70%). Steel rebar noted at 0.1m.
		0.50	D					Brown silty slight sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint. (HEAD DEPOSITS).
		0.80	D					
		1.00	D		1.10			Light brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		1.50	D		1.50			End of Borehole at 1.500m

1
2
3
4
5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 1.50m bgl.
No roots encountered.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client:	Date: 27/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP2	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D					TOPSOIL: Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse flint.
		0.50	D		0.50			Brown sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
		0.80	D		0.80			Orangey brown to light brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		1.00	D		1.20			End of Borehole at 1.200m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 1.00m bgl.
No roots encountered 1.00m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client:	Date: 27/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP3	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.20			TOPSOIL: Dark brown slightly sandy CLAY. Sand is fine to medium grained.
		0.50	D					Brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint.
		0.80	D					
		1.00	D		1.00			Brown clayey fine to medium grained SAND. (FOLKESTONE FORMATION).
		1.40	D		1.40			End of Borehole at 1.400m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 1.40m bgl.
No roots encountered 0.80m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client:	Date: 27/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP4	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10			Tarmac
		0.20	D		0.30			MADE GROUND: Dark brown sandy sub-angular to sub-rounded fine to medium GRAVEL. Sand is fine to coarse grained.
		0.50	D					Light brown silty sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint. (HEAD DEPOSITS).
		0.80	D					
		1.00	D					
		1.50	D		1.60			Light reddish brown - orangey brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		2.00	D					
		2.50	D		2.50			End of Borehole at 2.500m

1 2 3 4 5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 2.50m bgl.
No roots encountered 1.20m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery		Client:		Date: 28/11/2024	
Location: Storrington Rd, Washington, West Sussex, RH20 4AG		Contractor:			
Project No. : GWPR6344		Crew Name:		Equipment:	
Location Number TP5	Location Type TP	Level	Logged By JN	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.30			TOPSOIL: Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse flint.
		0.50	D					Orangey brown to light brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		0.80	D					
		1.00	D					
		1.20	D		1.20			End of Borehole at 1.200m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 1.20m bgl.
No roots encountered 0.50m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client:	Date: 27/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP6	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D					TOPSOIL: Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint.
					0.40			
		0.50	D					Brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint. (HEAD DEPOSITS).
		0.80	D					
		1.00	D					
		1.50	D					
					1.80			Orangey brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		2.00	D		2.00			End of Borehole at 2.000m

1
2
3
4
5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 2.00m bgl.
No roots encountered 1.20m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client:	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP7	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.20			TOPSOIL: Dark brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint.
		0.50	D					Dark brown to brown sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
		0.80	D		0.80			Orangey brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		1.00	D		1.00			End of Borehole at 1.000m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 1.00m bgl.
No roots encountered 1.50m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
CPA	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.30			MADE GROUND: Brown slightly sandy very gravelly fine to medium grained CLAY. Gravel is sub-angular to sub-rounded fine to coarse (French drain 100%).
								End of Borehole at 0.300m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 0.30m bgl.
Roots encountered 0.30m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
CPC	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.10	D		0.10			MADE GROUND: Light brown slightly clayey very gravelly fine to medium grained SAND. Gravel is sub-angular to sub-rounded fine to coarse brick (40%), concrete (30%) and flint (30%).
								End of Borehole at 0.100m

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Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 0.10m bgl.
Roots encountered 0.10m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
CPD	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.20			MADE GROUND: Black clayey fine to medium grained SAND. Rare brick fragments noted.
		0.50	D		0.50			Dark brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint. (HEAD DEPOSITS).
								End of Borehole at 0.500m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 0.50m bgl.
Roots encountered 0.50m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
CPE	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.20			TOPSOIL: Dark brown clayey fine to medium grained SAND.
		0.50	D		0.50			Dark brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint. (HEAD DEPOSITS).
								End of Borehole at 0.500m

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Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 0.50m bgl.
Roots encountered 0.50m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
CPF	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.20			TOPSOIL: Dark brown sandy CLAY. Sand is fine to medium grained.
		0.50	D		0.50			Dark brown to brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint. (HEAD DEPOSITS).
								End of Borehole at 0.500m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 0.50m bgl.
Roots encountered 0.50m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
CPG	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.20			TOPSOIL: Dark brown very sandy CLAY. Sand is fine to medium grained.
		0.50	D		0.50			Dark brown to brown sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
								End of Borehole at 0.500m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 0.50m bgl.
Roots encountered 0.50m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
CPH	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.20			TOPSOIL: Dark brown clayey fine to medium grained SAND.
		0.50	D		0.50			Dark brown to brown sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
								End of Borehole at 0.500m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 0.50m bgl.
Roots encountered 0.50m bgl.
Groundwater was not struck.

Percussion Drilling Log

Project Name: Old Clayton Kennels and Cattery		Client: Highwood Group	Date: 06/01/2025 - 10/01/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG		Contractor:	
Project No. : GWPR6344		Crew Name:	Drilling Equipment:
Borehole Number: BH1	Hole Type: CP	Level:	Logged By:
Scale: 1:50	Page Number: Sheet 1 of 2		

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		0.20	D		0.25			Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint. (TOPSOIL).
		0.40	D					
		0.80	D					Brown silty slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to subrounded fine to medium flint. (HEAD DEPOSITS).
		1.00	D					
		1.20	D					
		1.20	SPT	N=5 (1,0/1,1,1,2)				
		1.70	D		1.60			Reddish brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		2.20	D					
		2.20	SPT	N=33 (4,4/6,8,9,10)				
		2.70	D					
		3.20	D					
		3.20	SPT	N=46 (8,9/9,11,11,15)				
		3.70	D					
		4.20	D					
		4.20	SPT	N=50 (6,6/10,10,13,17)				
		4.70	D					
		5.20	D					
		5.20	SPT	50 (10,12/50 for 225mm)				
		5.90	D					
		6.70	D					
		6.70	SPT	N=46 (8,8/8,11,11,16)				
		7.40	D					
		8.20	D					
		8.20	SPT	50 (5,11/50 for 225mm)				
		8.90	D					
		9.70	D					
		9.70	SPT	N=48 (8,8/9,9,13,17)				

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
12.50 20.00	200 150	12.50 20.00	200 150								

Remarks

Roots were noted. to 0.15m bgl Groundwater was not encountered.

Percussion Drilling Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 06/01/2025 - 10/01/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Drilling Equipment:

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
BH1	CP			1:50	Sheet 2 of 2

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		10.40	D					Reddish brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		11.20	D					
		11.20	SPT	50 (6,11/50 for 225mm)				
		11.90	D					
		12.70	D					
		12.70	SPT	50 (11,13/50 for 150mm)				
		13.40	D					
		14.20	D					
		14.20	SPT	N=50 (10,9/10,12,18,10)				
		14.90	D					
		15.70	D					
		15.70	SPT	50 (7,7/50 for 225mm)				
		16.40	D					
		17.20	D					
		17.20	SPT	50 (8,9/50 for 225mm)				
		17.90	D					
		18.70	D					
		19.40	D					
		20.00	D		20.00			End of Borehole at 20.000m

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
12.50 20.00	200 150	12.50 20.00	200 150								

Remarks

Roots were noted. to 0.15m bgl Groundwater was not encountered.

Percussion Drilling Log

Project Name: Old Clayton Kennels and Cattery		Client: Highwood Group	Date: 06/01/2025 - 10/01/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG		Contractor:	
Project No. : GWPR6344		Crew Name:	Drilling Equipment:
Borehole Number: BH2	Hole Type: CP	Level:	Logged By:
Scale: 1:50	Page Number: Sheet 1 of 3		

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		0.20	D		0.25			Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint. (TOPSOIL).
		0.40	D					
		0.80	D					Brown silty slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to subrounded fine to medium flint. (HEAD DEPOSITS).
		1.00	D					
		1.20	D					
		1.20	SPT	N=14 (1,1/1,6,3,4)	1.50			
		1.70	D					Reddish brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		2.20	D					
		2.20	SPT	N=43 (4,9/9,11,11,12)				
		2.70	D					
		3.20	D					
		3.20	SPT	N=50 (6,6/10,10,13,17)				
		3.70	D					
		4.20	D					
		4.20	SPT	N=44 (3,2/9,9,11,15)				
		4.70	D					
		5.20	D					
		5.20	SPT	50 (9,12/50 for 225mm)				
		5.90	D					
		6.50	D					
		6.50	SPT	50 (10,13/50 for 225mm)				
		7.20	D					
		8.00	D					
		8.00	SPT	N=50 (6,6/9,9,21,11)				
		8.70	D					
		9.50	D					
		9.50	SPT	50 (14,13/50 for 225mm)				

1 2 3 4 5 6 7 8 9 10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
12.00 20.00	200 150	12.00 20.00	200 150								

Remarks

Roots were noted. to 0.15m bgl Groundwater was not encountered.

Percussion Drilling Log

Project Name: Old Clayton Kennels and Cattery		Client: Highwood Group	Date: 06/01/2025 - 10/01/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG		Contractor:	
Project No. : GWPR6344		Crew Name:	Drilling Equipment:
Borehole Number: BH2	Hole Type: CP	Level:	Logged By:
Scale: 1:50	Page Number: Sheet 2 of 3		

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		10.20	D					Reddish brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		11.00	D					
		11.00	SPT	50 (6,9/50 for 225mm)				
		11.70	D					
		12.50	D					
		12.50	SPT	N=50 (8,8/9,12,21,8)				
		13.20	D					
		14.00	D					
		14.00	SPT	50 (10,13/50 for 225mm)				
		14.70	D					
		15.50	D					
		15.50	SPT	N=50 (6,6/9,11,19,11)				
		16.20	D					
		17.00	D					
		17.00	SPT	50 (11,19/50 for 150mm)				
		17.70	D					
		18.50	D					
		18.50	SPT	50 (10,10/50 for 150mm)				
		19.20	D					
		20.00	D		20.00			

11 12 13 14 15 16 17 18 19 20

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
12.00	200	12.00	200								
20.00	150	20.00	150								

Remarks

Roots were noted. to 0.15m bgl Groundwater was not encountered.

Percussion Drilling Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 06/01/2025 - 10/01/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Drilling Equipment:

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
BH2	CP			1:50	Sheet 3 of 3

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		20.00	SPT	50 (6,12/50 for 150mm)				End of Borehole at 20.000m

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
12.00 20.00	200 150	12.00 20.00	200 150								

Remarks

Roots were noted. to 0.15m bgl Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 27/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP1	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.25			MADE GROUND: Dark brown sandy gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse brick (30%) and concrete (70%). Steel rebar noted at 0.1m.
		0.50	D					Brown silty slight sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint. (HEAD DEPOSITS).
		0.80	D					
		1.00	D		1.10			Light brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		1.50	D					
					1.95			End of Borehole at 1.950m

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Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 1.50m bgl.
No roots encountered.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 27/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP2	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D					TOPSOIL: Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse flint.
		0.50	D		0.50			Brown sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
		0.80	D		0.80			Orangey brown to light brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		1.00	D		1.20			End of Borehole at 1.200m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 1.00m bgl.
Roots encountered 1.00m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 27/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP3	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.20			TOPSOIL: Dark brown slightly sandy CLAY. Sand is fine to medium grained.
		0.50	D					Brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint.
		0.80	D					
		1.00	D		1.00			Brown clayey fine to medium grained SAND. (FOLKESTONE FORMATION).
		1.40	D					
					1.70			End of Borehole at 1.700m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 1.40m bgl.
Roots encountered 0.80m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 27/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP4	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10			Tarmac
		0.20	D		0.30			MADE GROUND: Dark brown sandy sub-angular to sub-rounded fine to medium GRAVEL. Sand is fine to coarse grained.
		0.50	D					Light brown silty sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint. (HEAD DEPOSITS).
		0.80	D					
		1.00	D					
		1.50	D		1.60			Light reddish brown - orangey brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		2.00	D					
		2.50	D		2.35			End of Borehole at 2.350m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 2.50m bgl.
Roots encountered 1.20m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery		Client: Highwood Group	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG		Contractor:	
Project No. : GWPR6344		Crew Name:	Equipment:
Location Number: TP5	Location Type: TP	Level:	Logged By: JN
Scale: 1:25	Page Number: Sheet 1 of 1		

Well	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
		0.20	D		0.30			TOPSOIL: Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse flint.
		0.50	D					Orangey brown to light brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		0.80	D					
		1.00	D					
		1.20	D		1.60			End of Borehole at 1.600m

Dimensions: Pit Length	Pit Width	Trench Support and Comment: Pit Stability	Shoring Used	Remarks	Pumping Data: Date	Rate	Remarks

Remarks

Trial pit completed to 1.20m bgl.
Roots encountered 0.50m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 27/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP6	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D					TOPSOIL: Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint.
					0.40			
		0.50	D					Brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint. (HEAD DEPOSITS).
		0.80	D					
		1.00	D					
		1.50	D					
					1.80			Orangey brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		2.00	D					
					2.45			End of Borehole at 2.450m

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Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 2.00m bgl.
Roots encountered 1.20m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 28/11/2024
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP7	TP		JN	1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.20			TOPSOIL: Dark brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to medium flint.
		0.50	D					Dark brown to brown sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
		0.80	D		0.80			Orangey brown fine to medium grained SAND. (FOLKESTONE FORMATION).
		1.00	D					
					1.90			End of Borehole at 1.900m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Trial pit completed to 1.50m bgl.
Roots encountered 1.00m bgl.
Groundwater was not struck.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 31/03/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP201	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.30			Dark brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint. (TOPSOIL).
					0.60			Brown silty slightly sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
								End of Borehole at 0.600m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Roots were noted to 0.20m bgl. Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 31/03/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP202	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.30			Dark brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint. (TOPSOIL).
					0.60			Brown silty slightly sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
								End of Borehole at 0.600m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Roots were noted to 0.20m bgl. Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 31/03/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP203	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.25			Dark brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint. (TOPSOIL).
					0.60			Brown silty slightly sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
								End of Borehole at 0.600m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Roots were noted to 0.60m bgl. Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 31/03/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP204	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.35			Dark brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint. (TOPSOIL).
					0.60			Brown silty slightly sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
								End of Borehole at 0.600m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Roots were noted to 0.35m bgl. Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 31/03/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP205	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.30			Dark brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint. (TOPSOIL).
					0.60			Brown silty slightly sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
								End of Borehole at 0.600m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Roots were noted to 0.60m bgl. Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 31/03/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP206	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D					Brown silty slightly sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
					0.40			Brown silty slightly sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
					0.60			End of Borehole at 0.600m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Roots were noted to 0.40m bgl. Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 31/03/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP207	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D		0.30			Dark brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint. (TOPSOIL).
					0.60			Brown silty slightly sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
								End of Borehole at 0.600m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Roots were noted to 0.30m bgl. Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 31/03/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP208	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D					Dark brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint. (TOPSOIL).
					0.40			Brown silty slightly sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
					0.60			End of Borehole at 0.600m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Roots were noted to 0.20m bgl. Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 01/03/2025 - 31/03/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP209	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D					Dark brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint. (TOPSOIL).
					0.40			Brown silty slightly sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
					0.60			End of Borehole at 0.600m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Roots were noted to 0.60m bgl. Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 31/03/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP210	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D					Dark brown sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is subangular to sub-rounded fine to coarse flint. (TOPSOIL).
					0.40			Brown silty slightly sandy CLAY. Sand is fine to medium grained. (HEAD DEPOSITS).
					0.60			End of Borehole at 0.600m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Roots were noted to 0.60m bgl. Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 07/05/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP301	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.50	D					Pale brown sandy gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse brick (40%), concrete (40%), flint (10%), slate (5%) and metal (5%). (MADE GROUND).
		1.00	D					
		1.50	D		1.40			Brown silty slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to subrounded fine to medium flint. (HEAD DEPOSITS).
					1.60			End of Borehole at 1.600m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

No roots were noted. Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 07/05/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP302	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.30	D		0.50			Pale brown sandy gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse brick (40%), concrete (40%), flint (10%), slate (5%) and metal (5%). (MADE GROUND).
		1.00	D		1.00			Brown silty slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to subrounded fine to medium flint. (HEAD DEPOSITS).
								End of Borehole at 1.000m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

No roots were noted. Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 07/05/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP303	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.15	D					Pale brown sandy gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse brick (40%), concrete (40%), flint (10%), slate (5%) and metal (5%). (MADE GROUND).
					0.30			
		0.50	D					Brown silty slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to subrounded fine to medium flint. (HEAD DEPOSITS).
					0.80			End of Borehole at 0.800m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Roots were noted to 0.80m bgl. Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 07/05/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP304	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.15	D		0.30			Pale brown sandy gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse brick (40%), concrete (40%), flint (10%), slate (5%) and metal (5%). (MADE GROUND).
		0.50	D		0.80			Brown silty slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to subrounded fine to medium flint. (HEAD DEPOSITS).
								End of Borehole at 0.800m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

No roots were noted. Groundwater was not encountered.

Trial Pit Log

Project Name: Old Clayton Kennels and Cattery	Client: Highwood Group	Date: 07/05/2025
Location: Storrington Rd, Washington, West Sussex, RH20 4AG	Contractor:	
Project No. : GWPR6344	Crew Name:	Equipment:

Location Number	Location Type	Level	Logged By	Scale	Page Number
TP305	TP			1:25	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	D					Pale brown sandy gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse brick (40%), concrete (40%), flint (10%), slate (5%) and metal (5%). (MADE GROUND).
					0.45			
		0.60	D					Brown silty slightly sandy slightly gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to subrounded fine to medium flint. (HEAD DEPOSITS).
					0.80			End of Borehole at 0.800m

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

No roots were noted. Groundwater was not encountered.

APPENDIX D: Geotechnical Laboratory Testing

2 The Long Barn, Norton Farm, Selborne Road, Alton, Hampshire GU34 3NB
0333 600 1221 enquiries@groundandwater.co.uk **groundandwater.co.uk**

Registered Office: Kineton House, 31 Horse Fair, Banbury, Oxfordshire OX16 0AE Registered in England No. 07032001

Laboratory Report

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES A PHENNA GROUP COMPANY

Contract Number: 76652

Client Ref: **GWPR6344**
Client PO: **GWPR6344**

Date Received: **20-01-2025**
Date Completed: **24-01-2025**
Report Date: **24-01-2025**

Client: **Ground and Water Limited**

Contract Title: **Old Clayton Kennels and Cattery, RH20 4AG**
For the attention of: **Roger Foord**

This report has been checked and approved by:

Darren Bourne
Quality Senior Technician

Description	Qty
Moisture Content BS 1377:1990 - Part 2 : 3.2 - * UKAS	2
1 Point Liquid & Plastic Limit BS 1377:1990 - Part 2 : 4.4 & 5.3 - * UKAS	2
Particle Size Distribution BS EN ISO 17892-4 : 5.1 - * UKAS	9

Notes: **Observations and Interpretations are outside the UKAS Accreditation**
*** - denotes test included in laboratory scope of accreditation**
 # - denotes test carried out by approved contractor
@ - denotes non accredited tests

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This test report/certificate shall not be reproduced except in full, without the approval of GEO Site & Testing Services Ltd. Any opinions or interpretations stated - within this report/certificate are excluded from the laboratories UKAS accreditation.

Approved Signatories:
Brendan Evans (Office Administrator) - Darren Bourne (Quality Senior Technician) - Paul Evans (Director)
Richard John (Quality/Technical Manager) - Shaun Jones (Laboratory manager) - Shaun Thomas (Site Manager)
Wayne Honey (HR & HSE Manager)

GEO Site & Testing Services Ltd
Unit 3-4 Heol Aur, Dafen Ind Est, Llanelli, Carmarthenshire SA14 8QN
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GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

NATURAL MOISTURE, LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX
(BS 1377:1990 - Part 2 : 4.4 & 5.3)

Contract Number	76652
Project Name	Old Clayton Kennels and Cattery, RH20 4AG
Date Tested	21/01/2025

DESCRIPTIONS

Sample/Hole Reference	Sample Number	Sample Type	Depth (m)			Descriptions
BH1		D	1.00	-		Brown fine to medium gravelly silty sandy CLAY
BH2		D	1.00	-		Brown clayey SAND
				-		
				-		
				-		
				-		
				-		
				-		
				-		
				-		
				-		
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				-		

Operator
Aaron Hodge

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	NATURAL MOISTURE, LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX (BS 1377:1990 - Part 2 : 4.4 & 5.3)	
Contract Number	76652	
Project Name	Old Clayton Kennels and Cattery, RH20 4AG	
Date Tested	21/01/2025	

Sample/Hole Reference	Sample Number	Sample Type	Depth (m)			Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity index %	Passing 0.425mm %	Remarks
BH1		D	1.00	-		25	41	19	22	90	CI Intermediate Plasticity
BH2		D	1.00	-		16		NP		95	
				-							
				-							
				-							
				-							
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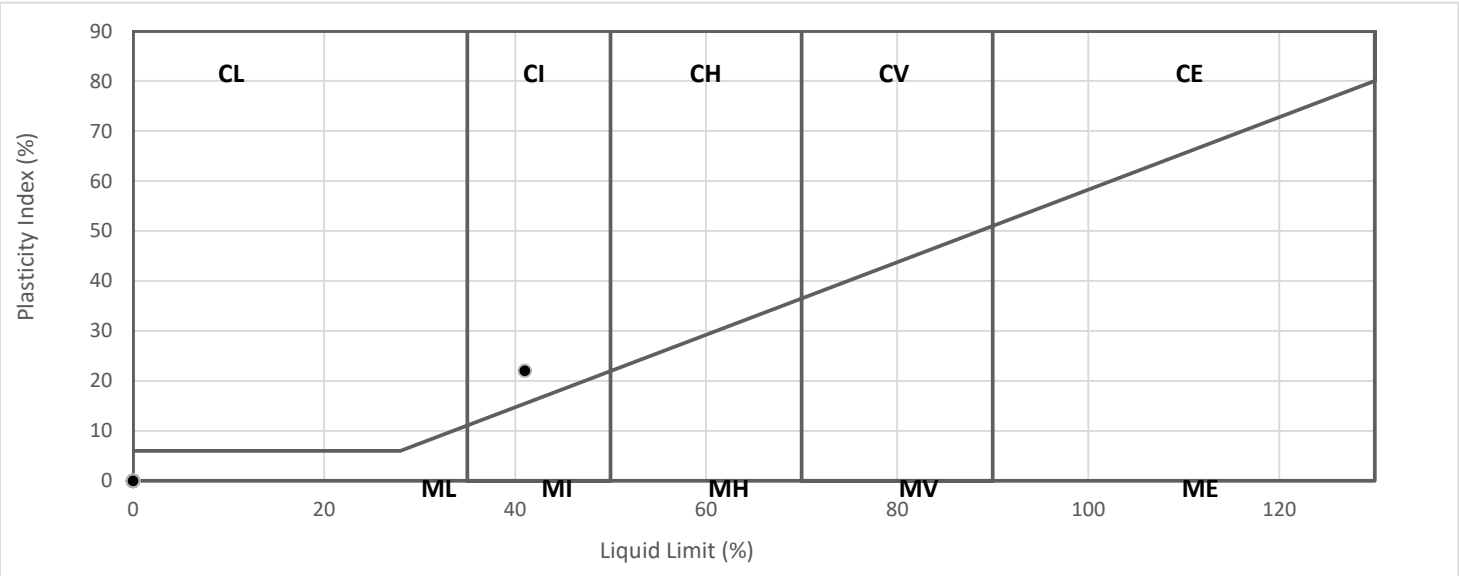
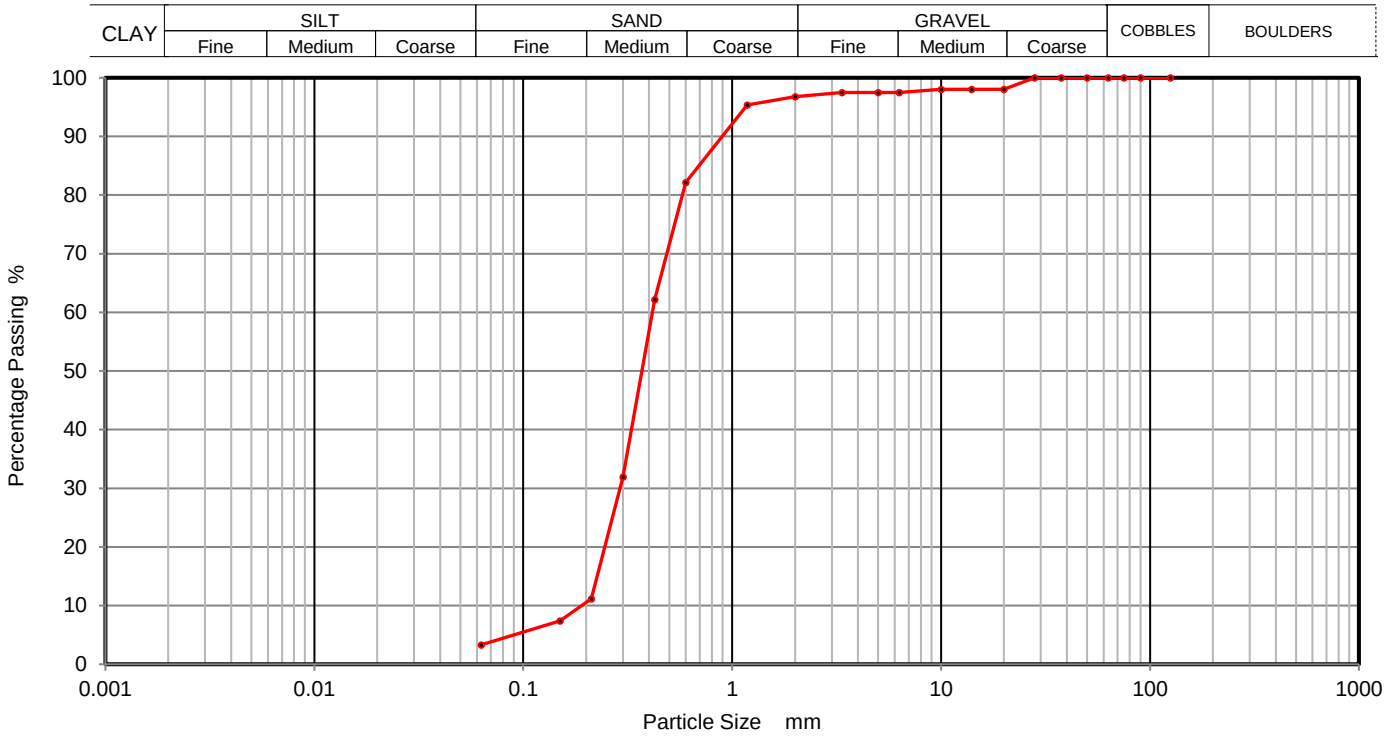
Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION
BS 5930:2015+A1:2020



Operator
Aaron Hodge

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2**	Contract Number	**76652**
		Borehole/Pit No.	**BH1**
Project Name	**Old Clayton Kennels and Cattery, RH20 4AG**	Sample No.	
Sample Description	Red slightly fine to coarse gravelly slightly silty/clay fine to coarse SAND	Depth Top	**19.40**
		Depth Base	
Date Tested	22/01/2025	Sample Type	**D**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	98		
14	98		
10	98		
6.3	97		
5	97		
3.35	97		
2	97		
1.18	95		
0.63	82		
0.425	62		
0.30	32		
0.20	11		
0.15	7		
0.063	3		

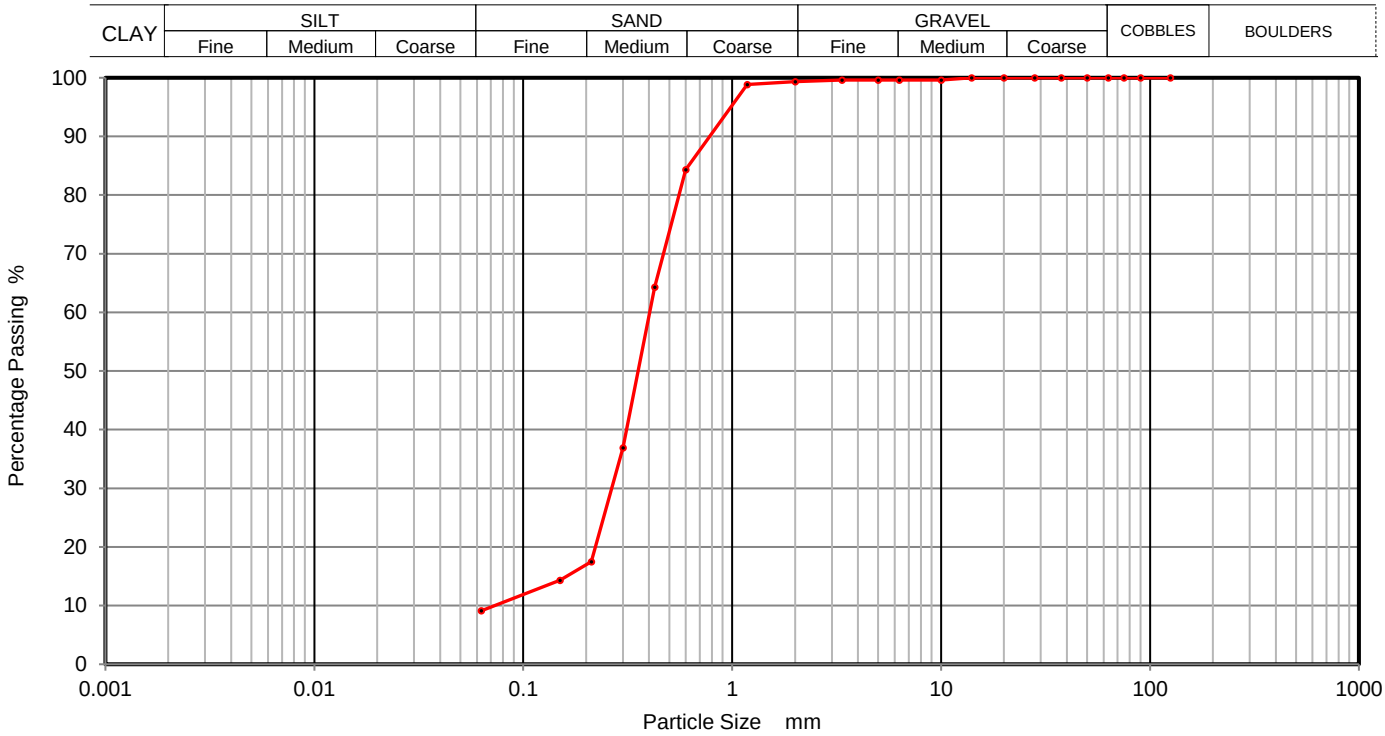
Sample Proportions	% dry mass
Cobbles	0
Gravel	3
Sand	94
Silt and Clay	3

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Jordan Williams

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2**	Contract Number	**76652**
		Borehole/Pit No.	**BH1**
Project Name	**Old Clayton Kennels and Cattery, RH20 4AG**	Sample No.	
Sample Description	Red slightly fine to medium gravelly slightly silty/clay fine to coarse SAND	Depth Top	**2.20**
		Depth Base	
Date Tested	22/01/2025	Sample Type	**D**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	99		
1.18	99		
0.63	84		
0.425	64		
0.30	37		
0.20	17		
0.15	14		
0.063	9		

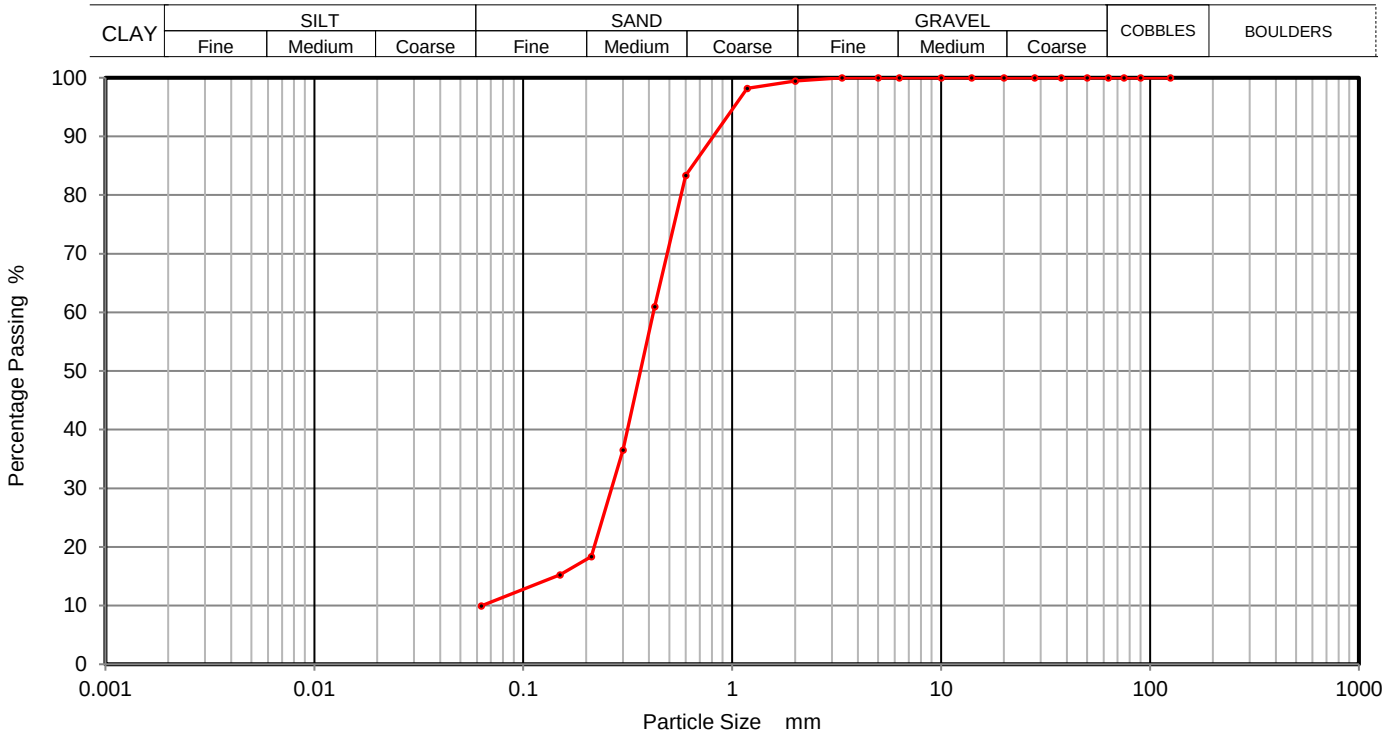
Sample Proportions	% dry mass
Cobbles	0
Gravel	1
Sand	90
Silt and Clay	9

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Jordan Williams

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	PARTICLE SIZE DISTRIBUTION BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2	Contract Number	76652
		Borehole/Pit No.	BH1
Project Name	Old Clayton Kennels and Cattery, RH20 4AG	Sample No.	
Sample Description	Red slightly fine gravelly silty/clay fine to coarse SAND	Depth Top	3.20
		Depth Base	
Date Tested	22/01/2025	Sample Type	D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	99		
1.18	98		
0.63	83		
0.425	61		
0.30	37		
0.20	18		
0.15	15		
0.063	10		

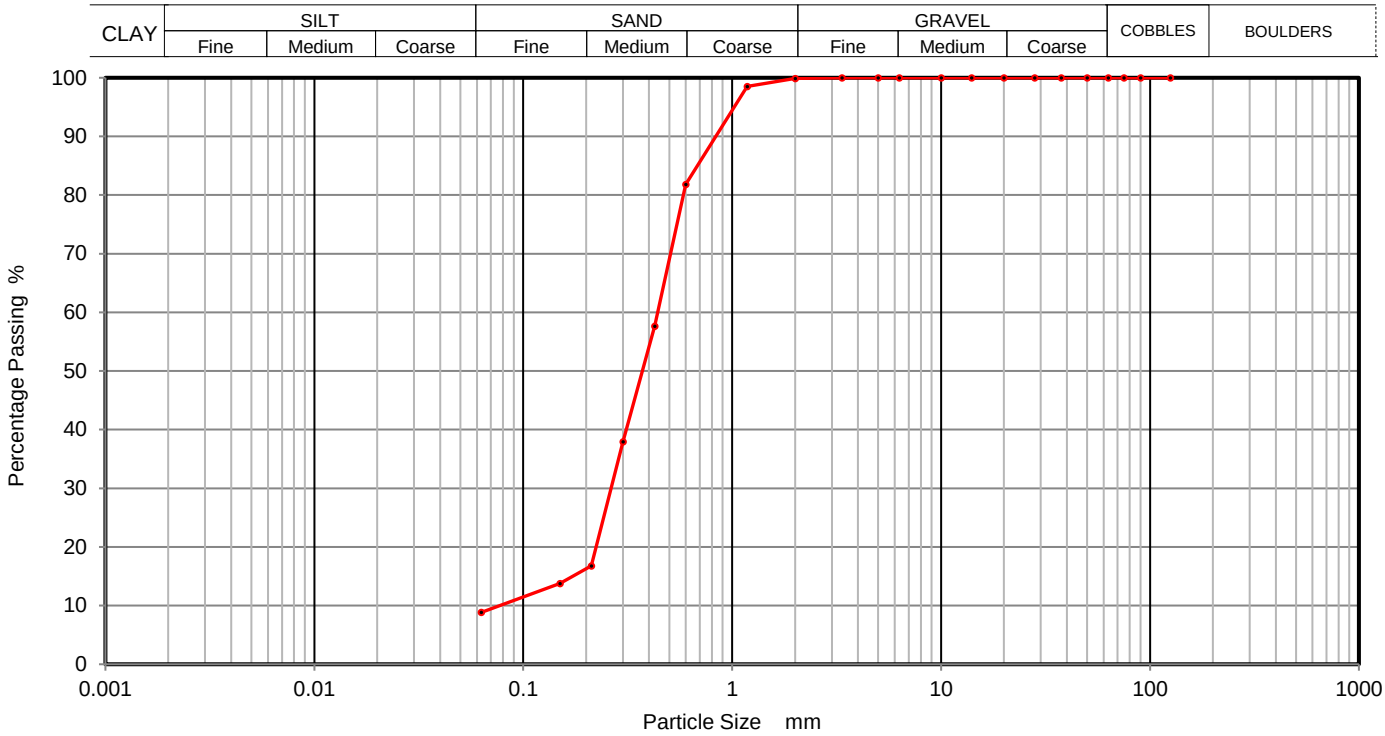
Sample Proportions	% dry mass
Cobbles	0
Gravel	1
Sand	89
Silt and Clay	10

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Jordan Williams

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2**	Contract Number	**76652**
		Borehole/Pit No.	**BH1**
Project Name	**Old Clayton Kennels and Cattery, RH20 4AG**	Sample No.	
Sample Description	Red slightly silty/clay fine to coarse SAND	Depth Top	**4.20**
		Depth Base	
Date Tested	22/01/2025	Sample Type	**D**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	99		
0.63	82		
0.425	58		
0.30	38		
0.20	17		
0.15	14		
0.063	9		

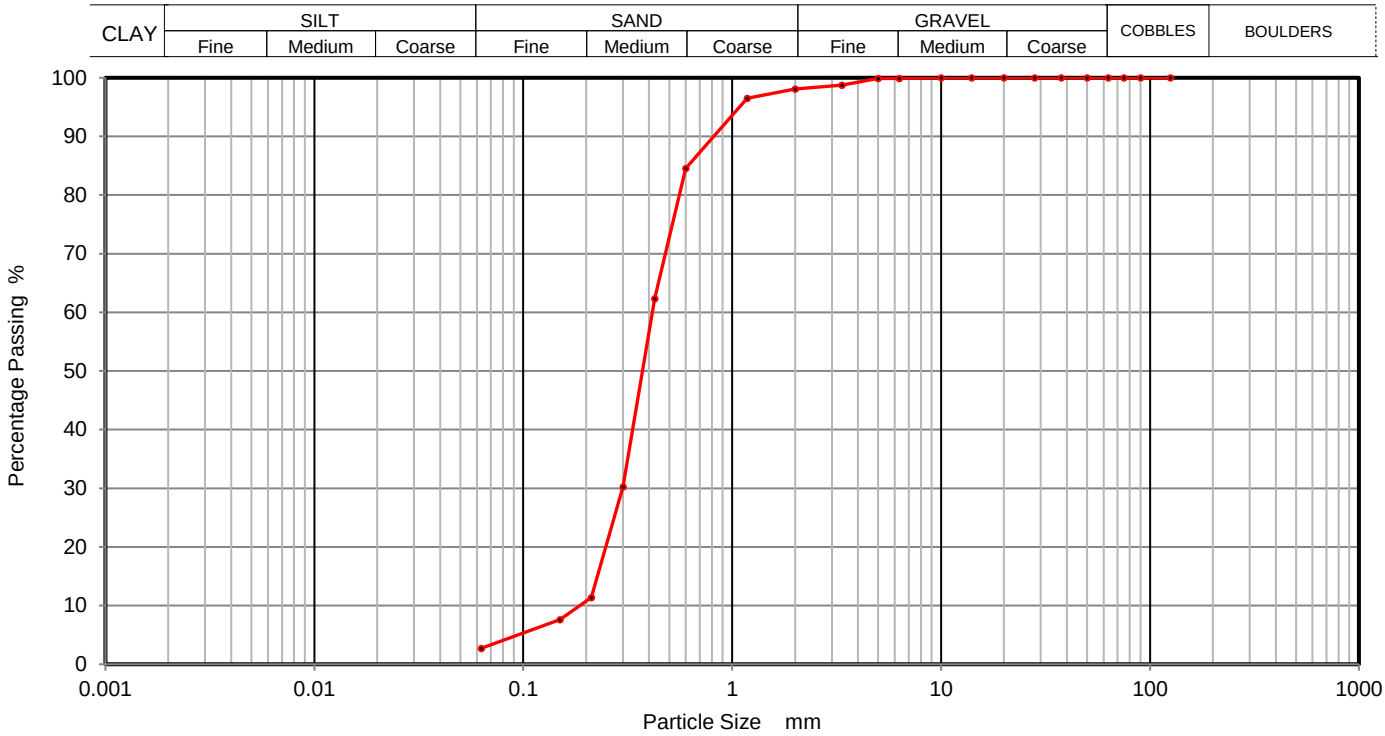
Sample Proportions	% dry mass
Cobbles	0
Gravel	0
Sand	91
Silt and Clay	9

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Jordan Williams

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2**	Contract Number	**76652**
		Borehole/Pit No.	**BH2**
Project Name	**Old Clayton Kennels and Cattery, RH20 4AG**	Sample No.	
Sample Description	Red slightly fine to medium gravelly slightly silty/clay fine to coarse SAND	Depth Top	**12.50**
		Depth Base	
Date Tested	22/01/2025	Sample Type	**D**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	99		
2	98		
1.18	96		
0.63	85		
0.425	62		
0.30	30		
0.20	11		
0.15	8		
0.063	3		

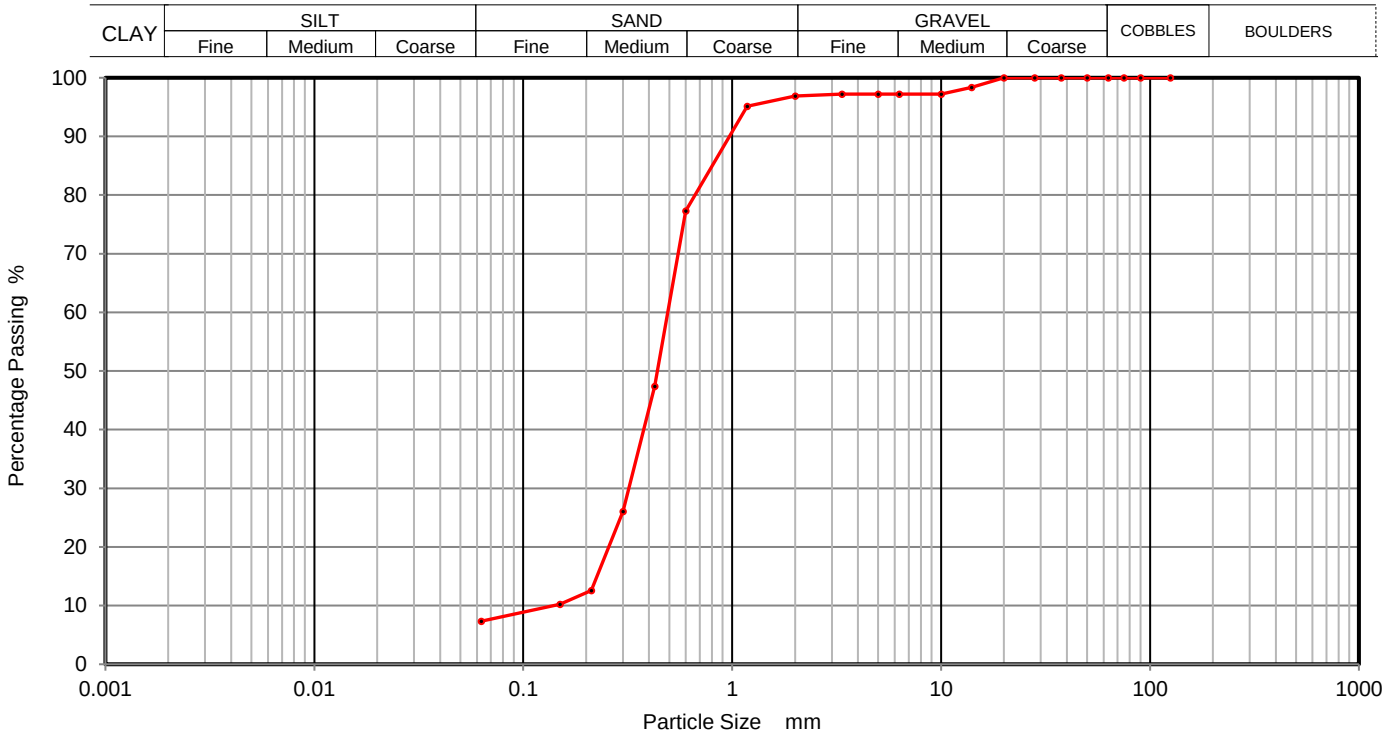
Sample Proportions	% dry mass
Cobbles	0
Gravel	2
Sand	95
Silt and Clay	3

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Jordan Williams

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2**	Contract Number	**76652**
		Borehole/Pit No.	**BH2**
Project Name	**Old Clayton Kennels and Cattery, RH20 4AG**	Sample No.	
Sample Description	Red slightly fine to medium gravelly slightly silty/clay fine to coarse SAND	Depth Top	**2.20**
		Depth Base	
Date Tested	22/01/2025	Sample Type	**D**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	98		
10	97		
6.3	97		
5	97		
3.35	97		
2	97		
1.18	95		
0.63	77		
0.425	47		
0.30	26		
0.20	13		
0.15	10		
0.063	7		

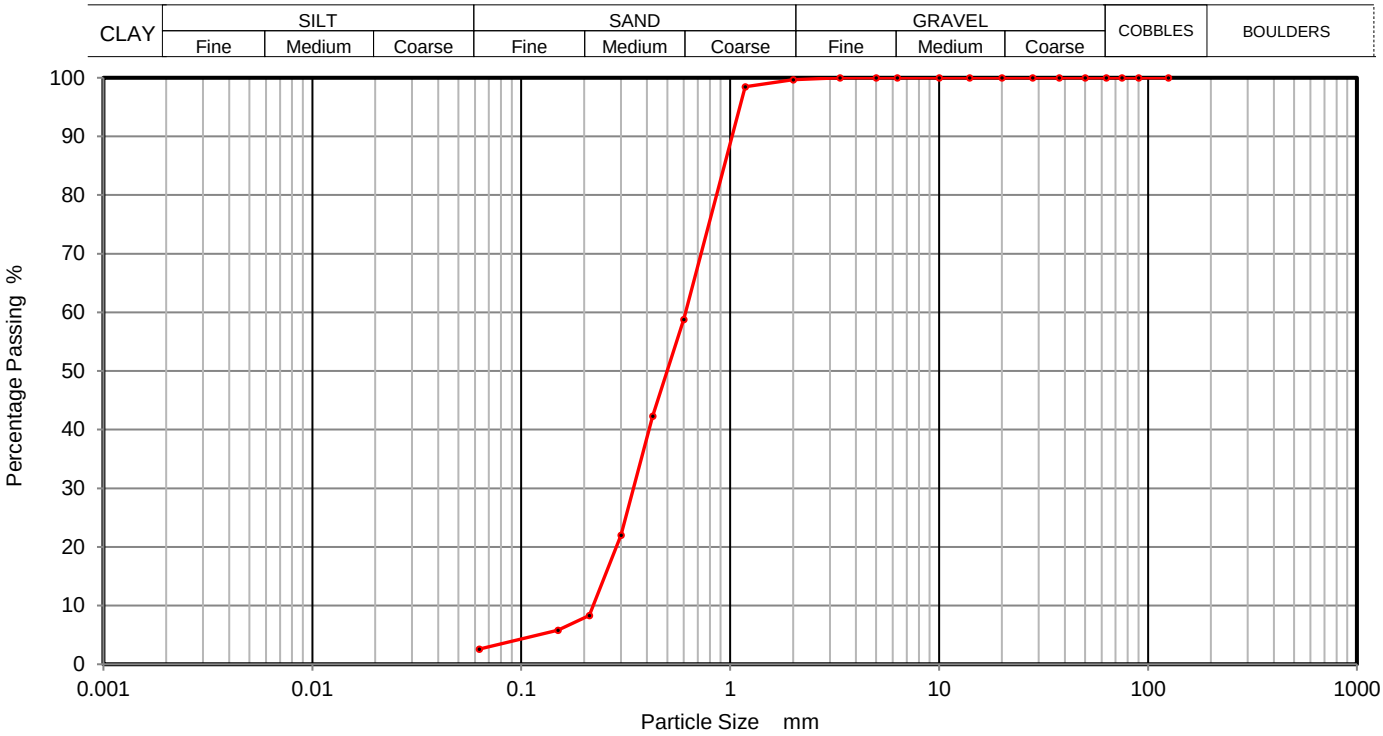
Sample Proportions	% dry mass
Cobbles	0
Gravel	3
Sand	90
Silt and Clay	7

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Jordan Williams

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2**	Contract Number	**76652**
		Borehole/Pit No.	**BH2**
Project Name	**Old Clayton Kennels and Cattery, RH20 4AG**	Sample No.	
Sample Description	Red slightly silty/clay fine to coarse SAND	Depth Top	**3.20**
		Depth Base	
Date Tested	22/01/2025	Sample Type	**D**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	98		
0.63	59		
0.425	42		
0.30	22		
0.20	8		
0.15	6		
0.063	3		

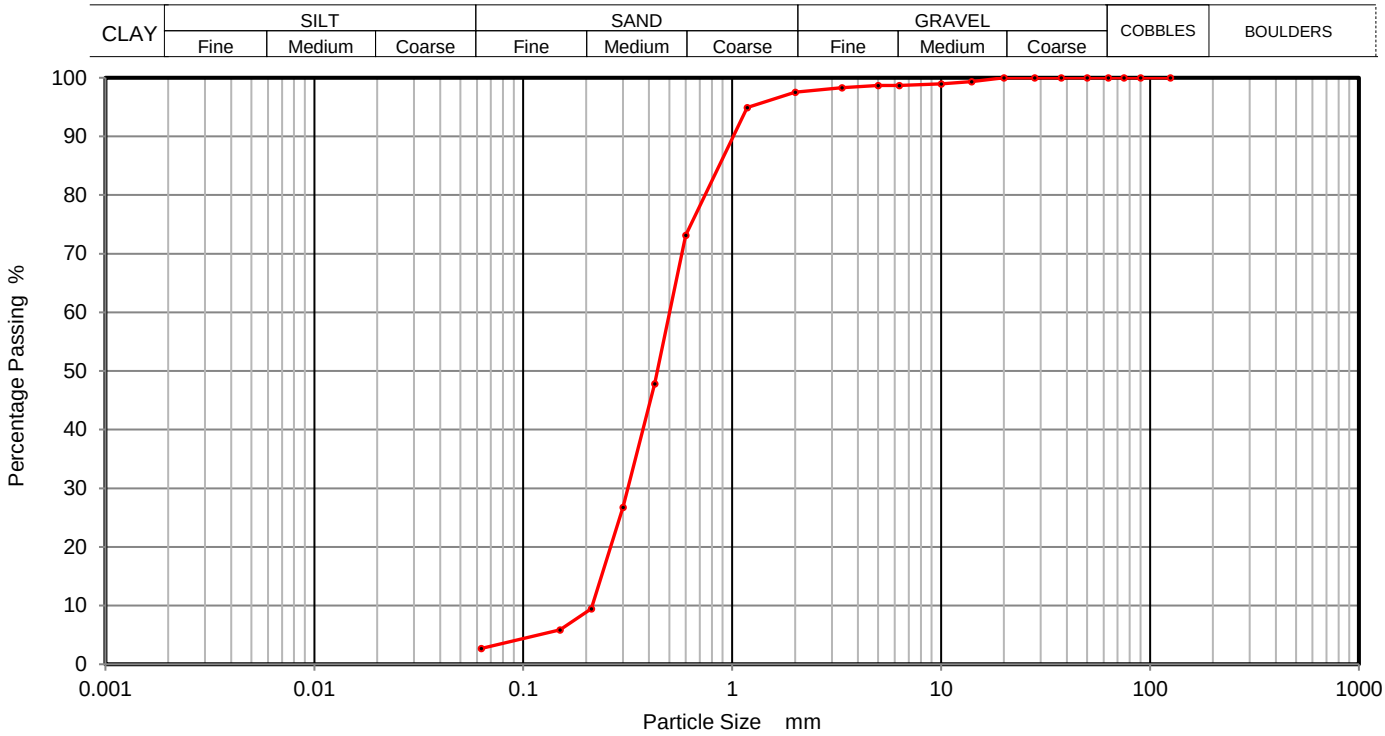
Sample Proportions	% dry mass
Cobbles	0
Gravel	0
Sand	97
Silt and Clay	3

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Jordan Williams

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2**	Contract Number	**76652**
		Borehole/Pit No.	**BH2**
Project Name	**Old Clayton Kennels and Cattery, RH20 4AG**	Sample No.	
Sample Description	Red slightly fine to medium gravelly slightly silty/clay fine to coarse SAND	Depth Top	**4.20**
		Depth Base	
Date Tested	22/01/2025	Sample Type	**D**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	99		
10	99		
6.3	99		
5	99		
3.35	98		
2	98		
1.18	95		
0.63	73		
0.425	48		
0.30	27		
0.20	9		
0.15	6		
0.063	3		

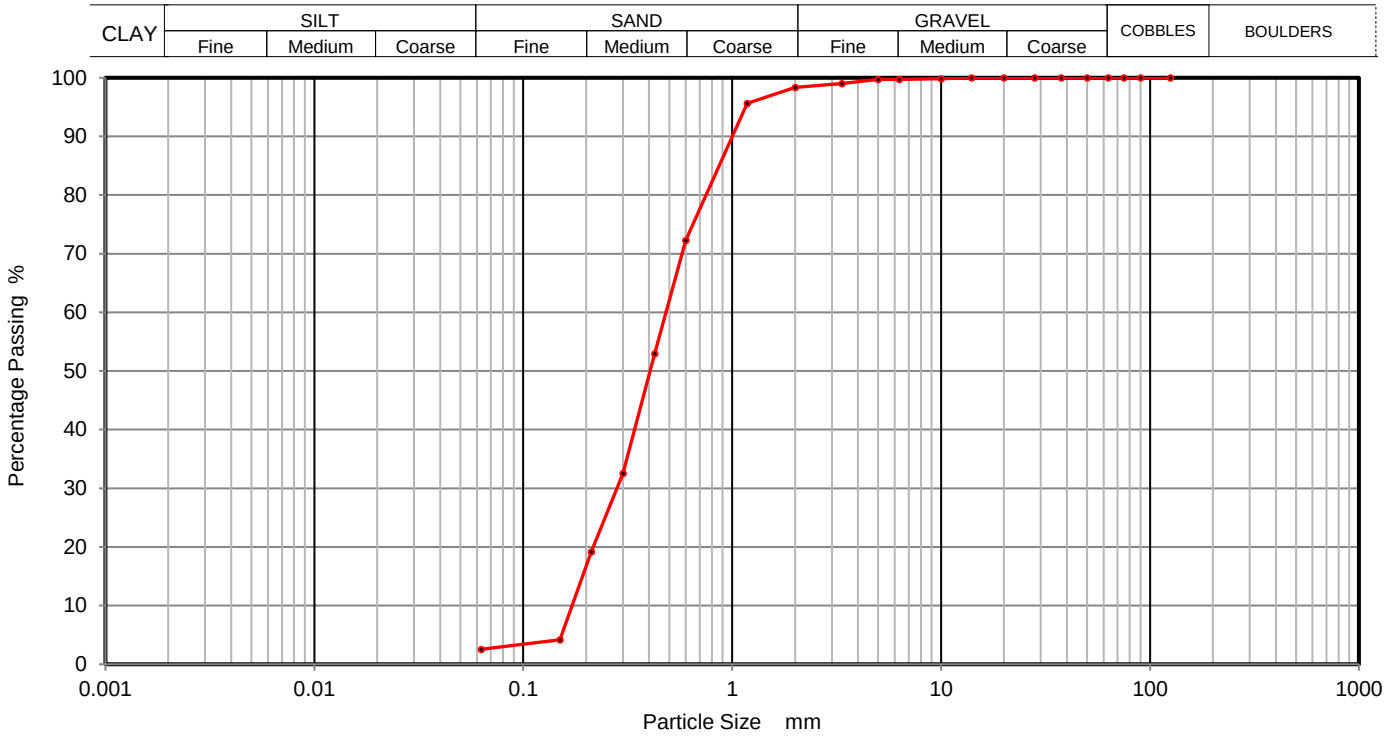
Sample Proportions	% dry mass
Cobbles	0
Gravel	2
Sand	95
Silt and Clay	3

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Jordan Williams

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS EN ISO 17892-4:2016 Wet Sieve, Clause 5.2**	Contract Number	**76652**
		Borehole/Pit No.	**BH2**
Project Name	**Old Clayton Kennels and Cattery, RH20 4AG**	Sample No.	
Sample Description	Red slightly fine to medium gravelly slightly silty/clay fine to coarse SAND	Depth Top	**4.90**
		Depth Base	
Date Tested	22/01/2025	Sample Type	**D**



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	99		
2	98		
1.18	96		
0.63	72		
0.425	53		
0.30	33		
0.20	19		
0.15	4		
0.063	3		

Sample Proportions	% dry mass
Cobbles	0
Gravel	2
Sand	95
Silt and Clay	3

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Operator
Jordan Williams

APPENDIX E: Chemical Laboratory Testing

2 The Long Barn, Norton Farm, Selborne Road, Alton, Hampshire GU34 3NB
0333 600 1221 enquiries@groundandwater.co.uk **groundandwater.co.uk**

Registered Office: Kineton House, 31 Horse Fair, Banbury, Oxfordshire OX16 0AE Registered in England No. 07032001

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Selbourne Road
Alton
Hampshire
GU34 3NB

e: roger.foord@groundandwater.co.uk

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Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 24-057940

Project / Site name:	Old Clayton Kennels and Cattery Storrington	**Samples received on:**	04/12/2024
Your job number:	GWPR6344	**Samples instructed on/ Analysis started on:**	06/12/2024
Your order number:	GWPR6344	**Analysis completed by:**	12/12/2024
Report Issue Number:	1	**Report issued on:**	12/12/2024
Samples Analysed:	10 soil samples		

Signed:

Dominika Liana
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 24-057940
Project / Site name: Old Clayton Kennels and Cattery Storrington
Your Order No: GWPR6344

Lab Sample Number				400625	400626	400627	400628	400629
Sample Reference				CPA	CPC	CPD	CPE	CPF
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.20	0.10	0.15	0.15	0.15
Date Sampled				28/11/2024	28/11/2024	28/11/2024	28/11/2024	28/11/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	36.9	-	-	-
Moisture Content	%	0.01	NONE	11	9.5	-	-	-
Total mass of sample received	kg	0.1	NONE	1.7	1.5	-	-	-
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	-	-	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	-	-	KWB	KWB	KWB
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	0.11	< 0.05	-	-	-
Pyrene	mg/kg	0.05	MCERTS	0.12	0.13	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	-
Chrysene	mg/kg	0.05	MCERTS	0.08	0.1	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.14	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.1	0.09	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.07	0.08	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.07	0.09	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	-	-	-

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-057940
Project / Site name: Old Clayton Kennels and Cattery Storrington
Your Order No: GWPR6344

Lab Sample Number				400630	400631	400632	400633	400634
Sample Reference				CPG	CPH	TP1	WS1	WS5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.15	0.15	0.15	0.20	0.20
Date Sampled				28/11/2024	28/11/2024	28/11/2024	28/11/2024	28/11/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Stone Content	%	0.1	NONE	-	-	-	-	-
Moisture Content	%	0.01	NONE	-	-	-	-	-
Total mass of sample received	kg	0.1	NONE	-	-	-	-	-
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KWB	KWB	KWB	KWB	KWB
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	-	-	-

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 24-057940
Project / Site name: Old Clayton Kennels and Cattery Storrington

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
400625	CPA	None Supplied	0.2	Brown loam and clay with gravel and vegetation
400626	CPC	None Supplied	0.1	Brown loam and clay with vegetation and stones

Analytical Report Number : 24-057940
Project / Site name: Old Clayton Kennels and Cattery Storrington

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

Sample Deviation Report

Analytical Report Number : 24-057940
Project / Site name: Old Clayton Kennels and Cattery Storrington

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
CPA	N/A	S	400625	c	Speciated PAHs and/or Semi-volatile organic compounds in soil	L064B	c
CPC	N/A	S	400626	c	Speciated PAHs and/or Semi-volatile organic compounds in soil	L064B	c

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WD18 8YS

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e: reception@i2analytical.com

Analytical Report Number : 25-001666

Project / Site name:	Old Clayton Kennels and Cattery Storrington	**Samples received on:**	16/01/2025
Your job number:	GWPR6344	**Samples instructed on/ Analysis started on:**	16/01/2025
Your order number:	GWPR6344	**Analysis completed by:**	23/01/2025
Report Issue Number:	1	**Report issued on:**	23/01/2025
Samples Analysed:	8 soil samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 25-001666
Project / Site name: Old Clayton Kennels and Cattery Storrington
Your Order No: GWPR6344

Lab Sample Number				425507	425508	425509	425510	425511
Sample Reference				BH1	BH1	BH1	BH1	BH2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				5.20	10.40	14.90	20.00	5.20
Date Sampled				09/01/2025	09/01/2025	09/01/2025	09/01/2025	09/01/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.3	12	9.5	10	8.9
Total mass of sample received	kg	0.1	NONE	0.3	0.8	1.2	0.5	1.4
General Inorganics								
pH (L099)	pH Units	N/A	MCERTS	6.2	8	7.9	7.8	6.4
Total Sulphate as SO_4	%	0.005	MCERTS	0.007	0.011	0.012	0.01	0.014
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	19	5.2	4.5	4.3	3.7
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	9.32	2.59	2.24	2.14	1.84
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	< 0.5	1.4	1	1.1	< 0.5
Total Sulphur	mg/kg	50	MCERTS	56	59	51	54	59
Total Sulphur	%	0.005	MCERTS	0.006	0.006	0.005	0.005	0.006
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Heavy Metals / Metalloids								
Magnesium (leachate equivalent)	mg/l	2.5	NONE	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 25-001666
Project / Site name: Old Clayton Kennels and Cattery Storrington
Your Order No: GWPR6344

Lab Sample Number				425512	425513	425514
Sample Reference				BH2	BH2	BH2
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A
Depth (m)				10.20	15.50	19.20
Date Sampled				09/01/2025	09/01/2025	09/01/2025
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.1	8.8	7.9
Total mass of sample received	kg	0.1	NONE	0.7	0.6	0.5
General Inorganics						
pH (L099)	pH Units	N/A	MCERTS	8.8	6.2	6.5
Total Sulphate as SO_4	%	0.005	MCERTS	0.019	0.007	0.005
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	4.3	4.7	3.7
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	2.17	2.33	1.86
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	< 0.5	< 0.5	< 0.5
Total Sulphur	mg/kg	50	MCERTS	55	< 50	55
Total Sulphur	%	0.005	MCERTS	0.006	< 0.005	0.005
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	< 2.0	< 2.0
Heavy Metals / Metalloids						
Magnesium (leachate equivalent)	mg/l	2.5	NONE	< 2.5	< 2.5	< 2.5

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

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Analytical Report Number : 25-001666
Project / Site name: Old Clayton Kennels and Cattery Storrington

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
425507	BH1	None Supplied	5.2	Brown sand with gravel
425508	BH1	None Supplied	10.4	Brown sand with gravel
425509	BH1	None Supplied	14.9	Brown sand with gravel
425510	BH1	None Supplied	20	Brown sand with gravel
425511	BH2	None Supplied	5.2	Brown sand with gravel
425512	BH2	None Supplied	10.2	Brown sand with gravel
425513	BH2	None Supplied	15.5	Brown sand with gravel
425514	BH2	None Supplied	19.2	Brown sand with gravel

Analytical Report Number : 25-001666
Project / Site name: Old Clayton Kennels and Cattery Storrington

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES	In-house method based on TRL 447	L038B	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES	In-house method	L038B	D	MCERTS
Water Soluble Nitrate (2:1) as N in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08, 2:1 extraction	L078-PL	W	NONE
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser	In-house method	L082B	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099-PL	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

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Analytical Report Number : 25-001687

Project / Site name:	Old Clayton Kennels and Cattery Storrington	**Samples received on:**	14/01/2025
Your job number:	GWPR6344	**Samples instructed on/ Analysis started on:**	16/01/2025
Your order number:	GWPR6344	**Analysis completed by:**	22/01/2025
Report Issue Number:	1	**Report issued on:**	22/01/2025
Samples Analysed:	2 soil samples		

Signed:

Trevor Hill
Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 25-001687
Project / Site name: Old Clayton Kennels and Cattery Storrington
Your Order No: GWPR6344

Lab Sample Number				425593	425594
Sample Reference				BH1	BH2
Sample Number				None Supplied	None Supplied
Water Matrix				N/A	N/A
Depth (m)				0.20	0.20
Date Sampled				09/01/2025	09/01/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	22	14
Total mass of sample received	kg	0.1	NONE	1	1.1
Asbestos					
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MWI	MWI
General Inorganics					
pH (L099)	pH Units	N/A	MCERTS	7.7	6.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	34	32
Water Soluble SO_4 16hr extraction (2:1)	mg/l	1.25	MCERTS	17.2	15.9
Organic Matter (automated)	%	0.1	MCERTS	4.3	1.9
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.5	1.1
Total Phenols					
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.1	0.19
Fluorene	mg/kg	0.05	MCERTS	0.16	0.37
Phenanthrene	mg/kg	0.05	MCERTS	0.68	1.6
Anthracene	mg/kg	0.05	MCERTS	0.29	0.92
Fluoranthene	mg/kg	0.05	MCERTS	0.43	0.83
Pyrene	mg/kg	0.05	MCERTS	0.33	0.6
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.11	0.18
Chrysene	mg/kg	0.05	MCERTS	0.16	0.31
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.12	0.11
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.11	0.11
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.06	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.06	0.05
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	2.61	5.29

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Analytical Report Number: 25-001687
Project / Site name: Old Clayton Kennels and Cattery Storrington
Your Order No: GWPR6344

Lab Sample Number				425593	425594
Sample Reference				BH1	BH2
Sample Number				None Supplied	None Supplied
Water Matrix				N/A	N/A
Depth (m)				0.20	0.20
Date Sampled				09/01/2025	09/01/2025
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	6.5	8.7
Boron (water soluble)	mg/kg	0.2	MCERTS	0.8	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	12	13
Copper (aqua regia extractable)	mg/kg	1	MCERTS	9.9	8.3
Lead (aqua regia extractable)	mg/kg	1	MCERTS	29	19
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	6.5	7.9
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	21	24
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	48	35
Petroleum Hydrocarbons					
TPHCWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0
TPHCWG - Aliphatic >EC35 - EC40 $_{EH_CU_1D_AL}$	mg/kg	10	NONE	< 10	< 10
TPHCWG - Aliphatic >EC5 - EC35 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10
TPHCWG - Aliphatic >EC5 - EC40 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10
TPHCWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.02	MCERTS	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	2.8
TPHCWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10
TPHCWG - Aromatic >EC35 - EC40 $_{EH_CU_1D_AR}$	mg/kg	10	NONE	< 10	< 10
TPHCWG - Aromatic >EC5 - EC35 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10
TPHCWG - Aromatic >EC5 - EC40 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10
TPH Total >EC5 - EC40 $_{EH_CU+HS_1D_TOTAL}$	mg/kg	10	NONE	< 10	< 10
VOCs					
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0

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

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Analytical Report Number : 25-001687
Project / Site name: Old Clayton Kennels and Cattery Storrington

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
425593	BH1	None Supplied	0.2	Brown loam and clay with gravel and vegetation
425594	BH2	None Supplied	0.2	Brown loam and clay with gravel and vegetation

Analytical Report Number : 25-001687
Project / Site name: Old Clayton Kennels and Cattery Storrington

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088-PL	D/W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	MCERTS
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS

Analytical Report Number : 25-001687
Project / Site name: Old Clayton Kennels and Cattery Storrington

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099-PL	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

Sample Deviation Report

Analytical Report Number : 25-001687

Project / Site name: Old Clayton Kennels and Cattery Storrington

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BH1	N/A	S	425593	c	BTEX and/or Volatile organic compounds in soil	L073B	c
BH1	N/A	S	425593	c	Speciated PAHs and/or Semi-volatile organic compounds in soil	L064B	c
BH1	N/A	S	425593	c	Total cyanide in soil	L080-PL	c
BH1	N/A	S	425593	c	Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	L076B/L088-PL	c
BH2	N/A	S	425594	c	BTEX and/or Volatile organic compounds in soil	L073B	c
BH2	N/A	S	425594	c	Speciated PAHs and/or Semi-volatile organic compounds in soil	L064B	c
BH2	N/A	S	425594	c	Total cyanide in soil	L080-PL	c
BH2	N/A	S	425594	c	Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	L076B/L088-PL	c

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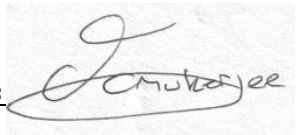
Analytical Report Number : 25-016813-2

Replaces Analytical Report Number: 25-016813, issue no. 1
Additional analysis undertaken.
Asbestos Quantification added onto sample 502646 as per client request

Project / Site name:	Old Clayton Kennels and Cattery Storrington	**Samples received on:**	03/04/2025
Your job number:	GWPR6344	**Samples instructed on/ Analysis started on:**	03/04/2025
Your order number:	GWPR6344	**Analysis completed by:**	14/04/2025
Report Issue Number:	2	**Report issued on:**	15/04/2025
Samples Analysed:	10 soil samples		

Signed: 

Tuhina Mukerjee
Senior Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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Some records may be kept for longer according to other legal/best practice requirements.

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 25-016813
Project / Site name: Old Clayton Kennels and Cattery Storrington
Your Order No: GWPR6344

Lab Sample Number				502643	502644	502645	502646	502647
Sample Reference				TP201	TP202	TP203	TP204	TP205
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.20	0.20	0.20	0.20	0.20
Date Sampled				31/03/2025	31/03/2025	31/03/2025	31/03/2025	31/03/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	49.7	< 0.1
Moisture Content	%	0.01	NONE	18	12	11	13	14
Total mass of sample received	kg	0.1	NONE	1.2	1.2	1.2	1.2	1.2
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MUA	MUA	MUA	MUA	MUA
Analysis completed	N/A	N/A	N/A	08/04/2025	08/04/2025	08/04/2025	08/04/2025	08/04/2025
Actinolite detected	Type	N/A	ISO 17025	-	-	-	Not-detected	-
Amosite detected	Type	N/A	ISO 17025	-	-	-	Not-detected	-
Anthophyllite detected	Type	N/A	ISO 17025	-	-	-	Not-detected	-
Chrysotile detected	Type	N/A	ISO 17025	-	-	-	Detected	-
Crocidolite detected	Type	N/A	ISO 17025	-	-	-	Not-detected	-
Tremolite detected	Type	N/A	ISO 17025	-	-	-	Not-detected	-
Asbestos % by hand picking/weighing	%	0.001	ISO 17025	-	-	-	< 0.001	-
Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-	-	-	Loose Fibres	-
General Inorganics								
pH (L099)	pH Units	N/A	MCERTS	5.5	5.5	6	7.5	7.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	22	8.2	11	65	12
Water Soluble SO_4 16hr extraction (2:1)	mg/l	1.25	MCERTS	10.8	4.08	5.69	32.7	6.17
Organic Matter (automated)	%	0.1	MCERTS	2.2	1.9	2.7	2	3.5
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3	1.1	1.5	1.2	2
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.09	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								

Analytical Report Number: 25-016813
Project / Site name: Old Clayton Kennels and Cattery Storrington
Your Order No: GWPR6344

Lab Sample Number				502643	502644	502645	502646	502647
Sample Reference				TP201	TP202	TP203	TP204	TP205
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.20	0.20	0.20	0.20	0.20
Date Sampled				31/03/2025	31/03/2025	31/03/2025	31/03/2025	31/03/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.3	7.3	7.5	8.1	6.9
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	0.7	0.6	0.7	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14	12	12	13	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	7.5	7.1	32	41	39
Lead (aqua regia extractable)	mg/kg	1	MCERTS	20	22	22	20	18
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.8	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	8.6	6.5	6.5	8.1	8.7
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	24	22	24	23	23
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	33	30	41	56	53
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	-	< 0.010	-	< 0.010	-
TPHCWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	-	< 0.010	-	< 0.010	-
TPHCWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	-	< 0.010	-	< 0.010	-
TPHCWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
TPHCWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
TPHCWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	-
TPHCWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	-
TPHCWG - Aliphatic >EC35 - EC40 $_{EH_CU_1D_AL}$	mg/kg	10	NONE	-	< 10	-	< 10	-
TPHCWG - Aliphatic >EC5 - EC35 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	-	< 10	-	< 10	-
TPHCWG - Aliphatic >EC5 - EC40 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	-	< 10	-	< 10	-
TPHCWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	-	< 0.010	-	< 0.010	-
TPHCWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	-	< 0.010	-	< 0.010	-
TPHCWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.02	MCERTS	-	< 0.020	-	< 0.020	-
TPHCWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
TPHCWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
TPHCWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPHCWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPHCWG - Aromatic >EC35 - EC40 $_{EH_CU_1D_AR}$	mg/kg	10	NONE	-	< 10	-	< 10	-
TPHCWG - Aromatic >EC5 - EC35 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	-	< 10	-	< 10	-
TPHCWG - Aromatic >EC5 - EC40 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	-	< 10	-	< 10	-
TPH Total >EC5 - EC40 $_{EH_CU+HS_1D_TOTAL}$	mg/kg	10	NONE	-	< 10	-	< 10	-
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-
Benzene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-
Toluene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-
Ethylbenzene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-
p & m-Xylene	µg/kg	8	MCERTS	-	< 8.0	-	< 8.0	-
o-Xylene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-

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

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Analytical Report Number: 25-016813
Project / Site name: Old Clayton Kennels and Cattery Storrington
Your Order No: GWPR6344

Lab Sample Number				502648	502649	502650	502651	502652
Sample Reference				TP206	TP207	TP208	TP209	TP210
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.20	0.20	0.20	0.20	0.20
Date Sampled				31/03/2025	31/03/2025	31/03/2025	31/03/2025	31/03/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	11	13	11	12
Total mass of sample received	kg	0.1	NONE	1.2	1.2	1.2	1.2	1.2
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DKI	DKI	DKI	DKI	DKI
Analysis completed	N/A	N/A	N/A	08/04/2025	08/04/2025	08/04/2025	08/04/2025	08/04/2025
Actinolite detected	Type	N/A	ISO 17025	-	-	-	-	-
Amosite detected	Type	N/A	ISO 17025	-	-	-	-	-
Anthophyllite detected	Type	N/A	ISO 17025	-	-	-	-	-
Chrysotile detected	Type	N/A	ISO 17025	-	-	-	-	-
Crocidolite detected	Type	N/A	ISO 17025	-	-	-	-	-
Tremolite detected	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos % by hand picking/weighing	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-	-	-	-	-
General Inorganics								
pH (L099)	pH Units	N/A	MCERTS	6.9	5.2	7.4	5.5	6.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	15	10	9.7	19	10
Water Soluble SO_4 16hr extraction (2:1)	mg/l	1.25	MCERTS	7.32	5.04	4.83	9.53	5.03
Organic Matter (automated)	%	0.1	MCERTS	1.3	1.8	2.2	2.8	2.8
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.8	1	1.3	1.6	1.6
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.07	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.07	< 0.05	0.05	0.17	0.09
Pyrene	mg/kg	0.05	MCERTS	0.07	< 0.05	< 0.05	0.17	0.07
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.07	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.06	< 0.05	< 0.05	0.11	0.07
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	0.12	0.07
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.06	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.06	< 0.05
Total PAH								

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Analytical Report Number: 25-016813
Project / Site name: Old Clayton Kennels and Cattery Storrington
Your Order No: GWPR6344

Lab Sample Number				502648	502649	502650	502651	502652
Sample Reference				TP206	TP207	TP208	TP209	TP210
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.20	0.20	0.20	0.20	0.20
Date Sampled				31/03/2025	31/03/2025	31/03/2025	31/03/2025	31/03/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	0.84	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.3	7.6	8	8.6	8
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	0.7	0.6	0.6	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.2	< 0.2	0.2	< 0.2	0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	13	13	15	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	35	39	33	11	37
Lead (aqua regia extractable)	mg/kg	1	MCERTS	21	21	21	18	23
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	8.6	7.9	8.1	8	9.7
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	25	24	25	27	27
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	62	41	41	34	49
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	-	< 0.010	-	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	-	< 0.010	-	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	-	< 0.010	-	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPHCWG - Aliphatic >EC35 - EC40 $_{EH_CU_1D_AL}$	mg/kg	10	NONE	< 10	-	< 10	-	< 10
TPHCWG - Aliphatic >EC5 - EC35 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	-	< 10	-	< 10
TPHCWG - Aliphatic >EC5 - EC40 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	-	< 10	-	< 10
TPHCWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	< 0.010	-	< 0.010	-	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	< 0.010	-	< 0.010	-	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.02	MCERTS	< 0.020	-	< 0.020	-	< 0.020
TPHCWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPHCWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPHCWG - Aromatic >EC35 - EC40 $_{EH_CU_1D_AR}$	mg/kg	10	NONE	< 10	-	< 10	-	< 10
TPHCWG - Aromatic >EC5 - EC35 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	-	< 10	-	< 10
TPHCWG - Aromatic >EC5 - EC40 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	-	< 10	-	< 10
TPH Total >EC5 - EC40 $_{EH_CU+HS_1D_TOTAL}$	mg/kg	10	NONE	< 10	-	< 10	-	< 10
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0

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

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Analytical Report Number: **25-016813**
Project / Site name: **Old Clayton Kennels and Cattery Sto**
Your Order No: **GWPR6344**

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample	Analysis completed	Analyst ID
502646	TP204	0.20	145	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**	14/04/2025	MUA

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 25-016813
Project / Site name: Old Clayton Kennels and Cattery Storrington

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
502643	TP201	None Supplied	0.2	Brown loam and clay with gravel and vegetation
502644	TP202	None Supplied	0.2	Brown loam with gravel and vegetation
502645	TP203	None Supplied	0.2	Brown loam with gravel and vegetation
502646	TP204	None Supplied	0.2	Brown loam and clay with stones
502647	TP205	None Supplied	0.2	Brown loam with vegetation
502648	TP206	None Supplied	0.2	Brown loam and clay with vegetation
502649	TP207	None Supplied	0.2	Brown loam and clay with gravel and vegetation
502650	TP208	None Supplied	0.2	Brown loam with gravel and vegetation
502651	TP209	None Supplied	0.2	Brown loam with gravel and vegetation
502652	TP210	None Supplied	0.2	Brown loam with gravel and vegetation

Analytical Report Number : 25-016813
Project / Site name: Old Clayton Kennels and Cattery Storrington

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references	HSE Report No: 83/1996, HSG 248 (2021), HSG 264 (2012) & SCA Blue Book (draft)	A006B	D	ISO 17025
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088-PL	D/W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	MCERTS
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS

Analytical Report Number : 25-016813
Project / Site name: Old Clayton Kennels and Cattery Storrington

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099-PL	D	MCERTS
Soil Descriptions	Textural classification	In-house method	L019B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

Analytical Report Number : 25-016813
Project / Site name: Old Clayton Kennels and Cattery Storrington

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be u should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref
TP202	N/A	S	502644	b	BTEX and/or Volatile organic compounds in soil	L073B
TP202	N/A	S	502644	b	Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	L076B/L088-PL
TP206	N/A	S	502648	b	BTEX and/or Volatile organic compounds in soil	L073B
TP206	N/A	S	502648	b	Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	L076B/L088-PL
TP208	N/A	S	502650	b	BTEX and/or Volatile organic compounds in soil	L073B
TP208	N/A	S	502650	b	Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	L076B/L088-PL

inreliable and

Test Deviation
b
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b
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b

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Analytical Report Number : 25-023917

Project / Site name:	Old Clayton Kennels and Cattery Storrington	**Samples received on:**	08/05/2025
Your job number:	GWPR6344	**Samples instructed on/ Analysis started on:**	09/05/2025
Your order number:	GWPR6344	**Analysis completed by:**	15/05/2025
Report Issue Number:	1	**Report issued on:**	15/05/2025
Samples Analysed:	5 soil samples - 1 10:1 WAC sample		

Signed:

Rafa Szczepaczyk
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 25-023917
Project / Site name: Old Clayton Kennels and Cattery Storrington
Your Order No: GWPR6344

Lab Sample Number				541118	541119	541120	541121	541122
Sample Reference				TP301	TP302	TP303	TP304	TP305
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.5	0.3	0.15	0.15	0.2
Date Sampled				07/05/2025	07/05/2025	07/05/2025	07/05/2025	07/05/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	54.9	< 0.1
Moisture Content	%	0.01	NONE	12	8.9	8.5	7.6	19
Total mass of sample received	kg	0.1	NONE	0.8	0.9	1	1	0.8
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSO	DSO	DSO	DSO	DSO
Analysis completed	N/A	N/A	N/A	14/05/2025	14/05/2025	14/05/2025	14/05/2025	14/05/2025
General Inorganics								
pH (L005B)	pH Units	N/A	MCERTS	-	-	-	-	7.3
pH (L099)	pH Units	N/A	MCERTS	7.6	8.1	6	11.5	7.7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	3900	3700	270	370	49
Water Soluble SO_4 16hr extraction (2:1)	mg/l	1.25	MCERTS	1960	1870	136	183	24.7
Organic Matter (automated)	%	0.1	MCERTS	1.5	1.2	1.6	3.8	4.4
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.8	0.7	0.9	2.2	2.5
Loss on Ignition @ 450°C	%	0.2	MCERTS	-	-	-	-	6.3
Acid Neutralisation Capacity	+/- mmol/kg	-9999	NONE	-	-	-	-	1.2
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.06
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.07
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.18	0.22
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.1	0.48	0.79
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.09	0.48	0.74
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.05	0.24	0.43
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.07	0.31	0.54
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	0.39	1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	0.16	1.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.36	0.62
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.19	0.35
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.09
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.25	0.37
Coronene	mg/kg	0.05	NONE	-	-	-	-	0.15
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	3.11	6.38
Total WAC-17 PAHs	mg/kg	0.85	NONE	-	-	-	-	6.53

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Analytical Report Number: 25-023917
Project / Site name: Old Clayton Kennels and Cattery Storrington
Your Order No: GWPR6344

Lab Sample Number				541118	541119	541120	541121	541122
Sample Reference				TP301	TP302	TP303	TP304	TP305
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.5	0.3	0.15	0.15	0.2
Date Sampled				07/05/2025	07/05/2025	07/05/2025	07/05/2025	07/05/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.9	7.6	9.4	8.1	12
Boron (water soluble)	mg/kg	0.2	MCERTS	1.5	1.4	0.4	0.7	1.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.2	< 0.2	0.3	0.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	17	12	18	16
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16	14	10	23	95
Lead (aqua regia extractable)	mg/kg	1	MCERTS	15	12	26	40	170
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	9.9	8.3	9.1	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	1.1	1.1
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	28	25	23	24	28
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	54	37	100	270
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	-	< 0.010	-	< 0.010	-
TPHCWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	-	< 0.010	-	< 0.010	-
TPHCWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	-	< 0.010	-	< 0.010	-
TPHCWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
TPHCWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
TPHCWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	-
TPHCWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	-	< 8.0	-	21	-
TPHCWG - Aliphatic >EC35 - EC40 $_{EH_CU_1D_AL}$	mg/kg	10	NONE	-	< 10	-	19	-
TPHCWG - Aliphatic >EC5 - EC35 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	-	< 10	-	21	-
TPHCWG - Aliphatic >EC5 - EC40 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	-	< 10	-	40	-
TPHCWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	-	< 0.010	-	< 0.010	-
TPHCWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	-	< 0.010	-	< 0.010	-
TPHCWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.02	MCERTS	-	< 0.020	-	< 0.020	-
TPHCWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
TPHCWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
TPHCWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPHCWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	-	< 10	-	37	-
TPHCWG - Aromatic >EC35 - EC40 $_{EH_CU_1D_AR}$	mg/kg	10	NONE	-	< 10	-	54	-
TPHCWG - Aromatic >EC5 - EC35 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	-	< 10	-	37	-
TPHCWG - Aromatic >EC5 - EC40 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	-	< 10	-	91	-
TPH Total >EC5 - EC40 $_{EH_CU+HS_1D_TOTAL}$	mg/kg	10	NONE	-	< 10	-	130	-
Mineral Oil (EC10 - EC40) $_{EH_CU_1D_AL}$	mg/kg	10	NONE	-	-	-	-	< 10
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-
Benzene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	-	< 8.0	-	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	< 5.0
Total BTEX	µg/kg	10	MCERTS	-	-	-	-	< 10

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Analytical Report Number: 25-023917
Project / Site name: Old Clayton Kennels and Cattery Storrington
Your Order No: GWPR6344

Lab Sample Number				541118	541119	541120	541121	541122
Sample Reference				TP301	TP302	TP303	TP304	TP305
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.5	0.3	0.15	0.15	0.2
Date Sampled				07/05/2025	07/05/2025	07/05/2025	07/05/2025	07/05/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
PCBs by GC-MS								
PCB Congener 28	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
PCB Congener 52	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
PCB Congener 101	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
PCB Congener 118	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
PCB Congener 138	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
PCB Congener 153	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
PCB Congener 180	mg/kg	0.001	MCERTS	-	-	-	-	< 0.001
Total PCBs	mg/kg	0.007	MCERTS	-	-	-	-	< 0.007

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

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Waste Acceptance Criteria Analytical Results

Report No:	**25-023917**						
					Client:	**GANDW**	
Location	**Old Clayton Kennels and Cattery Storrington**						
Lab Reference (Sample Number)	541122				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	07/05/2025				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TP305						
Depth (m)	0.20						
Solid Waste Analysis							
TOC (%)**	2.5				3%	5%	6%
Loss on Ignition (%) **	6.3				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	6.53				100	--	--
pH (units)**	7.3				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	1.2				--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.00636			0.0636	0.5	2	25
Barium *	0.0155			0.155	20	100	300
Cadmium *	< 0.000100			< 0.00100	0.04	1	5
Chromium *	0.002			0.02	0.5	10	70
Copper *	0.0069			0.069	2	50	100
Mercury *	< 0.000500			< 0.00500	0.01	0.2	2
Molybdenum *	0.0017			0.017	0.5	10	30
Nickel *	0.0033			0.033	0.4	10	40
Lead *	< 0.0010			< 0.010	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.024			0.24	4	50	200
Chloride *	1.5			15	800	15000	25000
Fluoride*	0.15			1.5	10	150	500
Sulphate *	4.9			49	1000	20000	50000
TDS*	29			290	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	8.05			80.5	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	0.8						
Dry Matter (%)	81						
Moisture (%)	19						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

*= UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 25-023917
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* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
541118	TP301	None Supplied	0.5	Brown loam and sand with gravel and vegetation
541119	TP302	None Supplied	0.3	Brown loam and sand with gravel and vegetation
541120	TP303	None Supplied	0.15	Brown loam and sand with gravel and vegetation
541121	TP304	None Supplied	0.15	Brown loam and sand with vegetation and stones
541122	TP305	None Supplied	0.2	Brown loam and sand with gravel and vegetation

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Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	MCERTS
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099-PL	D	MCERTS
Soil Descriptions	Textural classification	In-house method	L019B	W	NONE
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088-PL	D/W	MCERTS
pH at 20°C in soil	Determination of pH in soil by addition of water followed by electrometric measurement	In-house method	L005B	W	MCERTS

Analytical Report Number : 25-023917
Project / Site name: Old Clayton Kennels and Cattery Storrington

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
PCB's By GC-MS in soil	Determination of PCB by extraction with hexane followed by GC-MS	In-house method based on USEPA 8082	L027B	D	MCERTS
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by electrometric measurement	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L031B	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR Analyser	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
One stage WAC 10:1 leachate preparation	One stage batch test at a liquid to solid ratio of 10 L/kg	BS EN 12457-2-2002	L043B	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046B	W	NONE
Loss on ignition of soil @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	In-house method	L047-PL	D	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088-PL	D/W	NONE
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

Sample Deviation Report

Analytical Report Number : 25-023917
Project / Site name: Old Clayton Kennels and Cattery Storrington

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP302	N/A	S	541119	b	BTEX and/or Volatile organic compounds in soil	L073B	b
TP302	N/A	S	541119	b	Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	L076B/L088-PL	b
TP304	N/A	S	541121	b	BTEX and/or Volatile organic compounds in soil	L073B	b
TP304	N/A	S	541121	b	Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	L076B/L088-PL	b
TP305	N/A	L	541122	b	One stage WAC 10:1 leachate preparation	L043B	b
TP305	N/A	L	541122	b	WAC Leachate 10:1	L043B	b
TP305	N/A	S	541122	b	BTEX and/or Volatile organic compounds in soil	L073B	b

APPENDIX F: Soil Assessment Criteria

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Ground and Water Limited

Soil Guideline Values and Generic Assessment Criteria

The Contaminated Land Regime reflects the UK Government's stated objectives of achieving sustainable development through the 'suitable for use approach'. At preliminary risk assessment stage, risks are evaluated qualitatively. As the site investigation progresses to a generic or detailed quantitative risk assessment, data is collected and assessment criteria are utilised to evaluate whether the contaminants represent an unacceptable risk to the identified receptors.

1. Contaminated Land Exposure Assessment Model (CLEA)

Current United Kingdom risk assessment practice is based on the Contaminated Land Exposure Assessment Model (CLEA).

The CLEA Guidance comprises the following documents:

1) EA Science Report SC050021/SR2: Human health toxicological assessment of contaminants in soil.
2) EA Science Report SC050021/SR3: Updated technical background to the CLEA model.
3) EA CLEA Bulletin (2009).
4) CLEA software version 1.07 (2015)
5) Toxicological reports and SGV technical notes.

The CLEA guidance and tools:

- Do not cover other types of risk to humans, such as fire, suffocation or explosion, or short-term and acute exposures;
- Do not cover risks to the environment, such as groundwater, ecosystems or buildings;
- Do not provide a definitive test for telling when human health risks are significant; and
- Are not a legal requirement in assessing land contamination risks. They are not part of the legal regime for Part 2A of the Environmental Protection Act 1990.

The CLEA guidance derives soil concentrations of contaminants above which (in the opinion of the EA) there may be a concern that warrants further investigation. It does not provide a definitive test for establishing that the risk is significant.

1.1. Land-use Scenarios

The CLEA model uses a range of standard land-use scenarios to develop conceptual exposure models outlined in the following sections.

1.1.1. Residential (with home grown produce) (RwHP)

Generic scenario assumes a typical two-storey house built on a ground bearing slab with a private garden having a lawn, flowerbeds and a small fruit and vegetable patch.

- Critical receptor is a young female child (zero to six years old)
- Exposure duration is six years.
- Exposure pathways include direct soil and indoor dust ingestion, consumption of homegrown produce and any adhering soil, skin contact with soils and indoor dust and inhalation of indoor and outdoor dust and vapours.
- Building type is a two-storey small-terraced house.

A sub-set of this land-use is residential apartments with communal landscaped gardens where the consumption of home grown vegetables will not occur. (Residential without homegrown produce (RwoHP)).

1.1.2. Allotments

Provision of open space (about 250sq.m) commonly made available to tenants by the local authority to grow fruit and vegetable for their own consumption. Typically, there are a number of plots to a site which may have a total area of up to 1 hectare. The tenants are assumed to be adults and that young children make occasional accompanied visits.

Although some allotment holders may choose to keep animals including rabbits, hens, and ducks, potential exposure to contaminated meat and eggs is not considered.

- Critical receptor is a young female child (zero to six years old)
- Exposure duration is six years.
- Exposure pathways include direct soil ingestion, consumption of homegrown produce and any adhering soil, skin contact with soils and inhalation of outdoor dust and vapours.
- There is no building.

1.1.3. Commercial/Industrial

The generic scenario assumes a typical commercial or light industrial property comprising a three-storey building at which employees spend most time indoors and are involved in office-based or relatively light physical work.

- Critical receptor is a working female adult (aged 16 to 65 years old).
- Exposure duration is a working lifetime of 49 years.
- Exposure pathways include direct soil and indoor dust ingestion, skin contact with soils and dusts and inhalation of dust and vapours.
- Building type is a three-storey office (pre 1970).

2. LQM/CIEH Suitable 4 Use Levels (S4UL)

For derivation of these S4UL reference must be made to:

Nathanial, P., McCaffrey, C., Gillet, A., Ogden, R., Nathanial, J., *The LQM/CIEH S4UL's for Human Health Risk Assessment*. **Land Quality Press**. 2015

2.1. S4UL Background

The Land Quality Management/Chartered Institute of Environmental Health (LQM/CIEH) S4UL for a given land use is the concentration of the contaminant in soil at which the predicted daily exposure,

as calculated by the CLEA software, equals the Health Criteria Value. The S4ULs have been derived for substances based on various generic land use and soil organic matter contents.

The final output for each contaminant represents a synthesis of new toxicological (and fate and transport) reviews published since the preparation of the 2nd edition LQM/CIEH GAC's (Nathanial et al., 2009).

In the derivation of LQM/CIEH S4UL's the principles of 'minimal' or 'tolerable' risk enshrined in SR2, which has not been withdrawn, has been maintained.

2.2. S4UL Land-use

S4UL's have been derived for the basic CLEA land-uses, as described in section 1.2, and for two new land uses:

- Public Open Spaces near Residential Housing (POSresi).
- Public Park (POSpark).

2.2.1. Public Open Spaces near Residential Housing (POSresi)

Includes the predominantly grassed areas adjacent to high density housing, the central green area on many 1930's – 1970's housing estates, and smaller areas commonly incorporated in newer developments as informal grassed areas or more formal landscaped areas with a mixture of open space and covered soils with planting. It is assumed that the close proximity to the place of residence will allow tracking back of soil to occur.

2.2.2. Public Park (POSpark)

An area of open space, usually owned and maintained by the local authority, provided for recreational uses including family visists and picnics, children's play area, informal sporting activities (not a dedicated sports pitch), and dog walking. It is assumed that tracking back of soils into places of residence will be negligible.

The following LQM/CIEH S4Uls (Copyright Land Quality Management Limited) have been reproduced with permission, to the publication number S4UL3072.

3. Category 4 Screening Levels (C4SLs)

In the case of Lead, no SGV or GAC has been published to date. This is likely to be due to the toxicity review that is currently being undertaken by the Environment Agency. In the absence of updated toxicity information the SGV derived using CLEA 1.07 methodology and related toxicity will be used.

The overall objective of the C4SLs research project was to assist the provision of technical guidance in support of Defra's revised Statutory Guidance (SG) for Part 2A of the Environmental Protection Act 1990 (Part 2A) (Defra, 2012a). Specifically, the project aimed to deliver:

- A methodology for deriving C4SLs for four generic land-uses comprising residential, commercial, allotments and public open space; and
- A demonstration of the methodology, via the derivation of C4SLs for six substances – arsenic, benzene, benzo(a)pyrene, cadmium, chromium (VI) and lead.

To help achieve a more targeted approach to identifying and managing contaminated land in relation to the risk (or possibility) of harm to human health, the revised SG presented a new four category

system for considering land under Part 2A, ranging from Category 4, where there is no risk that land poses a significant possibility of significant harm (SPOSH), or the level of risk is low, to Category 1, where the risk that land poses a significant possibility of significant harm (SPOSH) is unacceptably high. More specific guidance on what type of land should be considered as Category 4 (Human Health) is provided in Paragraphs 4.21 and 4.22 of the revised SG, as follows:

> *"4.21 The local authority should consider that the following types of land should be placed into Category 4: Human Health:*
> *(a) Land where no relevant contaminant linkage has been established.*
> *(b) Land where there are only normal levels of contaminants in soil, as explained in Section 3 of this Guidance.*
> *(c) Land that has been excluded from the need for further inspection and assessment because contaminant levels do not exceed relevant generic assessment criteria in accordance with Section 3 of this Guidance, or relevant technical tools or advice that may be developed in accordance with paragraph 3.30 of this Guidance.*
> *(d) Land where estimated levels of exposure to contaminants in soil are likely to form only a small proportion of what a receptor might be exposed to anyway through other sources of environmental exposure (e.g. in relation to average estimated national levels of exposure to substances commonly found in the environment, to which receptors are likely to be exposed in the normal course of their lives).*
>
> *4.22 The local authority may consider that land other than the types described in paragraph 4.21 should be placed into Category 4: Human Health if following a detailed quantitative risk assessment it is satisfied that the level of risk posed is sufficiently low."*

The C4SLs are intended as "relevant technical tools" (in relation to Paragraph 4.21(c)) to help local authorities and others when deciding to stop further assessment of a site, on the grounds that it falls within Category 4 (Human Health).

The Impact Assessment (IA), which accompanied the revised SG (Defra, 2012b) provides further information on the nature and potential role of the C4SLs. Paragraph 47(h) of the IA states that:

> *"The new statutory guidance will bring about a situation where the current SGVs/GACs are replaced with more pragmatic (but still strongly precautionary) Category 4 screening levels (C4SLs) which will provide a higher simple test for deciding that land is suitable for use and definitely not contaminated land."*

A key distinction between the Soil Guideline Values (SGVs) and the C4SLs is the level of risk that they describe. As described by the Environment Agency (2009a):

> *"SGVs are guidelines on the level of long-term human exposure to individual chemicals in soil that, unless stated otherwise, are tolerable or pose a minimal risk to human health."*

The implication of Paragraph 47(h) of the IA is that minimal risk is well within Category 4 and that the C4SLs should describe a higher level of risk which, whilst not minimal, can still be considered low enough to allow a judgement to be made that land containing substances at, or below, the C4SLs would typically fall within Category 4. This reflects Paragraph 4.20 of the revised SG, which states:

> *"4.20 The local authority should not assume that land poses a significant possibility of significant harm if it considers that there is no risk or that the level of risk posed is low. For the purposes of this Guidance, such land is referred to as a "Category 4: Human Health" case. The authority may decide that the land is a Category 4: Human Health case as soon as it considers it has evidence to this effect, and this may happen at any stage during risk assessment including the early stages."*

C4SLs, therefore, should not be viewed as "SPOSH levels" and they should not be used as a legal trigger for the determination of land under Part 2A.

The generic screening values referred to before usually take the form of risk-based Soil Guideline Values (SGVs) or other Generic Assessment Criteria (GACs) that are most typically derived using the Environment Agency's Contaminated Land Exposure Assessment (CLEA) model, as described in the Environment Agency's SR2, SR3 and SR7 reports (EA, 2009b & c; EA, 2008). It is anticipated that C4SLs will be used in a similar manner; as generic screening criteria that can be used within a GQRA, albeit describing a higher level of risk than the SGVs.

The suggested approach to the development of C4SLs consists of the retention and use of the CLEA framework, modified according to considerations of the underlying science within the context of Defra's policy objectives relating to the revised SG. Within this context, it is suggested that the development of C4SLs may be achieved in one of three ways, namely:

- By modifying the toxicological parameters used within CLEA (while maintaining current exposure parameters);
- By modifying the exposure parameters embedded within CLEA (while maintaining current toxicological "minimal risk" interpretations); and
- By modifying both toxicological and exposure parameters.

There is also a suggested check on "other considerations" (e.g., background levels, epidemiological data, sources of uncertainty) within the approach, applicable to all three options.

It is suggested that a new term is defined for the toxicological guidance values associated with the derivation of C4SLs – a Low Level of Toxicological Concern (LLTC). A LLTC should represent an intake of low concern that remains suitably protective of health, and definitely does not approach an intake level that could be defined as SPOSH.

4. CL:AIRE Generic Assessment Criteria (GAC)

For derivation of the CL:AIRE Generic Assessment Criteria (GAC) reference should be made to the following report:

> CL:AIRE, *The Soil Generic Assessment Criteria for Human Health Risk Assessment.* **Contaminated Land: Applications in the Real Environment**. 2009.

Within this report, Contaminated Land: Applications in Real Environments (CL:AIRE) provided Generic Assessment Criteria (GAC) in accordance with the CLEA software and the principles outlined previously for a further 35 contaminants sometimes encountered on land affected by contamination.

5. SoBRA Acute GAC

The Society of Brownfield Risk Assessment (SoBRA) identified that most human health risk assessments focus on the chronic risks arising from long-term exposure to specific substances. As chronic risks often occur at lower doses than acute risks, they are often the key drivers, however, in some instances the acute dose may also be an important consideration within risk assessments.

The methodology for deriving the acute GAC were related to two distinct receptor groups:

- Members of the public, where the 'critical' receptor for this group will typically be a female child, which is consistent with CLEA residential and Public Open Space/allotments land-uses;
- Workers involved with excavations. The critical receptor for this group is assumed to be a female working adult, without the use of PPE.

The acute GACs relate to short term exposure of high concentrations of a substance that lead to acute effects. They are not considered to be average exposures across a specific / defined area. As a result, the GACs should be normally be compared with the maximum likely concentration that the individual may be exposed to, and not the average concentration within a specific area.

The SoBRA acute GAC will primarily be used for contaminants that do not currently have any GAC, most notably Cyanide.

6. Detailed Quantitative Risk Assessments (DQRA)

Where the adoption of a GAC is not appropriate, for instance when the intended land-use is at variance the CLEA standard land-uses, then a DQRA may be undertaken to develop site specific values for relevant soil contaminants.

- Establishing the plausibility that generic exposure pathways exist in practice by measurement and observation.
- Developing more accurate parameters using site data.

7. Phytotoxicity

CLEA guidance only addresses human health toxicity; assessment of plant toxicity (phytotoxicity) is based on threshold trigger values obtained from the following source:

- BS3882:2015 – *Specification for Topsoil*

The trigger values are relevant only to those contaminants, where present in excess, have the potential to inhibit plant growth, or kill plants (Cu, Ni and Zn). The criteria have been based on a wide range of planting that are common within a multi-purpose topsoil.

8. Statistical Tests

DEFRA R&D Publication CLR 7 (DOE 1994) addressed the statistical treatment of test results and their comparison to Soil Guideline Values.

Consideration must be given to the appropriate area of land to be considered termed the critical averaging area.

For a communal open space or commercial land-use, the critical averaging area will depend on the proposed layout. For a residential use with private gardens the averaging area is the individual plot.

It may be appropriate to compare the upper 95th percentile concentration with the Soil Guideline Value, subject to applying a statistical test to establish that the range of concentrations are reasonably consistent and belonging to the same underlying distribution of data.

CL:AIRE published guidance in 2020, *Guidance in comparing soil contamination data with a critical concentration,* superseding the CL:AIRE/CIEH 2008 report of the same name. The guidance provides ways to assist land contamination stakeholders to apply statistical methods to their data to enable decisions under the legislative framework; either planning system or Part 2A of the Environmental Protection Act 1990.

The use of the statistical tests should only be applied if the following statements are valid for the datasets:

- Averaging areas, as well as the smallest area of concern have been identified on the basis of the CSM, including the desk study and/or the site walkover;
- The sample locations were chosen using a simple random, stratified random or stratified systematic (square, herringbone or triangular grid) sampling pattern, rather than being targeted to locations suspected of being contaminated;
- The sample locations are relatively evenly spread across the area and are not clustered, to avoid giving undue weight to some parts of the site over others in the calculated statistics;
- The analyses do not suggest a hotspot or outlier of contamination that should be treated as a separate zone. This has been established by a histogram and/or a names statistical test;
- The sample locations are all taken from one population (i.e. the same material);
- Where an averaging zone encompasses several averaging areas, analyses do not show a spatial trend or other spatial pattern across that zone; and
- The number of samples has been shown to be sufficient for a statistical analysis.

Any included statistical spreadsheet is based on an in-house method of statistical analysis, in line with those outlined within the CL:AIRE guidance (2020).

Treatment of Hot-Spots

- A statistical test is applied to establish whether the data is a part of a single set, or whether data outliers are present.
- Provided that the data is based on random sampling and no distinct contamination source was present at the sampling location, the hot-spot(s) may be excluded and the mean of the remaining data assessed.

9. Ground and Water Limited Soil Assessment Criteria

The Soil Assessment Criteria used in the preparation of the Generic Quantitative Risk Assessment are tabulated in the following pages, where the source of each has been outlined in the previous sections.

9.1. Inorganics

SoBRA – Acute Generic Assessment Criteria						
Determinand	**RwHP (mg/kg)**	**RwoHP (mg/kg)**	**Allotment (mg/kg)**	**Commercial (mg/kg)**	**POSresi (mg/kg)**	**POSpark (mg/kg)**
Cyanide	24	24	24	1400	24	24

9.2. Metals

C4SL Low Level of Toxicological Concern						
Determinand	**RwHP (mg/kg)**	**RwoHP (mg/kg)**	**Allotment (mg/kg)**	**Commercial (mg/kg)**	**POSresi (mg/kg)**	**POSpark (mg/kg)**
Lead	< 200	< 310	< 80	< 2300	< 630	< 1300

LQM/CIEH Suitable 4 Use Levels – Metals and Semi-metals						
Determinand	**RwHP (mg/kg)**	**RwoHP (mg/kg)**	**Allotment (mg/kg)**	**Commercial (mg/kg)**	**POSresi (mg/kg)**	**POSpark (mg/kg)**
Arsenic	37	40	43	640	79	170
Beryllium	1.7	1.7	35	12	2.2	63
Boron	290	11000	45	240000	21000	46000
Cadmium	11	85	1.9	190	120	532
Chromium (III)	910	910	18000	8600	1500	33000
Chromium (VI)	6	6	1.8	33	7.7	220
Copper	2400	7100	520	68000	12000	44000
Elemental Mercury	1.2	1.2	21	58	16	30
Inorganic Mercury	40	56	19	1100	120	240
Methylmercury	11	15	6	320	40	68
Nickel	130	180	53	980	230	800
Selenium	250	430	88	12000	1100	1800
Vanadium	410	1200	91	9000	2000	5000
Zinc	3700	40000	620	730000	81000	170000

Phytotoxicity (Harmful to Plants) Threshold Trigger Values			
Determinand	**Soil pH < 6.0 (mg/kg)**	**Soil pH 6.0 – 7.0 (mg/kg)**	**Soil pH > 7.0 (mg/kg)**
Copper	100	135	200
Nickel	60	75	110
Zinc	200	200	300
Notes: BS3882:2015 – *Specification for Topsoil*. Based on a wide range of common plants that will be exposed to multi-purpose topsoil. Toxicity of contaminant may also be impacted by pH of soils. Site observation of plant vitality may give additional guidance.			

CL:AIRE Soil Generic Assessment Criteria				
Determinand	**Residential (mg/kg)**	**Residential without plant uptake (mg/kg)**	**Allotment (mg/kg)**	**Commercial (mg/kg)**
Antimony	ND	550	ND	7500
Barium	ND	1300	ND	22000
Molybdenum	ND	670	ND	17000
ND – Not derived				

9.3. Total Petroleum Hydrocarbons (TPHs)

9.3.1. BTEX Compounds

LQM/CIEH Suitable 4 Use Levels – BTEX Compounds							
Determinand	**Soil Organic Matter**	**RwHP (mg/kg)**	**RwoHP (mg/kg)**	**Allotment (mg/kg)**	**Commercial (mg/kg)**	**POSresi (mg/kg)**	**POSpark (mg/kg)**
Benzene	1.0% SOM	0.087	0.38	0.017	27	72	90
	2.5% SOM	0.170	0.70	0.034	47	72	100
	6.0% SOM	0.370	1.40	0.075	90	73	110
Toluene	1.0% SOM	130	880	22	56000	56000	87000
	2.5% SOM	290	1900	51	110000	56000	95000
	6.0% SOM	660	3900	120	180000	56000	100000
Ethylbenzene	1.0% SOM	47	83	16	5700	24000	17000
	2.5% SOM	110	190	39	13000	24000	22000
	6.0% SOM	260	440	91	27000	25000	27000
o-Xylene	1.0% SOM	60	88	28	6600	41000	17000
	2.5% SOM	140	210	67	15000	42000	24000
	6.0% SOM	330	480	160	33000	43000	33000
m-Xylene	1.0% SOM	59	82	31	6200	41000	17000
	2.5% SOM	140	190	74	14000	42000	24000
	6.0% SOM	320	450	170	31000	43000	33000
p-Xylene	1.0% SOM	56	79	29	5900	41000	17000
	2.5% SOM	130	180	69	14000	42000	23000
	6.0% SOM	310	430	160	30000	43000	31000
SOM = Soil Organic Matter Content (%)							

9.3.2. Total Petroleum Hydrocarbons – Aliphatic

LQM/CIEH Suitable 4 Use Levels For TPH							
Aliphatic		**RwHP (mg/kg)**	**RwoHP (mg/kg)**	**Allotment (mg/kg)**	**Commercial (mg/kg)**	**POSresi (mg/kg)**	**POSpark (mg/kg)**
EC 5-6	1.0% SOM	42	42	730	3,200 (304) [sol]	570,000 (304) [sol]	95,000 (304) [sol]
	2.5% SOM	78	78	1,700	5,900 (558) [sol]	590,000	130,000 (558) [sol]
	6.0% SOM	160	160	3,900	12,000 (1150) [sol]	600,000 (1150)[sol]	180,000 (1150) [sol]
EC >6-8	1.0% SOM	100	100	2,300	7,800 (144) [sol]	600,000	150,000 (144) [sol]
	2.5% SOM	230	230	5,600	17,000 (322) [sol]	610,000	220,000 (322) [sol]
	6.0% SOM	530	530	13,000	40,000 (736) [sol]	620,000	320,000 (736) [sol]
EC >8-10	1.0% SOM	27	27	320	2,000 (78) [sol]	13,000	14,000 (78) [sol]
	2.5% SOM	65	65	770	4,800 (118) [vap]	13,000	18,000 (118) [vap]
	6.0% SOM	150	150	1,700	11,000 (451) [vap]	13,000	21,000 (451) [vap]
EC >10-12	1.0% SOM	130 (48) [vap]	130 (48) [vap]	2,200	9,700 (48) [sol]	13,000	21,000 (48) [sol]
	2.5% SOM	330 (118) [vap]	330 (118) [vap]	4,400	23,000 (118) [vap]	13,000	23,000 (118) [vap]
	6.0% SOM	760 (283) [vap]	760 (283) [vap]	7,300	47,000 (283) [vap]	13,000	24,000 (283) [vap]
EC >12-16	1.0% SOM	1,100 (24) [sol]	1,100 (24) [sol]	11,000	59,000 (24) [sol]	13,000	25,000 (24) [sol]
	2.5% SOM	2,400 (59) [sol]	2,400 (59) [sol]	13,000	82,000 (59) [sol]	13,000	25,000 (59) [sol]
	6.0% SOM	4,300 (142) [sol]	4,400 (142) [sol]	13,000	90,000 (142) [sol]	13,000	26,000 (142) [sol]
EC >16-35	1.0% SOM	65,000 (8.48) [sol]	65,000 (8.48) [sol]	260,000	1,600,000	250,000	450,000
	2.5% SOM	92,000 (21) [sol]	92,000 (21) [sol]	270,000	1,700,000	250,000	480,000
	6.0% SOM	110,000	110,000	270,000	1,800,000	250,000	490,000
EC >35-44	1.0% SOM	65,000 (8.48) [sol]	65,000 (8.48) [sol]	260,000	1,600,000	250,000	450,000
	2.5% SOM	92,000 (21) [sol]	92,000 (21) [sol]	270,000	1,700,000	250,000	480,000
	6.0% SOM	110,000	110,000	270,000	1,800,000	250,000	490,000

SOM = Soil Organic Matter Content (%)

[vap] – GAC presented exceeds the vapour saturation limit, which is presented in brackets.

[sol] – GAC presented exceeds the soil saturation limit, which is presented in brackets.

9.3.3. Total Petroleum Hydrocarbons – Aromatic

LQM/CIEH Suitable 4 Use Levels For TPH							
Aromatic		**RwHP (mg/kg)**	**RwoHP (mg/kg)**	**Allotment (mg/kg)**	**Commercial (mg/kg)**	**POSresi (mg/kg)**	**POSpark (mg/kg)**
EC 5-7 (Benzene)	1.0% SOM	70	370	13	26,000 (1220) [sol]	56,000	76,000 (1220 [sol]
	2.5% SOM	140	690	27	46,000 (2260) [sol]	56,000	84,000 (2260) [sol]
	6.0% SOM	300	1,400	57	86,000 (4710) [sol]	56,000	92,000 (4710) [sol]
EC >7-8 (Toluene)	1.0% SOM	130	860	22	56,000 (869) [vap]	56,000	87,000 (869) [sol]
	2.5% SOM	290	1,800	51	110,000 (1920) [sol]	56,000	95,000 (1920) [sol]
	6.0% SOM	660	3,900	120	180,000 (4360) [vap]	56,000	100,000 (4360) [vap]
EC >8-10	1.0% SOM	34	47	8.6	3,500 (613) [vap]	5,000	7,200 (613) [vap]
	2.5% SOM	83	110	21	8,100 (1500) [vap]	5,000	8,500 (1500) [vap]
	6.0% SOM	190	270	51	17,000 (3850) [vap]	5,000	9,300 (3580) [vap]
EC >10-12	1.0% SOM	74	250	13	16,000 (364) [sol]	5,000	9,200 (364) [sol]
	2.5% SOM	180	590	31	28,000 (899) [sol]	5,000	9,700 (889) [sol]
	6.0% SOM	380	1,200	74	34,000 (2150) [sol]	5,000	10,000
EC >12-16	1.0% SOM	140	1,800	23	36,000 (169) [sol]	5,100	10,000
	2.5% SOM	330	2,300 (419) [sol]	57	37,000	5,100	10,000
	6.0% SOM	660	2,500	130	38,000	5,000	10,000
EC >16-21	1.0% SOM	260	1,900	46	28,000	3,800	7,600
	2.5% SOM	540	1,900	110	28,000	3,800	7,700
	6.0% SOM	930	1,900	260	28,000	3,800	7,800
EC >21-35	1.0% SOM	1,100	1,900	370	28,000	3,800	7,800
	2.5% SOM	1,500	1,900	820	28,000	3,800	7,800
	6.0% SOM	1,700	1,900	1,600	28,000	3,800	7,900
EC >35-44	1.0% SOM	1,100	1,900	370	28,000	3,800	7,800
	2.5% SOM	1,500	1,900	820	28,000	3,800	7,800
	6.0% SOM	1,700	1,900	1,600	28,000	3,800	7,900
EC >44-70	1.0% SOM	1,600	1,900	1,200	28,000	3,800	7,800
	2.5% SOM	1,800	1,900	2,100	28,000	3,800	7,800
	6.0% SOM	1,900	1,900	3,000	28,000	3,800	7,900

SOM = Soil Organic Matter Content (%)

[vap] – GAC presented exceeds the vapour saturation limit, which is presented in brackets.

[sol] – GAC presented exceeds the soil saturation limit, which is presented in brackets.

9.4. Polycyclic Aromatic Hydrocarbons (PAHs)

LQM/CIEH Suitable 4 Use Levels For Polycyclic Aromatic Hydrocarbons (PAHs)							
Determinands		**RwHP (mg/kg)**	**RwoHP (mg/kg)**	**Allotment (mg/kg)**	**Commercial (mg/kg)**	**POSresi (mg/kg)**	**POSpark (mg/kg)**
Acenapthene	1.0% SOM	210	3,000 (57.0) [sol]	34	84,000(57.0) [sol]	15,000	29,000
	2.5% SOM	510	4,700(141) [sol]	85	97,000(141) [sol]	15,000	30,000
	6.0% SOM	1100	6,000(336) [sol]	200	100,000	15,000	30,000
Acenapthylene	1.0% SOM	170	2,900(86.1) [sol]	28	83,000(86.1) [sol]	15,000	29,000
	2.5% SOM	420	4,600(212) [sol]	69	97,000(212) [sol]	15,000	30,000
	6.0% SOM	920	6,000(506) [sol]	160	100,000	15,000	30,000
Anthracene	1.0% SOM	2,400	31,000(1.17) [vap]	380	520,000	74,000	150,000
	2.5% SOM	5,400	35,000	950	540,000	74,000	150,000
	6.0% SOM	11,000	37,000	2,200	540,000	74,000	150,000
Benzo(a)anthracene	1.0% SOM	7.20	11	2.90	170	29	49
	2.5% SOM	11	14	6.50	170	29	56
	6.0% SOM	13	15	13	180	29	62
Benzo(a)pyrene	1.0% SOM	2.20	3.20	0.97	35	5.70	11
	2.5% SOM	2.70	3.20	2.00	35	5.70	12
	6.0% SOM	3.00	3.20	3.50	36	5.70	13
Benzo(b)flouranthene	1.0% SOM	2.60	3.90	0.99	44	7.10	13
	2.5% SOM	3.30	4.00	2.10	44	7.20	15
	6.0% SOM	3.70	4.00	3.90	45	7.20	16
Benzo(ghi)perylene	1.0% SOM	320	360	290	3,900	640	1,400
	2.5% SOM	340	360	470	4,000	640	1,500
	6.0% SOM	350	360	640	4,000	640	1,600
Benzo(k)flouranthene	1.0% SOM	77	110	37	1,200	190	370
	2.5% SOM	93	110	75	1,200	190	410
	6.0% SOM	100	110	130	1,200	190	440
Chrysene	1.0% SOM	15	30	4.10	350	57	93
	2.5% SOM	22	31	9.40	350	57	110
	6.0% SOM	27	32	19	350	57	120
Dibenzo(ah)anthracene	1.0% SOM	0.24	0.31	0.14	3.50	0.57	1.10
	2.5% SOM	0.28	0.32	0.27	3.50	0.57	1.30
	6.0% SOM	0.30	0.32	0.43	3.60	0.58	1.40
Flouranthene	1.0% SOM	280	1,500	52	23,000	3,100	6,300
	2.5% SOM	560	1,600	130	23,000	3,100	6,300
	6.0% SOM	890	1,600	290	23,000	3,100	6,300
Flourene	1.0% SOM	170	2,800 (30.9) [sol]	27	63,000(30.9) [sol]	9,900	20,000
	2.5% SOM	400	3,800(76.5) [sol]	67	68,000	9,900	20,000
	6.0% SOM	860	4,500(183) [sol]	160	71,000	9,900	20,000
Indeno(123-cd)pyrene	1.0% SOM	27	45	9.50	500	82	150
	2.5% SOM	36	46	21	510	82	170
	6.0% SOM	41	46	39	510	82	180
Napthalene	1.0% SOM	15	36	65	1,600	11,000	800
	2.5% SOM	36	36	130	3,700	15,000	1,200
	6.0% SOM	85	85	200	8,400	17,000	1,900
Phenanthrene	1.0% SOM	95	1,300(183) [sol]	15	22,000	3,100	6,200
	2.5% SOM	220	1,500	38	22,000	3,100	6,200
	6.0% SOM	440	1,500	90	23,000	3,100	6,300
Pyrene	1.0% SOM	620	3,700	110	54,000	7,400	15,000
	2.5% SOM	1200	3,800	270	54,000	7,400	15,000
	6.0% SOM	2000	3,800	620	54,000	7,400	15,000
Coal Tar (Benzo(a)pyrene used as marker compound)	1.0% SOM	0.79	1.2	0.32	15	2.20	4.40
	2.5% SOM	0.98	1.2	0.67	15	2.20	4.70
	6.0% SOM	1.10	1.2	1.20	15	2.20	4.80

SOM = Soil Organic Matter Content (%)

[vap] – GAC presented exceeds the vapour saturation limit, which is presented in brackets.

[sol] – GAC presented exceeds the soil saturation limit, which is presented in brackets.

9.5. Volatile and Semi-volatile Organic Compounds

LQM CIEH General Assessment Criteria: Volatile and Semi-Volatile Organic Compounds							
Determinands		**RwHP (mg/kg)**	**RwoHP (mg/kg)**	**Allotment (mg/kg)**	**Commercial (mg/kg)**	**POSresi (mg/kg)**	**POSpark (mg/kg)**
Chloroalkanes & alkenes							
1,2 Dichloroethane	1.0% SOM	0.0071	0.0092	0.0046	0.67	29	21
	2.5% SOM	0.011	0.013	0.0083	0.97	29	24
	6.0% SOM	0.019	0.023	0.016	1.70	29	28
1,1,2,2 Tetrachloroethane	1.0% SOM	1.60	3.90	0.41	270	1,400	1,800
	2.5% SOM	3.40	8.00	0.89	550	1,400	2,100
	6.0% SOM	7.50	17	2.00	1,100	1,400	2,300
1,1,1,2 Tetrachloroethane	1.0% SOM	1.20	1.50	0.79	110	1,400	1,500
	2.5% SOM	2.80	3.50	1.90	250	1,400	1,800
	6.0% SOM	6.40	8.20	4.40	560	1,400	2,100
Tetrachloroethene	1.0% SOM	0.18	0.18	0.65	19	1,400	810 [sol](424)
	2.5% SOM	0.39	0.40	1.50	42	1,400	1,100 [sol](951)
	6.0% SOM	0.90	0.92	3.60	95	1,400	1,500
1,1,1 Trichloroethane	1.0% SOM	8.80	9.00	48	660	140,000	57,000 [vap](1425)
	2.5% SOM	18	18	110	1,300	140,000	76,000 [vap](2915)
	6.0% SOM	39	40	240	3,000	140,000	100,000 [vap] (6392)
Tetrachloromethene	1.0% SOM	0.026	0.026	0.45	2.90	890	190
	2.5% SOM	0.056	0.056	1.00	6.30	920	270
	6.0% SOM	0.130	0.130	2.40	14	950	400
Trichloroethene	1.0% SOM	0.016	0.017	0.041	1.20	120	70
	2.5% SOM	0.034	0.036	0.091	2.60	120	91
	6.0% SOM	0.075	0.080	0.210	5.70	120	120
Trichloromethane	1.0% SOM	0.91	1.20	0.42	99	2,500	2,600
	2.5% SOM	1.70	2.10	0.83	170	2,500	2,800
	6.0% SOM	3.40	4.20	1.70	350	2,500	3,100
Vinyl Chloride	1.0% SOM	0.00064	0.00077	0.00055	0.059	3.50	4.80
	2.5% SOM	0.00087	0.00100	0.00100	0.077	3.50	5.00
	6.0% SOM	0.00014	0.00150	0.00180	0.120	3.50	5.40
Explosives							
2,4,6 Trinitrotoluene	1.0% SOM	1.60	65	0.24	1,000	130	260
	2.5% SOM	3.70	66	0.58	1,000	130	270
	6.0% SOM	8.10	66	1.40	1,000	130	270
RDX (Hexogen/Cyclonite/1,3,5-trinitro-1,3,5-triazacyclohexane)	1.0% SOM	120	13,000	17	210,000	26,000	49,000(18.7)[sol]
	2.5% SOM	250	13,000	38	210,000	26,000	51,000
	6.0% SOM	540	13,000	85	210,000	27,000	53,000
HMX (Octogen/1,3,5,7-tetrenitro-1,3,5,7-tetrazacyclo-octane)	1.0% SOM	5.70	67,00	0.86	110,000	13,000	23,000(0.35)[vap]
	2.5% SOM	13	67,00	1.90	110,000	13,000	23,000(0.39)[vap]
	6.0% SOM	26	67,00	3.90	110,000	13,000	24,000(0.48)[vap]
Atrazine	1.0% SOM	3.30	610	0.50	9,300	1,200	2,300
	2.5% SOM	7.60	620	1.20	9,400	1,200	2,400
	6.0% SOM	17.40	620	2.70	9,400	1,200	2,400

[vap] – GAC presented exceeds the vapour saturation limit, which is presented in brackets.
[sol] – GAC presented exceeds the soil saturation limit, which is presented in brackets.

VOC and SVOC table continued overleaf

VOC and SVOC table continued from previous page

LQM CIEH General Assessment Criteria: Volatile and Semi-Volatile Organic Compounds							
Determinands		**RwHP (mg/kg)**	**RwoHP (mg/kg)**	**Allotment (mg/kg)**	**Commercial (mg/kg)**	**POSresi (mg/kg)**	**POSpark (mg/kg)**
Pesticides							
Aldrin	1.0% SOM	5.70	7.30	3.20	170	18	30
	2.5% SOM	6.60	7.40	6.10	170	18	31
	6.0% SOM	7.10	7.50	9.60	170	18	31
Dieldrin	1.0% SOM	0.97	7.00	0.17	170	18	30
	2.5% SOM	2.00	7.30	0.41	170	18	30
	6.0% SOM	3.50	7.40	0.96	170	18	31
Dichlorvos	1.0% SOM	0.032	6.40	0.0049	140	16	26
	2.5% SOM	0.066	6.50	0.0100	140	16	26
	6.0% SOM	0.140	6.60	0.0220	140	16	27
Alpha - Endosulfan	1.0% SOM	7.40	160(0.003)[vap]	1.20	5,600(0.003)[vap]	1,200	2,400
	2.5% SOM	18	280(0.007)[vap]	2.90	7,400(0.007)[vap]	1,200	2,400
	6.0% SOM	41	410(0.016)[vap]	6.80	8,400(0.016)[vap]	1,200	2,400
Beta - Endosulfan	1.0% SOM	7.00	190(0.00007)[vap]	1.10	6,300(0.00007)[vap]	1,200	2,400
	2.5% SOM	17	320(0.0002)[vap]	2.70	7,800(0.0002)[vap]	1,200	2,400
	6.0% SOM	39	440(0.0004)[vap]	6.40	8700	1,200	2,500
Alpha - Hexachlorocyclohexanes	1.0% SOM	0.23	6.90	0.035	170	24	47
	2.5% SOM	0.55	9.20	0.087	180	24	48
	6.0% SOM	1.20	11	0.210	180	24	48
Beta - Hexachlorocyclohexanes	1.0% SOM	0.085	3.70	0.013	65	8.10	15
	2.5% SOM	0.200	3.80	0.032	65	8.10	15
	6.0% SOM	0.460	3.80	0.077	65	8.10	16
Gamma - Hexachlorocyclohexanes	1.0% SOM	0.06	2.90	0.0092	67	8.2	14
	2.5% SOM	0.14	3.30	0.0230	69	8.2	15
	6.0% SOM	0.33	3.50	0.0540	70	8.2	15
Chlorobenzenes							
Chlorobenzene	1.0% SOM	0.46	0.46	5.90	56	11,000	1,300(675)[sol]
	2.5% SOM	1.00	1.00	14	130	13,000	2,000(1520)[sol]
	6.0% SOM	2.40	2.40	32	290	14,000	2,900
1,2-Dichlorobenzene	1.0% SOM	23	24	94	2,000 (571) [sol]	90,000	24,000(571)[sol]
	2.5% SOM	55	57	230	4,800 (1370) [sol]	95,000	36,000(1370)[sol]
	6.0% SOM	130	130	540	11,000 (3240) [sol]	98,000	51,000(3240)[sol]
1,3-Dichlorobenzene	1.0% SOM	0.40	0.44	0.25	30	300	390
	2.5% SOM	1.00	1.10	0.60	73	300	440
	6.0% SOM	2.30	2.50	1.50	170	300	470
1,4-Dichlorobenzene	1.0% SOM	61	61	15	4,400 (224)[vap]	17,000[g]	36,000 (224)[vap]
	2.5% SOM	150	150	37	10,000 (540)[vap]	17,000[g]	36,000 (540)[vap]
	6.0% SOM	350	350	88[g]	25,000 (1280)[vap]	17,000[g]	36,000 (1280)[vap]
1,2,3,-Trichlorobenzene	1.0% SOM	1.50	1.50	4.70	102	1,800	770(134)[vap]
	2.5% SOM	3.60	3.70	12	250	1,800	1,100(330)[vap]
	6.0% SOM	8.60	8.80	28	590	1,800	1,600(789)[vap]
1,2,4,-Trichlorobenzene	1.0% SOM	2.60	2.60	55	220	15,000	1,700(318)[vap]
	2.5% SOM	6.40	6.40	140	530	17,000	2,600(786)[vap]
	6.0% SOM	15	15	320	1,300	19,000	4,000(1880)[vap]
1,3,5,-Trichlorobenzene	1.0% SOM	0.33	0.33	4.70	23	1,700	380(36.7)[vap]
	2.5% SOM	0.81	0.81	12	55	1,700	590(90.8)[vap]
	6.0% SOM	1.90	1.90	140	130	1,800	860(217)[vap]

[vap] – GAC presented exceeds the vapour saturation limit, which is presented in brackets.
[sol] – GAC presented exceeds the soil saturation limit, which is presented in brackets.

VOC and SVOC table continued overleaf

VOC and SVOC table continued from previous page

LQM CIEH General Assessment Criteria: Volatile and Semi-Volatile Organic Compounds							
Determinands		**RwHP (mg/kg)**	**RwoHP (mg/kg)**	**Allotment (mg/kg)**	**Commercial (mg/kg)**	**POSresi (mg/kg)**	**POSpark (mg/kg)**
Chlorobenzenes (cont.)							
1,2,3,4,- Tetrachlorobenzene	1.0% SOM	15	24	4.40	1,700(122)^{vap}	830	1,500(122)^{vap}
	2.5% SOM	36	56	11	3,080(304)^{vap}	830	1,600
	6.0% SOM	78	120	26	4,400(728)^{vap}	830	1,600
1,2,3,5,- Tetrachlobenzene	1.0% SOM	0.66	0.75	0.38	49(39.4)^{vap}	78	110(39)^{vap}
	2.5% SOM	1.60	1.90	0.90	120(98.1)^{vap}	79	120
	6.0% SOM	3.70	4.30	2.20	240(235)^{vap}	79	130
1,2,4, 5,- Tetrachlobenzene	1.0% SOM	0.33	0.73	0.06	42(19.7)^{sol}	13	25
	2.5% SOM	0.77	1.70	0.16	72(49.1)^{sol}	13	26
	6.0% SOM	1.60	3.50	0.37	96	13	26
Pentachlrobenzene	1.0% SOM	5.80	19	1.20	640(43.0)^{sol}	100	190
	2.5% SOM	12	30	3.10	770(107)^{sol}	100	190
	6.0% SOM	22	38	7.00	830	100	190
Hexachlorobenzene	1.0% SOM	1.80(0.20)^{vap}	4.10 (0.20)^{vap}	0.47	110(0.20)^{vap}	16	30
	2.5% SOM	3.30(0.50)^{vap}	5.70 (0.50)^{vap}	1.10	120	16	30
	6.0% SOM	4.90	6.70 (1.2)^{vap}	2.50	120	16	30
Phenols & Chlorophenols							
BTEX	1.0% SOM	280	750	66	760^{dir}(31,000)	760^{dir}(11,000)	760^{dir}(8,600)
	2.5% SOM	550	1,300	140	1,500^{dir}(35,000)	1,500^{dir}(11,000)	1,500^{dir}(9,700)
	6.0% SOM	1100	2,300	280	3,200^{dir}(37,000)	3,200^{dir}(11,000)	3,200^{dir}(11,000)
Chlorophenols (4 Congeners)	1.0% SOM	0.87	94	0.13	3,500	620	1,100
	2.5% SOM	2.00	150	0.30	4,000	620	1,100
	6.0% SOM	4.50	210	0.70	4,300	620	1,100
Pentachlorophenols	1.0% SOM	0.22	27(16.4)^{vap}	0.03	400	60	110
	2.5% SOM	0.52	29	0.08	400	60	120
	6.0% SOM	1.20	31	0.19	400	60	120
Others							
Carbon Disulphide	1.0% SOM	0.14	0.14	4.80	11	11,000	1,300
	2.5% SOM	0.29	0.29	10	22	11,000	1,900
	6.0% SOM	0.62	0.62	23	47	12,000	2,700
Hexachloro-1,3-Butadiene	1.0% SOM	0.29	0.32	0.25	31	25	48
	2.5% SOM	0.70	0.78	0.61	68	25	50
	6.0% SOM	1.60	1.80	1.40	120	25	51

^{vap} – GAC presented exceeds the vapour saturation limit, which is presented in brackets.
^{sol} – GAC presented exceeds the soil saturation limit, which is presented in brackets.

VOC and SVOC table continued overleaf

VOC and SVOC table continued from previous page

CL:AIRE General Assessment Criteria: Volatile and Semi-Volatile Organic Compounds					
Determinands		**RwHP (mg/kg)**	**RwoHP (mg/kg)**	**Allotment (mg/kg)**	**Commercial (mg/kg)**
1,1,2 Trichloroethane	1.0% SOM	0.60	0.88	0.28	94
	2.5% SOM	1.20	1.8	0.61	190
	6.0% SOM	2.70	3.9	1.40	400
1,1-Dichloroethane	1.0% SOM	2.40	2.50	9.20	280
	2.5% SOM	3.90	4.10	17	450
	6.0% SOM	7.40	7.70	35	850
1,1-Dichloroethene	1.0% SOM	0.23	0.23	2.80	26
	2.5% SOM	0.40	0.41	5.60	46
	6.0% SOM	0.82	0.82	12	92
1,2,4-Trimethylbenzene	1.0% SOM	0.35	0.41	0.38	42
	2.5% SOM	0.85	0.99	0.93	99
	6.0% SOM	2.00	2.30	2.20	220
1,2-Dichloropropane	1.0% SOM	0.024	0.024	0.62	3.3
	2.5% SOM	0.042	0.042	1.20	5.9
	6.0% SOM	0.084	0.085	2.60	12
2,4-Dimethylphenol	1.0% SOM	19	210	3.10	16000*
	2.5% SOM	43	410	7.20	24000*
	6.0% SOM	97	730	17	30000*
2,4-Dinitrotoluene	1.0% SOM	1.50	170*	0.22	3700*
	2.5% SOM	3.20	170	0.49	3700*
	6.0% SOM	7.20	170	1.10	3800*
2,6-Dinitrotoluene	1.0% SOM	0.78	78	0.12	1900*
	2.5% SOM	1.70	84	0.27	1900*
	6.0% SOM	3.90	87	0.61	1900*
2-Chloronapthalene	1.0% SOM	3.70	3.80	40	390*
	2.5% SOM	9.20	9.30	98	960*
	6.0% SOM	22	22	230	2200*
Biphenyl	1.0% SOM	66*	220*	14	18000*
	2.5% SOM	160	500*	35	33000*
	6.0% SOM	360	980*	83	48000*
Bis (2-ethylhexyl) phthalate	1.0% SOM	280*	2700*	47*	85000*
	2.5% SOM	610*	2800*	120*	86000*
	6.0% SOM	1100*	2800*	280*	86000*
Bromobenzene	1.0% SOM	0.87	0.91	3.2	97
	2.5% SOM	2.0	2.1	7.6	220
	6.0% SOM	4.7	4.9	18	520
Bromodichloromethane	1.0% SOM	0.016	0.019	0.016	2.1
	2.5% SOM	0.030	0.034	0.032	3.7
	6.0% SOM	0.061	0.070	0.068	7.6
Bromoform	1.0% SOM	2.8	5.2	0.95	760
	2.5% SOM	5.9	11	2.1	1500
	6.0% SOM	13	23	4.6	3100
Butyl benzyl phthalate	1.0% SOM	1400*	42000*	220*	940000*
	2.5% SOM	3300*	44000*	550*	940000*
	6.0% SOM	7200*	44000*	1300*	950000*

*soil concentration above saturation limit

VOC and SVOC table continued overleaf

VOC and SVOC table continued from previous page

CL:AIRE General Assessment Criteria: Volatile and Semi-Volatile Organic Compounds					
Determinands		**RwHP (mg/kg)**	**RwoHP (mg/kg)**	**Allotment (mg/kg)**	**Commercial (mg/kg)**
Chloroethane	1.0% SOM	8.3	8.4	110	960
	2.5% SOM	11	11	200	1300
	6.0% SOM	18	18	380	2100
Chloromethane	1.0% SOM	0.0083	0.0085	0.066	1.0
	2.5% SOM	0.0098	0.0099	0.13	1.2
	6.0% SOM	0.013	0.013	0.23	1.6
***Cis* 1,2 Dichloroethene**	1.0% SOM	0.11	0.12	0.26	14
	2.5% SOM	0.19	0.20	0.50	24
	6.0% SOM	0.37	0.39	1.0	47
Dichloromethane	1.0% SOM	0.58	2.10	0.10	270
	2.5% SOM	0.98	2.80	0.19	360
	6.0% SOM	1.70	4.50	0.34	560
Diethyl Phthalate	1.0% SOM	120*	1800*	19*	150000*
	2.5% SOM	260*	3500*	41*	220000*
	6.0% SOM	570*	6300*	94*	290000*
Di-*n*-butyl phthalate	1.0% SOM	13*	450*	2.00	15000*
	2.5% SOM	31*	450*	5.00	15000*
	6.0% SOM	67*	450*	12	15000*
Di-*n*-octyl phthalate	1.0% SOM	2300*	3400*	940*	89000*
	2.5% SOM	2800*	3400*	2100*	89000*
	6.0% SOM	3100*	3400*	3900*	89000*
Hexachloroethane	1.0% SOM	0.20	0.22	0.27	22*
	2.5% SOM	0.48	0.54	0.67	53*
	6.0% SOM	1.10	1.30	1.60	120*
Isopropylbenzene	1.0% SOM	11	12	32	1400*
	2.5% SOM	27	28	79	3300*
	6.0% SOM	64	67	190	7700*
Methyl *tert*-butyl ether (MTBE)	1.0% SOM	49	73	23	7900
	2.5% SOM	84	120	44	13000
	6.0% SOM	160	220	90	24000
Propylbenzene	1.0% SOM	34	40	34	4100*
	2.5% SOM	82	97	83	9700*
	6.0% SOM	190	230	200	21000*
Styrene	1.0% SOM	8.10	35	1.60	3300*
	2.5% SOM	19	78	3.70	6500*
	6.0% SOM	43	170	8.70	11000*
Total Cresols (2-, 3-, and 4-methylphenol)	1.0% SOM	80	3700	12	160000
	2.5% SOM	180	5400	27	180000*
	6.0% SOM	400	6900	63	180000*
***Trans* 1,2 Dichloroethene**	1.0% SOM	0.19	0.19	0.93	22
	2.5% SOM	0.34	0.35	1.90	40
	6.0% SOM	0.70	0.71	0.24	81
Tributyl tin oxide	1.0% SOM	0.25	1.40	0.042	130*
	2.5% SOM	0.59	3.10	0.100	180*
	6.0% SOM	1.30	5.70	0.240	200*

*soil concentration above saturation limit

C4SL Low Level of Toxicological Concern							
Determinands		RwHP (mg/kg)	RwoHP (mg/kg)	Allotment (mg/kg)	Commercial (mg/kg)	POSresi (mg/kg)	POSpark (mg/kg)
1,2-Dichloroethane (Ethylene Dichloride)	1.0% SOM	0.11	0.16	0.054	12	300	300
	2.5% SOM	0.18	0.24	0.10	17	310	330
	6.0% SOM	0.31	0.41	0.19	29	310	380
Cis-1,2-Dichloroethene	1.0% SOM	0.46	0.50	0.89	38	3,800	2,000
	2.5% SOM	0.78	0.84	1.7	64	3,800	2,400
	6.0% SOM	1.5	1.6	3.6	120	3,900	3,100
Tetrachloroethene (PCE)	1.0% SOM	0.31	0.32	2	24	3,200	1,400
	2.5% SOM	0.70	0.71	4.8	55	3,300	1,900
	6.0% SOM	1.60	1.60	11	130	3,400	2,500
Trans-1,2-Dichloroethene	1.0% SOM	0.90	0.93	3.70	69	13,000	5,600
	2.5% SOM	1.60	1.70	7.50	120	13,000	7,000
	6.0% SOM	3.30	3.40	16	260	13,000	9,100
Trichloroethene (TCE)	1.0% SOM	0.0093	0.0097	0.032	0.73	76	41
	2.5% SOM	0.020	0.020	0.072	1.5	78	54
	6.0% SOM	0.043	0.045	0.16	3.4	79	69
Vinyl Chloride (Chloroethene)	1.0% SOM	0.0064	0.015	0.0017	1.1	7.8	18
	2.5% SOM	0.010	0.019	0.0031	1.4	7.8	19
	6.0% SOM	0.017	0.029	0.0058	2.2	7.8	19

9.6. Per- and Polyfluoroalkyl Substances (PFAS)

Interim C4SLs for PFOA, PFNA, PFHxS and PFOS						
Determinand	RwHP (mg/kg)	RwoHP (mg/kg)	Allotment (mg/kg)	Commercial (mg/kg)	POSresi (mg/kg)	POSpark (mg/kg)
PFOA	0.076	0.041	0.0014	0.60	0.079	0.17
PFOS	0.013	0.041	0.0027	0.60	0.079	0.17
PFHxS	0.0081	0.041	0.0015	0.60	0.079	0.17
PFNA	0.0073	0.041	0.0013	0.60	0.079	0.17

9.7. Asbestos

No asbestos or asbestos containing materials (ACM's) are considered acceptable on-site from a human health perspective. Therefore the GAC for asbestos & ACM's within any imported material should be none detected (ND).

APPENDIX G: Asbestos Risk Assessment

2 The Long Barn, Norton Farm, Selborne Road, Alton, Hampshire GU34 3NB
0333 600 1221 enquiries@groundandwater.co.uk **groundandwater.co.uk**

Registered Office: Kineton House, 31 Horse Fair, Banbury, Oxfordshire OX16 0AE Registered in England No. 07032001

Asbestos Risk Assessment (CIRIA733)

Site information	Trial Hole	TP204								
	Depth (m bgl)	0.20n								
Asbestos Type Considerations	Abestos type	Chrysotile			Amosite			Crocidolite		
	Kasbestos	1.3			1.7			2.0		
	Soil Concentration (Quantification Result in %)	0.001								
Soil Type Considerations	Soil Type	Sand	Sandy Clay	Clay	Sand	Sandy Clay	Clay	Sand	Sandy Clay	Clay
	Ksoil	2.9	1.7	0.93	2.9	1.7	0.93	2.9	1.7	0.93
	Enter the relevant from the above		1.7			2.9			1.7	
Constants	Koverall		1.6			1.6			1.6	
	Dust Concentration (mg/m3)		0.1			0.1			0.1	
	Dry Conditions Exposure (hrs)		750			750			750	
	Occupation hours in a year		1920			1920			1920	
Calculation Results	fibre/ml per mg/m3		0.00138							
	fibre/ml		0.000138							
	fibre/ml.hr		0.104							
	fibre/ml.year		0.000054							
Mesothelioma Accumulated Risk	Age (exposure commences)		0			0			0	
	Risk persists for (Years)		60			60			60	
	Cummulative Age Adjustment Factor		16.8			16.8			16.8	
	fibre/ml.year (cumulative)		0.00091							
Lung Cancer Accumulated Risk	Risk persists for (Years)		60			60			60	
	fibre/ml.year (cumulative)		0.00065							

BACKGROUND

This asbestos risk assessment has been undertaken in accordance with the guidance within CIRIA733.

The fibre concentration within the airborne soil dust (in fibres/ml per mg/m3) was calculated based on the results of Addison et al 1988.

The airborne concentration of soil dust (0.1mg/m3) was based on ambient urban dust levels and ART modelling.

The dry conditions exposure (750hrs) was based upon regional meteorological data suggesting 150hrs of dry conditions per year, when applied over a 5-year segment this equates to 750hours.

The occupational hours per year (1920hrs) is based on a 40-hour working week and 48 working weeks in a year.

A worst-case exposure scenario has been considered for residents, groundworkers or generally end-users. This was based on the risk persisting for a period of 60 years, accumulated in 5-year increments. As the risk of mesothelioma is age dependent, this considered the exposure commencing at age 0 with the relevant age adjustment factor applied for each 5-year increment.

Based on the above considerations, the following equations have been used:

((Kasbestostype x Ksoil) ÷ Koverall) x Soil Concentration = fibre/ml per mg/m3

Fibre/ml per mg/m3 x Dust Concentration = fibre/ml

(f/ml x Dry Conditions Exposure (hrs)) = fibre/ml.hr

Fibre/ml.hr ÷ occupational hours per year = fibre/ml.year

Mesothelioma: fibre/ml.year x 16.8 (cumulative age adjustment factor for 60 years)

Lung Cancer: fibre/ml.year x 12 (60 years in 5-year increments)

APPENDIX H: Waste Hazard Assessment

2 The Long Barn, Norton Farm, Selborne Road, Alton, Hampshire GU34 3NB
0333 600 1221 enquiries@groundandwater.co.uk **groundandwater.co.uk**

Registered Office: Kineton House, 31 Horse Fair, Banbury, Oxfordshire OX16 0AE Registered in England No. 07032001

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

a) understand the origin of the waste
b) select the correct List of Waste code(s)
c) confirm that the list of determinands, results and sampling plan are fit for purpose
d) select and justify the chosen metal species (Appendix B)
e) correctly apply moisture correction and other available corrections
f) add the meta data for their user-defined substances (Appendix A)
g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

F3LP6-STWBG-QRIWP

Report is invalid if pages are removed.

Job name

GWPR6344 Old Clayton Kennels and Cattery, Storrington Road, Washington, West Sussex RH20 4AG

Description/Comments

Project

GWPR6344

Site

Old Clayton Kennels and Cattery, Storrington Road, Washington, West Sussex RH20 4AG

Classified by

Name:
Roger Foord
Date:
10 Feb 2025 16:43 GMT
Telephone:
0333 600 1221

Company:
Ground and Water
2 The Long Barn, Norton Farm
Selborne Road
Alton
GU34 3NB

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: -

Course	Date
Hazardous Waste Classification	-

Purpose of classification

2 - Material Characterisation

Address of the waste

Old Clayton Kennels and Cattery, Storrington Road, Washington, West Sussex **Post Code** RH20 4AG

SIC for the process giving rise to the waste

41202 Construction of domestic buildings

Description of industry/producer giving rise to the waste

Redevelopment of former kennels and cattery.

Description of the specific process, sub-process and/or activity that created the waste

Waste from foundation excavations and remedial works.

Description of the waste

Made Ground comprising a dark brown clayey sandy GRAVEL. The sand was fine to coarse and the gravel was fine to coarse, sub-angular to sub-rounded flint (60%) and concrete (40%).

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	BH1--09012025-0.20		Non Hazardous		3
2	BH2--09012025-0.20		Non Hazardous		5

Related documents

#	Name	Description
1	25-001687_HWOL.hwol	i2 Analytical .hwol file used to populate the Job

Report

Created by: Roger Foord

Created date: 10 Feb 2025 16:43 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	7
Appendix B: Rationale for selection of metal species	8
Appendix C: Version	9

Classification of sample: BH1--09012025-0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
BH1--09012025-0.20
Moisture content:
22%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 22% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
3	pH			PH		7.7	pH		7.7	pH	7.7 pH		
4	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		6.5	mg/kg		5.07	mg/kg	0.000507 %	✓	
5	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<**LOD**
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		9.9	mg/kg	1.126	8.694	mg/kg	0.000869 %	✓	
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<**LOD**
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		6.5	mg/kg	1.579	8.008	mg/kg	0.000801 %	✓	
9	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	29	mg/kg	1.56	35.283	mg/kg	0.00226 %	✓	
10	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
11	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		21	mg/kg	1.785	29.241	mg/kg	0.00292 %	✓	
12	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		48	mg/kg	2.469	92.45	mg/kg	0.00925 %	✓	
13	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.8	mg/kg	23.173	14.46	mg/kg	0.00145 %	✓	
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<**LOD**

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		benzene	601-020-00-8	200-753-7	71-43-2		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
16		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
17		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
18		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<8	µg/kg		<0.008	mg/kg	<0.0000008 %		<LOD
19		toluene	601-021-00-3	203-625-9	108-88-3		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
20		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
21		acenaphthene		201-469-6	83-32-9		0.1	mg/kg		0.078	mg/kg	0.0000078 %	✓	
22		anthracene		204-371-1	120-12-7		0.29	mg/kg		0.226	mg/kg	0.0000226 %	✓	
23		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.11	mg/kg		0.0858	mg/kg	0.00000858 %	✓	
24		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.11	mg/kg		0.0858	mg/kg	0.00000858 %	✓	
25		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.12	mg/kg		0.0936	mg/kg	0.00000936 %	✓	
26		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		benzo[ghi]perylene		205-883-8	191-24-2		0.06	mg/kg		0.0468	mg/kg	0.00000468 %	✓	
28		chrysene	601-048-00-0	205-923-4	218-01-9		0.16	mg/kg		0.125	mg/kg	0.0000125 %	✓	
29		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
30		fluoranthene		205-912-4	206-44-0		0.43	mg/kg		0.335	mg/kg	0.0000335 %	✓	
31		fluorene		201-695-5	86-73-7		0.16	mg/kg		0.125	mg/kg	0.0000125 %	✓	
32		indeno[123-cd]pyrene		205-893-2	193-39-5		0.06	mg/kg		0.0468	mg/kg	0.00000468 %	✓	
33		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
34		phenanthrene		201-581-5	85-01-8		0.68	mg/kg		0.53	mg/kg	0.000053 %	✓	
35		pyrene		204-927-3	129-00-0		0.33	mg/kg		0.257	mg/kg	0.0000257 %	✓	
36		TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
37		chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		12	mg/kg	1.462	17.539	mg/kg	0.00175 %		
											Total:	0.0218 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH2--09012025-0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
BH2--09012025-0.20
Moisture content:
14%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
3	pH			PH		6.5 pH		6.5 pH	6.5 pH		
4	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		8.7 mg/kg		7.482 mg/kg	0.000748 %	✓	
5	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		8.3 mg/kg	1.126	8.037 mg/kg	0.000804 %	✓	
7	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
8	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		7.9 mg/kg	1.579	10.731 mg/kg	0.00107 %	✓	
9	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	25.487 mg/kg	0.00163 %	✓	
10	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		24 mg/kg	1.785	36.846 mg/kg	0.00368 %	✓	
12	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		35 mg/kg	2.469	74.326 mg/kg	0.00743 %	✓	
13	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.5 mg/kg	23.173	9.964 mg/kg	0.000996 %	✓	
14	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		benzene	601-020-00-8	200-753-7	71-43-2		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
16		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
17		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
18		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<8	µg/kg		<0.008	mg/kg	<0.0000008 %		<LOD
19		toluene	601-021-00-3	203-625-9	108-88-3		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
20		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
21		acenaphthene		201-469-6	83-32-9		0.19	mg/kg		0.163	mg/kg	0.0000163 %	✓	
22		anthracene		204-371-1	120-12-7		0.92	mg/kg		0.791	mg/kg	0.0000791 %	✓	
23		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.18	mg/kg		0.155	mg/kg	0.0000155 %	✓	
24		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.11	mg/kg		0.0946	mg/kg	0.00000946 %	✓	
25		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.11	mg/kg		0.0946	mg/kg	0.00000946 %	✓	
26		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		benzo[ghi]perylene		205-883-8	191-24-2		0.05	mg/kg		0.043	mg/kg	0.0000043 %	✓	
28		chrysene	601-048-00-0	205-923-4	218-01-9		0.31	mg/kg		0.267	mg/kg	0.0000267 %	✓	
29		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
30		fluoranthene		205-912-4	206-44-0		0.83	mg/kg		0.714	mg/kg	0.0000714 %	✓	
31		fluorene		201-695-5	86-73-7		0.37	mg/kg		0.318	mg/kg	0.0000318 %	✓	
32		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
33		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
34		phenanthrene		201-581-5	85-01-8		1.6	mg/kg		1.376	mg/kg	0.000138 %	✓	
35		pyrene		204-927-3	129-00-0		0.6	mg/kg		0.516	mg/kg	0.0000516 %	✓	
36		TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
37		chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		13	mg/kg	1.462	19	mg/kg	0.0019 %		
											Total:	0.0205 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non GB MCL determinands

monohydric phenols (CAS Number: P1186)

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)
Data source: CLP combined data
Data source date: 26 Mar 2019
Hazard Statements: Muta. 2; H341 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , Acute Tox. 3; H301 , STOT RE 2; H373 , Skin Corr. 1B; H314 , Skin Corr. 1B; H314 >= 3 % , Skin Irrit. 2; H315 1 <= conc. < 3 % , Eye Irrit. 2; H319 1 <= conc. < 3 % , Aquatic Chronic 2; H411

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

GB MCL index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

arsenic (EC Number: 231-148-6, CAS Number: 7440-38-2)

GB MCL index number: 033-001-00-X
Description/Comments: Worst Case: IARC considers arsenic Group 1; Carcinogenic to humans
Additional Hazard Statement(s): Carc. 1A; H350
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 1A; H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4
Description/Comments:
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2; H351

- **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

- **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

- **chromium(III) oxide** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from ECHA's C&L inventory database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 30 Apr 2020
Hazard Statements: Acute Tox. 4; H302 , Skin Sens. 1; H317 , Eye Irrit. 2; H319

Appendix B: Rationale for selection of metal species

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Most likely worst case.

arsenic {arsenic}

Most likely worst case.

cadmium {cadmium sulfide}

Most likely worst case.

copper {dicopper oxide; copper (I) oxide}

Most likely worst case.

mercury {mercury}

Most likely worst case.

nickel {nickel dihydroxide}

Most likely worst case.

lead {lead chromate}

Most likely worst case.

selenium {selenium}

Most likely worst case.

vanadium {divanadium pentaoxide; vanadium pentoxide}

Most likely worst case.

zinc {zinc sulphate}

Most likely worst case.

boron {boron tribromide}

Most likely worst case.

chromium in chromium(VI) compounds {chromium(VI) oxide}

Most likely worst case.

chromium in chromium(III) compounds {chromium(III) oxide}

Most likely worst case.

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2025.24.6453.11761 (25 Jan 2025)
HazWasteOnline Database: 2025.24.6453.11761 (25 Jan 2025)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
GB MCL List - version 1.1 of 09 June 2021
GB MCL List v2.0 - version 2.0 of 20th October 2023
GB MCL List v3.0 - version 3.0 of 11th January 2024
GB MCL List v4.0 - version 4.0 of 2nd March 2024
GB MCL List v5.0 - version 5.0 of 26th June 2024

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

a) understand the origin of the waste
b) select the correct List of Waste code(s)
c) confirm that the list of determinands, results and sampling plan are fit for purpose
d) select and justify the chosen metal species (Appendix B)
e) correctly apply moisture correction and other available corrections
f) add the meta data for their user-defined substances (Appendix A)
g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

9EKNB-JPUF4-0NLRR

Report is invalid if pages are removed.

Job name

GWPR6344 Old Clayton Kennels and Cattery, Storrington Road, Washington, West Sussex RH20 4AG[2]

Description/Comments

Project

GWPR6344

Site

Old Clayton Kennels and Cattery, Storrington Road, Washington, West Sussex RH20 4AG

Classified by

Name:
Roger Foord
Date:
17 Apr 2025 08:41 GMT
Telephone:
0333 600 1221

Company:
Ground and Water
2 The Long Barn, Norton Farm
Selborne Road
Alton
GU34 3NB

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: -

Course	Date
Hazardous Waste Classification	-

Purpose of classification

2 - Material Characterisation

Address of the waste

Old Clayton Kennels and Cattery, Storrington Road, Washington, West Sussex **Post Code** RH20 4AG

SIC for the process giving rise to the waste

41202 Construction of domestic buildings

Description of industry/producer giving rise to the waste

Redevelopment of former cattery with care home and 8 bungalows

Description of the specific process, sub-process and/or activity that created the waste

Waste created during foundation excavations.

Description of the waste

Made Ground comprising Dark brown clayey sandy GRAVEL. The sand was fine to coarse and the gravel was fine to coarse, sub-angular to sub-rounded flint (60%) and concrete (40%).

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	TP201--31032025-0.20		Non Hazardous		3
2	TP202--31032025-0.20		Non Hazardous		5
3	TP203--31032025-0.20		Non Hazardous		7
4	TP204--31032025-0.20		Non Hazardous		9
5	TP205--31032025-0.20		Non Hazardous		12
6	TP206--31032025-0.20		Non Hazardous		14
7	TP207--31032025-0.20		Non Hazardous		16
8	TP208--31032025-0.20		Non Hazardous		18
9	TP209--31032025-0.20		Non Hazardous		20
10	TP210--31032025-0.20		Non Hazardous		22

Related documents

#	Name	Description
1	25-016813_HWOL (1).hwol	i2 Analytical .hwol file used to populate the Job

Report

Created by: Roger Foord

Created date: 17 Apr 2025 08:41 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	24
Appendix B: Rationale for selection of metal species	25
Appendix C: Version	26

Classification of sample: TP201--31032025-0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP201--31032025-0.20
Moisture content:
18%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 18% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**
3	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<**LOD**
4	pH			PH		5.5 pH		5.5 pH	5.5 pH		
5	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.7 mg/kg	23.173	13.301 mg/kg	0.00133 %	✓	
6	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		8.3 mg/kg		6.806 mg/kg	0.000681 %	✓	
7	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<**LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		7.5 mg/kg	1.126	6.924 mg/kg	0.000692 %	✓	
9	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		8.6 mg/kg	1.579	11.139 mg/kg	0.00111 %	✓	
11	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	25.581 mg/kg	0.00164 %	✓	
12	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
13	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		24 mg/kg	1.785	35.132 mg/kg	0.00351 %	✓	
14	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		33 mg/kg	2.469	66.819 mg/kg	0.00668 %	✓	

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
16		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
17		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
18		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
19		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
20		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
21		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
22		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
23		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
24		pyrene		204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
25		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
26		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
27		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
28		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
29		fluoranthene		205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
31		chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		14	mg/kg	1.462	20.462	mg/kg	0.00205 %		
											Total:	0.0177 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP202--31032025-0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP202--31032025-0.20
Moisture content:
12%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**
3	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<**LOD**
4	pH			PH		5.5 pH		5.5 pH	5.5 pH		
5	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.7 mg/kg	23.173	14.275 mg/kg	0.00143 %	✓	
6	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		7.3 mg/kg		6.424 mg/kg	0.000642 %	✓	
7	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<**LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		7.1 mg/kg	1.126	7.035 mg/kg	0.000703 %	✓	
9	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		6.5 mg/kg	1.579	9.035 mg/kg	0.000903 %	✓	
11	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	22 mg/kg	1.56	30.198 mg/kg	0.00194 %	✓	
12	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
13	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		22 mg/kg	1.785	34.561 mg/kg	0.00346 %	✓	
14	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		30 mg/kg	2.469	65.189 mg/kg	0.00652 %	✓	

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
17		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
18		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
19		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
20		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
21		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
22		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
23		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24		pyrene		204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
28		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		fluoranthene		205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
30		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
31		benzene	601-020-00-8	200-753-7	71-43-2		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
32		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
33		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
34		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<8	µg/kg		<0.008	mg/kg	<0.0000008 %		<LOD
35		toluene	601-021-00-3	203-625-9	108-88-3		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
36		TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
37		chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		12	mg/kg	1.462	17.539	mg/kg	0.00175 %		
											Total:	0.0173 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP203--31032025-0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP203--31032025-0.20
Moisture content:
11%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**
3	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<**LOD**
4	pH			PH		6 pH		6 pH	6pH		
5	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.6 mg/kg	23.173	12.374 mg/kg	0.00124 %	✓	
6	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		7.5 mg/kg		6.675 mg/kg	0.000668 %	✓	
7	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<**LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		32 mg/kg	1.126	32.065 mg/kg	0.00321 %	✓	
9	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		0.8 mg/kg		0.712 mg/kg	0.0000712 %	✓	
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		6.5 mg/kg	1.579	9.137 mg/kg	0.000914 %	✓	
11	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	22 mg/kg	1.56	30.541 mg/kg	0.00196 %	✓	
12	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
13	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		24 mg/kg	1.785	38.132 mg/kg	0.00381 %	✓	
14	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		41 mg/kg	2.469	90.105 mg/kg	0.00901 %	✓	

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
17		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
18		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
19		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
20		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
21		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
22		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
23		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24		pyrene		204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
28		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		fluoranthene		205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
30		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
31		chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		12	mg/kg	1.462	17.539	mg/kg	0.00175 %		
											Total:	0.0226 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP204--31032025-0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP204--31032025-0.20
Moisture content:
13%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**
3	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<**LOD**
4	pH			PH		7.5 pH		7.5 pH	7.5 pH		
5	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.7 mg/kg	23.173	14.112 mg/kg	0.00141 %	✓	
6	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		8.1 mg/kg		7.047 mg/kg	0.000705 %	✓	
7	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<**LOD**
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		41 mg/kg	1.126	40.16 mg/kg	0.00402 %	✓	
9	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		8.1 mg/kg	1.579	11.131 mg/kg	0.00111 %	✓	
11	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	27.141 mg/kg	0.00174 %	✓	
12	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
13	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		23 mg/kg	1.785	35.722 mg/kg	0.00357 %	✓	
14	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		56 mg/kg	2.469	120.304 mg/kg	0.012 %	✓	

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
17		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
18		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
19		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
20		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
21		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
22		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
23		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24		pyrene		204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		chrysene	601-048-00-0	205-923-4	218-01-9		0.09	mg/kg		0.0783	mg/kg	0.00000783 %	✓	
28		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		fluoranthene		205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
30		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
31		benzene	601-020-00-8	200-753-7	71-43-2		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
32		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
33		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
34		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<8	µg/kg		<0.008	mg/kg	<0.0000008 %		<LOD
35		toluene	601-021-00-3	203-625-9	108-88-3		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
36		TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
37		asbestos	650-013-00-6	- - - - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001	%		<0.001	%	<0.001 %		<LOD
38		chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		13	mg/kg	1.462	19	mg/kg	0.0019 %		
											Total:	0.0265 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP205--31032025-0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP205--31032025-0.20
Moisture content:
14%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
3	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
4	pH			PH		7.2 pH		7.2 pH	7.2 pH		
5	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.9 mg/kg	23.173	17.936 mg/kg	0.00179 %	✓	
6	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		6.9 mg/kg		5.934 mg/kg	0.000593 %	✓	
7	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.2 mg/kg	1.285	0.221 mg/kg	0.0000172 %	✓	
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		39 mg/kg	1.126	37.762 mg/kg	0.00378 %	✓	
9	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		8.7 mg/kg	1.579	11.818 mg/kg	0.00118 %	✓	
11	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	24.146 mg/kg	0.00155 %	✓	
12	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		23 mg/kg	1.785	35.311 mg/kg	0.00353 %	✓	
14	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		53 mg/kg	2.469	112.551 mg/kg	0.0113 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		acenaphthylene											
			205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
16		acenaphthene											
			201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
17		anthracene											
			204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
18		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
19		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
20		indeno[123-cd]pyrene											
			205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
21		naphthalene											
		601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
22		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
23		phenanthrene											
			201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
24		pyrene											
			204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
25		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
26		benzo[ghi]perylene											
			205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
27		chrysene											
		601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
28		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
29		fluoranthene											
			205-912-4	206-44-0		0.05	mg/kg		0.043	mg/kg	0.0000043 %	✓	
30		fluorene											
			201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
31		chromium in chromium(III) compounds { chromium(III) oxide }											
			215-160-9	1308-38-9		14	mg/kg	1.462	20.462	mg/kg	0.00205 %		
										Total:	0.0257 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP206--31032025-0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP206--31032025-0.20
Moisture content:
12%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
3	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
4	pH			PH		6.9 pH		6.9 pH	6.9 pH		
5	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.7 mg/kg	23.173	14.275 mg/kg	0.00143 %	✓	
6	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		7.3 mg/kg		6.424 mg/kg	0.000642 %	✓	
7	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.2 mg/kg	1.285	0.226 mg/kg	0.0000176 %	✓	
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		35 mg/kg	1.126	34.677 mg/kg	0.00347 %	✓	
9	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		8.6 mg/kg	1.579	11.954 mg/kg	0.0012 %	✓	
11	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	21 mg/kg	1.56	28.825 mg/kg	0.00185 %	✓	
12	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		25 mg/kg	1.785	39.274 mg/kg	0.00393 %	✓	
14	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		62 mg/kg	2.469	134.725 mg/kg	0.0135 %	✓	

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
17		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
18		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
19		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
20		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
21		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
22		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
23		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24		pyrene		204-927-3	129-00-0		0.07	mg/kg		0.0616	mg/kg	0.00000616 %	✓	
25		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		chrysene	601-048-00-0	205-923-4	218-01-9		0.06	mg/kg		0.0528	mg/kg	0.00000528 %	✓	
28		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		fluoranthene		205-912-4	206-44-0		0.07	mg/kg		0.0616	mg/kg	0.00000616 %	✓	
30		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
31		benzene	601-020-00-8	200-753-7	71-43-2		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
32		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
33		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
34		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<8	µg/kg		<0.008	mg/kg	<0.0000008 %		<LOD
35		toluene	601-021-00-3	203-625-9	108-88-3		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
36		TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
37		chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		16	mg/kg	1.462	23.385	mg/kg	0.00234 %		
											Total:	0.0284 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP207--31032025-0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP207--31032025-0.20
Moisture content:
11%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
3	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
4	pH			PH		5.2 pH		5.2 pH	5.2 pH		
5	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.7 mg/kg	23.173	14.437 mg/kg	0.00144 %	✓	
6	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		7.6 mg/kg		6.764 mg/kg	0.000676 %	✓	
7	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		39 mg/kg	1.126	39.08 mg/kg	0.00391 %	✓	
9	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		7.9 mg/kg	1.579	11.105 mg/kg	0.00111 %	✓	
11	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	21 mg/kg	1.56	29.153 mg/kg	0.00187 %	✓	
12	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		24 mg/kg	1.785	38.132 mg/kg	0.00381 %	✓	
14	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		41 mg/kg	2.469	90.105 mg/kg	0.00901 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		acenaphthylene											
			205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
16		acenaphthene											
			201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
17		anthracene											
			204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
18		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
19		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
20		indeno[123-cd]pyrene											
			205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
21		naphthalene											
		601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
22		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
23		phenanthrene											
			201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
24		pyrene											
			204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
25		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
26		benzo[ghi]perylene											
			205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
27		chrysene											
		601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
28		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
29		fluoranthene											
			205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		fluorene											
			201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
31		chromium in chromium(III) compounds { chromium(III) oxide }											
			215-160-9	1308-38-9		13	mg/kg	1.462	19	mg/kg	0.0019 %		
										Total:	0.0237 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP208--31032025-0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP208--31032025-0.20
Moisture content:
13%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
3	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
4	pH			PH		7.4 pH		7.4 pH	7.4 pH		
5	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.6 mg/kg	23.173	12.096 mg/kg	0.00121 %	✓	
6	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		8 mg/kg		6.96 mg/kg	0.000696 %	✓	
7	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.2 mg/kg	1.285	0.224 mg/kg	0.0000174 %	✓	
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		33 mg/kg	1.126	32.324 mg/kg	0.00323 %	✓	
9	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		8.1 mg/kg	1.579	11.131 mg/kg	0.00111 %	✓	
11	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	21 mg/kg	1.56	28.498 mg/kg	0.00183 %	✓	
12	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		25 mg/kg	1.785	38.828 mg/kg	0.00388 %	✓	
14	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		41 mg/kg	2.469	88.08 mg/kg	0.00881 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
16		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
17		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-371-1	120-12-7									
18		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
19		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
20		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-893-2	193-39-5									
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
22		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
23		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-581-5	85-01-8									
24		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-927-3	129-00-0									
25		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
26		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-883-8	191-24-2									
27		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
28		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
29		fluoranthene				0.05	mg/kg		0.0435	mg/kg	0.00000435 %	✓	
			205-912-4	206-44-0									
30		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7									
31		benzene				<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
32		ethylbenzene				<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
33		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
34		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<8	µg/kg		<0.008	mg/kg	<0.0000008 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
35		toluene				<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
36		TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
				TPH									
37		chromium in chromium(III) compounds { chromium(III) oxide }				13	mg/kg	1.462	19	mg/kg	0.0019 %		
			215-160-9	1308-38-9									
										Total:	0.0227 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP209--31032025-0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP209--31032025-0.20
Moisture content:
11%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
3	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
4	pH			PH		5.5 pH		5.5 pH	5.5 pH		
5	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.6 mg/kg	23.173	12.374 mg/kg	0.00124 %	✓	
6	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		8.6 mg/kg		7.654 mg/kg	0.000765 %	✓	
7	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		11 mg/kg	1.126	11.022 mg/kg	0.0011 %	✓	
9	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		8 mg/kg	1.579	11.246 mg/kg	0.00112 %	✓	
11	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	24.988 mg/kg	0.0016 %	✓	
12	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		27 mg/kg	1.785	42.898 mg/kg	0.00429 %	✓	
14	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		34 mg/kg	2.469	74.721 mg/kg	0.00747 %	✓	

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
15		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
16		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
17		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
18		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.07	mg/kg		0.0623	mg/kg	0.00000623 %	✓	
19		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.06	mg/kg		0.0534	mg/kg	0.00000534 %	✓	
20		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
21		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
22		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.12	mg/kg		0.107	mg/kg	0.0000107 %	✓	
23		phenanthrene		201-581-5	85-01-8		0.07	mg/kg		0.0623	mg/kg	0.00000623 %	✓	
24		pyrene		204-927-3	129-00-0		0.17	mg/kg		0.151	mg/kg	0.0000151 %	✓	
25		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
26		benzo[ghi]perylene		205-883-8	191-24-2		0.06	mg/kg		0.0534	mg/kg	0.00000534 %	✓	
27		chrysene	601-048-00-0	205-923-4	218-01-9		0.11	mg/kg		0.0979	mg/kg	0.00000979 %	✓	
28		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
29		fluoranthene		205-912-4	206-44-0		0.17	mg/kg		0.151	mg/kg	0.0000151 %	✓	
30		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
31		chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		15	mg/kg	1.462	21.923	mg/kg	0.00219 %		
											Total:	0.0199 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP210--31032025-0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP210--31032025-0.20
Moisture content:
12%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
3	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
4	pH			PH		6.8 pH		6.8 pH	6.8 pH		
5	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.6 mg/kg	23.173	12.235 mg/kg	0.00122 %	✓	
6	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		8 mg/kg		7.04 mg/kg	0.000704 %	✓	
7	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.2 mg/kg	1.285	0.226 mg/kg	0.0000176 %	✓	
8	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		37 mg/kg	1.126	36.659 mg/kg	0.00367 %	✓	
9	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
10	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		9.7 mg/kg	1.579	13.483 mg/kg	0.00135 %	✓	
11	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	23 mg/kg	1.56	31.571 mg/kg	0.00202 %	✓	
12	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		27 mg/kg	1.785	42.416 mg/kg	0.00424 %	✓	
14	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		49 mg/kg	2.469	106.476 mg/kg	0.0106 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
15		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
16		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
17		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-371-1	120-12-7									
18		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
19		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
20		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-893-2	193-39-5									
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
22		benzo[b]fluoranthene				0.07	mg/kg		0.0616	mg/kg	0.00000616 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-581-5	85-01-8									
24		pyrene				0.07	mg/kg		0.0616	mg/kg	0.00000616 %	✓	
			204-927-3	129-00-0									
25		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
26		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-883-8	191-24-2									
27		chrysene				0.07	mg/kg		0.0616	mg/kg	0.00000616 %	✓	
		601-048-00-0	205-923-4	218-01-9									
28		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
29		fluoranthene				0.09	mg/kg		0.0792	mg/kg	0.00000792 %	✓	
			205-912-4	206-44-0									
30		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7									
31		benzene				<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
32		ethylbenzene				<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
33		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
34		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<8	µg/kg		<0.008	mg/kg	<0.0000008 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
35		toluene				<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
36		TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
				TPH									
37		chromium in chromium(III) compounds { chromium(III) oxide }				15	mg/kg	1.462	21.923	mg/kg	0.00219 %		
			215-160-9	1308-38-9									
										Total:	0.0261 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non GB MCL determinands

monohydric phenols (CAS Number: P1186)

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)
Data source: CLP combined data
Data source date: 26 Mar 2019
Hazard Statements: Muta. 2; H341 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , Acute Tox. 3; H301 , STOT RE 2; H373 , Skin Corr. 1B; H314 , Skin Corr. 1B; H314 >= 3 % , Skin Irrit. 2; H315 1 <= conc. < 3 % , Eye Irrit. 2; H319 1 <= conc. < 3 % , Aquatic Chronic 2; H411

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

GB MCL index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

arsenic (EC Number: 231-148-6, CAS Number: 7440-38-2)

GB MCL index number: 033-001-00-X
Description/Comments: Worst Case: IARC considers arsenic Group 1; Carcinogenic to humans
Additional Hazard Statement(s): Carc. 1A; H350
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 1A; H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2; H351

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

chromium(III) oxide (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from ECHA's C&L inventory database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 30 Apr 2020
Hazard Statements: Acute Tox. 4; H302 , Skin Sens. 1; H317 , Eye Irrit. 2; H319

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4
Description/Comments:
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

Appendix B: Rationale for selection of metal species

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Most likely worst case.

chromium in chromium(VI) compounds {chromium(VI) oxide}

Most likely worst case.

boron {boron tribromide}

Most likely worst case.

arsenic {arsenic}

Most likely worst case.

cadmium {cadmium sulfide}

Most likely worst case.

copper {dicopper oxide; copper (I) oxide}

Most likely worst case.

mercury {mercury}

Most likely worst case.

nickel {nickel dihydroxide}

Most likely worst case.

lead {lead chromate}

Most likely worst case.

selenium {selenium}

Most likely worst case.

vanadium {divanadium pentaoxide; vanadium pentoxide}

Most likely worst case.

zinc {zinc sulphate}

Most likely worst case.

chromium in chromium(III) compounds {chromium(III) oxide}

Most likely worst case.

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2025.106.6568.11951 (16 Apr 2025)
HazWasteOnline Database: 2025.106.6568.11951 (16 Apr 2025)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
GB MCL List - version 1.1 of 09 June 2021
GB MCL List v2.0 - version 2.0 of 20th October 2023
GB MCL List v3.0 - version 3.0 of 11th January 2024
GB MCL List v4.0 - version 4.0 of 2nd March 2024
GB MCL List v5.0 - version 5.0 of 26th June 2024
GB MCL List v6.0 - version 6.0 of 15th February 2025

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

a) understand the origin of the waste
b) select the correct List of Waste code(s)
c) confirm that the list of determinands, results and sampling plan are fit for purpose
d) select and justify the chosen metal species (Appendix B)
e) correctly apply moisture correction and other available corrections
f) add the meta data for their user-defined substances (Appendix A)
g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

YGD8G-GEKGF-NKJ6D

Report is invalid if pages are removed.

Job name

GWPR6344 The Old Clayton Kennels and Cattery, Storrington Road, Washington RH20 4AG

Description/Comments

Project

GWPR6344

Site

The Old Clayton Kennels and Cattery, Storrington Road, Washington RH20 4AG

Classified by

Name:
Roger Foord
Date:
28 May 2025 09:44 GMT
Telephone:
0333 600 1221

Company:
Ground and Water
2 The Long Barn, Norton Farm
Selborne Road
Alton
GU34 3NB

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: -

Course	Date
Hazardous Waste Classification	-

Purpose of classification

2 - Material Characterisation

Address of the waste

The Old Clayton Kennels and Cattery, Storrington Road, Washington **Post Code** RH20 4AG

SIC for the process giving rise to the waste

41202 Construction of domestic buildings

Description of industry/producer giving rise to the waste

Redevelopment of former kennels and cattery

Description of the specific process, sub-process and/or activity that created the waste

Waste created during foundation excavations

Description of the waste

Made Ground comprising a pale brown sandy gravelly CLAY. Sand is fine to medium grained. Gravel is sub-angular to sub-rounded fine to coarse brick (40%), concrete (40%), flint (10%), slate (5%) and metal (5%).

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	TP301--07052025-0.50		Non Hazardous		3
2	TP302--07052025-0.30		Non Hazardous		5
3	TP303--07052025-0.15		Non Hazardous		7
4	TP304--07052025-0.15		Hazardous	HP 8	9
5	TP305--07052025-0.20		Non Hazardous		12

Related documents

#	Name	Description
1	25-023917_HWOL (1).hwol	i2 Analytical .hwol file used to populate the Job

Report

Created by: Roger Foord

Created date: 28 May 2025 09:44 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	14
Appendix B: Rationale for selection of metal species	15
Appendix C: Version	16

Classification of sample: TP301--07052025-0.50

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP301--07052025-0.50
Moisture content:
12%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
4	pH			PH		7.6 pH		7.6 pH	7.6 pH		
5	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		7.9 mg/kg		6.952 mg/kg	0.000695 %	✓	
6	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		16 mg/kg	1.126	15.853 mg/kg	0.00159 %	✓	
8	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		12 mg/kg	1.579	16.68 mg/kg	0.00167 %	✓	
10	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	20.59 mg/kg	0.00132 %	✓	
11	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		28 mg/kg	1.785	43.987 mg/kg	0.0044 %	✓	
13	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		130 mg/kg	2.469	282.488 mg/kg	0.0282 %	✓	
14	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1.5 mg/kg	23.173	30.588 mg/kg	0.00306 %	✓	
15	acenaphthylene		205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
16		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
17		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
18		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
19		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
20		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
21		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
22		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
23		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
24		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
25		fluoranthene		205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
26		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
27		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
28		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
29		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		pyrene		204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
31		chromium in Cr(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		18	mg/kg	1.462	26.308	mg/kg	0.00263 %		
											Total:	0.0436 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP302--07052025-0.30

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP302--07052025-0.30
Moisture content:
8.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
4	pH			PH		8.1 pH		8.1 pH	8.1 pH		
5	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		7.6 mg/kg		6.924 mg/kg	0.000692 %	✓	
6	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.2 mg/kg	1.285	0.234 mg/kg	0.0000182 %	✓	
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		14 mg/kg	1.126	14.36 mg/kg	0.00144 %	✓	
8	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		9.9 mg/kg	1.579	14.245 mg/kg	0.00142 %	✓	
10	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	12 mg/kg	1.56	17.052 mg/kg	0.00109 %	✓	
11	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		25 mg/kg	1.785	40.658 mg/kg	0.00407 %	✓	
13	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		54 mg/kg	2.469	121.475 mg/kg	0.0121 %	✓	
14	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1.4 mg/kg	23.173	29.555 mg/kg	0.00296 %	✓	
15	acenaphthylene		205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
16		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
17		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
18		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
19		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
20		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
21		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
22		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
23		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
24		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25		fluoranthene		205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
28		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
30		pyrene		204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
31		benzene	601-020-00-8	200-753-7	71-43-2		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
32		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
33		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
34		xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
35		toluene	601-021-00-3	203-625-9	108-88-3		<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
36		TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
37		chromium in Cr(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		17	mg/kg	1.462	24.846	mg/kg	0.00248 %		
											Total:	0.0263 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP303--07052025-0.15

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP303--07052025-0.15
Moisture content:
8.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
4	pH			PH		6 pH		6 pH	6pH		
5	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		9.4 mg/kg		8.601 mg/kg	0.00086 %	✓	
6	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		10 mg/kg	1.126	10.302 mg/kg	0.00103 %	✓	
8	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		8.3 mg/kg	1.579	11.996 mg/kg	0.0012 %	✓	
10	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	26 mg/kg	1.56	37.108 mg/kg	0.00238 %	✓	
11	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		23 mg/kg	1.785	37.569 mg/kg	0.00376 %	✓	
13	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		37 mg/kg	2.469	83.598 mg/kg	0.00836 %	✓	
14	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.4 mg/kg	23.173	8.481 mg/kg	0.000848 %	✓	
15	acenaphthylene		205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
16		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
17		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
18		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.05	mg/kg		0.0457	mg/kg	0.00000457 %	✓	
19		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
20		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
21		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
22		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
23		chrysene	601-048-00-0	205-923-4	218-01-9		0.07	mg/kg		0.0641	mg/kg	0.00000641 %	✓	
24		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
25		fluoranthene		205-912-4	206-44-0		0.1	mg/kg		0.0915	mg/kg	0.00000915 %	✓	
26		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
28		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
30		pyrene		204-927-3	129-00-0		0.09	mg/kg		0.0823	mg/kg	0.00000823 %	✓	
31		chromium in Cr(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		12	mg/kg	1.462	17.539	mg/kg	0.00175 %		
											Total:	0.0202 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP304--07052025-0.15

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample name:
TP304--07052025-0.15
Moisture content:
7.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 8: Corrosive "waste which on application can cause skin corrosion"

pH; pH "Assumed to be irritant/corrosive because of pH value"

Because of determinand:

pH (conc.: 11.5 pH)

Determinands

Moisture content: 7.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
2	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<**LOD**
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**
4	pH			PH		11.5 pH		11.5 pH	11.5 pH		
5	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		8.1 mg/kg		7.484 mg/kg	0.000748 %	✓	
6	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.3 mg/kg	1.285	0.356 mg/kg	0.0000277 %	✓	
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		23 mg/kg	1.126	23.927 mg/kg	0.00239 %	✓	
8	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		9.1 mg/kg	1.579	13.281 mg/kg	0.00133 %	✓	
10	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	40 mg/kg	1.56	57.651 mg/kg	0.0037 %	✓	
11	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		1.1 mg/kg		1.016 mg/kg	0.000102 %	✓	
12	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		24 mg/kg	1.785	39.588 mg/kg	0.00396 %	✓	

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
13	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		100 mg/kg	2.469	228.163 mg/kg	0.0228 %	✓	
14	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		0.7 mg/kg	23.173	14.988 mg/kg	0.0015 %	✓	
15	acenaphthylene		205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
16	acenaphthene		201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
17	anthracene		204-371-1	120-12-7		0.05 mg/kg		0.0462 mg/kg	0.00000462 %	✓	
18	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.24 mg/kg		0.222 mg/kg	0.0000222 %	✓	
19	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.36 mg/kg		0.333 mg/kg	0.0000333 %	✓	
20	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.39 mg/kg		0.36 mg/kg	0.000036 %	✓	
21	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.16 mg/kg		0.148 mg/kg	0.0000148 %	✓	
22	benzo[ghi]perylene		205-883-8	191-24-2		0.25 mg/kg		0.231 mg/kg	0.0000231 %	✓	
23	chrysene	601-048-00-0	205-923-4	218-01-9		0.31 mg/kg		0.286 mg/kg	0.0000286 %	✓	
24	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
25	fluoranthene		205-912-4	206-44-0		0.48 mg/kg		0.444 mg/kg	0.0000444 %	✓	
26	fluorene		201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
27	indeno[123-cd]pyrene		205-893-2	193-39-5		0.19 mg/kg		0.176 mg/kg	0.0000176 %	✓	
28	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
29	phenanthrene		201-581-5	85-01-8		0.18 mg/kg		0.166 mg/kg	0.0000166 %	✓	
30	pyrene		204-927-3	129-00-0		0.48 mg/kg		0.444 mg/kg	0.0000444 %	✓	
31	benzene	601-020-00-8	200-753-7	71-43-2		<5 µg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
32	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<5 µg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
33	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<5 µg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
34	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<5 µg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
35	toluene	601-021-00-3	203-625-9	108-88-3		<5 µg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
36	TPH (C6 to C40) petroleum group			TPH		130 mg/kg		130 mg/kg	0.013 %		
37	chromium in Cr(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		18 mg/kg	1.462	26.308 mg/kg	0.00263 %		
								Total:	0.0525 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"
Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 10000 mg/kg (1%) because: Heavy end hydrocarbons unlikely to be flammable at the concentrations noted

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.013%)

Classification of sample: TP305--07052025-0.20

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP305--07052025-0.20
Moisture content:
19%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 19% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	monohydric phenols			P1186		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
4	pH			PH		7.7 pH		7.7 pH	7.7 pH		
5	arsenic { arsenic }	033-001-00-X	231-148-6	7440-38-2		12 mg/kg		9.72 mg/kg	0.000972 %	✓	
6	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.4 mg/kg	1.285	0.416 mg/kg	0.0000324 %	✓	
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		95 mg/kg	1.126	86.637 mg/kg	0.00866 %	✓	
8	mercury { mercury }	080-001-00-0	231-106-7	7439-97-6		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		18 mg/kg	1.579	23.029 mg/kg	0.0023 %	✓	
10	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	170 mg/kg	1.56	214.787 mg/kg	0.0138 %	✓	
11	selenium { selenium }	034-001-00-2	231-957-4	7782-49-2		1.1 mg/kg		0.891 mg/kg	0.0000891 %	✓	
12	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		28 mg/kg	1.785	40.488 mg/kg	0.00405 %	✓	
13	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]		270 mg/kg	2.469	540.035 mg/kg	0.054 %	✓	
14	boron { boron tribromide }	005-003-00-0	233-657-9	10294-33-4		1.2 mg/kg	23.173	22.524 mg/kg	0.00225 %	✓	
15	acenaphthylene		205-917-1	208-96-8		0.07 mg/kg		0.0567 mg/kg	0.00000567 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
17		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
18		benzo[a]anthracene				0.43	mg/kg		0.348	mg/kg	0.0000348 %	✓	
		601-033-00-9	200-280-6	56-55-3									
19		benzo[a]pyrene; benzo[def]chrysene				0.62	mg/kg		0.502	mg/kg	0.0000502 %	✓	
		601-032-00-3	200-028-5	50-32-8									
20		benzo[b]fluoranthene				1	mg/kg		0.81	mg/kg	0.000081 %	✓	
		601-034-00-4	205-911-9	205-99-2									
21		benzo[k]fluoranthene				1.1	mg/kg		0.891	mg/kg	0.0000891 %	✓	
		601-036-00-5	205-916-6	207-08-9									
22		benzo[ghi]perylene				0.37	mg/kg		0.3	mg/kg	0.00003 %	✓	
			205-883-8	191-24-2									
23		chrysene				0.54	mg/kg		0.437	mg/kg	0.0000437 %	✓	
		601-048-00-0	205-923-4	218-01-9									
24		dibenz[a,h]anthracene				0.09	mg/kg		0.0729	mg/kg	0.00000729 %	✓	
		601-041-00-2	200-181-8	53-70-3									
25		fluoranthene				0.79	mg/kg		0.64	mg/kg	0.000064 %	✓	
			205-912-4	206-44-0									
26		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
27		indeno[123-cd]pyrene				0.35	mg/kg		0.284	mg/kg	0.0000284 %	✓	
			205-893-2	193-39-5									
28		naphthalene				0.06	mg/kg		0.0486	mg/kg	0.00000486 %	✓	
		601-052-00-2	202-049-5	91-20-3									
29		phenanthrene				0.22	mg/kg		0.178	mg/kg	0.0000178 %	✓	
			201-581-5	85-01-8									
30		pyrene				0.74	mg/kg		0.599	mg/kg	0.0000599 %	✓	
			204-927-3	129-00-0									
31		benzene				<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
32		ethylbenzene				<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
33		xylene				<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
34		toluene				<5	µg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
35		coronene				0.15	mg/kg		0.122	mg/kg	0.0000121 %	✓	
			205-881-7	191-07-1									
36		polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
37		chromium in Cr(III) compounds { chromium(III) oxide }				16	mg/kg	1.462	23.385	mg/kg	0.00234 %		
			215-160-9	1308-38-9									
										Total:	0.089 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non GB MCL determinands

monohydric phenols (CAS Number: P1186)

Description/Comments: Combined hazards statements from harmonised entries in CLP for phenol, cresols and xylenols (604-001-00-2, 604-004-00-9, 604-006-00-X)
Data source: CLP combined data
Data source date: 26 Mar 2019
Hazard Statements: Muta. 2; H341 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , Acute Tox. 3; H301 , STOT RE 2; H373 , Skin Corr. 1B; H314 , Skin Corr. 1B; H314 >= 3 % , Skin Irrit. 2; H315 1 <= conc. < 3 % , Eye Irrit. 2; H319 1 <= conc. < 3 % , Aquatic Chronic 2; H411

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

GB MCL index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

arsenic (EC Number: 231-148-6, CAS Number: 7440-38-2)

GB MCL index number: 033-001-00-X
Description/Comments: Worst Case: IARC considers arsenic Group 1; Carcinogenic to humans
Additional Hazard Statement(s): Carc. 1A; H350
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 1A; H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2; H351

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

chromium(III) oxide (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from ECHA's C&L inventory database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 30 Apr 2020
Hazard Statements: Acute Tox. 4; H302 , Skin Sens. 1; H317 , Eye Irrit. 2; H319

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4
Description/Comments:
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Unknown Oil

Hazard statements taken from WM3 1st Edition 2015
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

coronene (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source: http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2; H371

polychlorobiphenyls; PCB (EC Number: 215-648-1, CAS Number: 1336-36-3)

GB MCL index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans;

POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Additional Hazard Statement(s): Carc. 1A; H350
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 1A; H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

Appendix B: Rationale for selection of metal species

chromium in Cr(VI) compounds {chromium(VI) oxide}

Most likely worst case.

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Most likely worst case.

arsenic {arsenic}

Most likely worst case.

cadmium {cadmium sulfide}

Most likely worst case.

copper {dicopper oxide; copper (I) oxide}

Most likely worst case.

mercury {mercury}

Most likely worst case.

nickel {nickel dihydroxide}

Most likely worst case.

lead {lead chromate}

Most likely worst case.

selenium {selenium}

Most likely worst case.

vanadium {divanadium pentaoxide; vanadium pentoxide}

Most likely worst case.

zinc {zinc sulphate}

Most likely worst case.

boron {boron tribromide}

Most likely worst case.

chromium in Cr(III) compounds {chromium(III) oxide}

Most likely worst case.

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2025.142.6646.12090 (22 May 2025)
HazWasteOnline Database: 2025.142.6646.12090 (22 May 2025)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
GB MCL List - version 1.1 of 09 June 2021
GB MCL List v2.0 - version 2.0 of 20th October 2023
GB MCL List v3.0 - version 3.0 of 11th January 2024
GB MCL List v4.0 - version 4.0 of 2nd March 2024
GB MCL List v5.0 - version 5.0 of 26th June 2024
GB MCL List v6.0 - version 6.0 of 15th February 2025