



Geo-Environmental

GROUND APPRAISAL REPORT

for the land at

PARK FARM AREA, BOORLEY GARDENS

WINCHESTER ROAD, HEDGE END

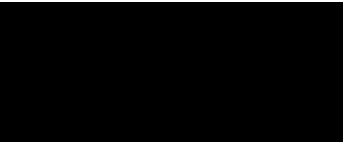
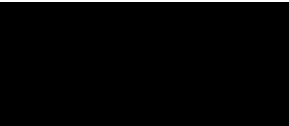
SOUTHAMPTON, SO32 2UA

on behalf of

BELLWAY HOMES & MILLER HOMES





Report:	GROUND APPRAISAL REPORT
Site:	PARK FARM AREA, BOORLEY GARDENS, WINCHESTER ROAD, HEDGE END, SOUTHAMPTON, SO32 2UA
Client:	BELLWAY HOMES & MILLER HOMES
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EXECUTIVE SUMMARY		
Site Details	Site Address	Park Farm, Boorley Gardens, Winchester Road, Hedge End, Southampton, SO32 2UA
	National Grid Reference	450346, 115099
	Site Area	2.5ha (approx.)
	Form of Development	The construction of a residential development including private gardens, access roads and associated development infrastructure.
Encountered Conditions	Scope of Works	The assessment comprised an intrusive investigation targeting potential sources of soil, groundwater and ground gas contamination to confirm the ground and groundwater conditions and support the development of updated geo-environmental assessments of the site in relation to the proposed development.
	Ground Conditions	The ground conditions encountered comprised a mantle of Topsoil or Made Ground overlying clay-based soils of the Wittering Formation with the London Clay Formation present at depth. Visual and olfactory evidence of hydrocarbon contamination was recorded in WS202.
	Groundwater	Groundwater was encountered at depths between 0.90m and 2.00m bgl during the investigation. Monitoring in May and June 2022 recorded groundwater depths ranging between 0.59m and 2.98m bgl.
Environmental Considerations	Human Health	This phase of contamination assessment did not identify any elevated contaminant concentrations. However, elevated PAH and asbestos was recorded during a previous phase of investigation within the Made Ground soils at the site. In addition, whilst below respective human health screening criteria values, some elevated concentrations of TPH compounds were identified in soils tested from WS202. Further post demolition investigation will be required to confirm the extent and status of the Made Ground soils.
	Groundwater	Minor hydrocarbon impact was observed in soils in WS202 adjacent to an above ground diesel tank, with some potential hydrocarbon breakdown products identified in soils analysed. A groundwater sample from this location recorded elevated metal compounds and three volatile organic compounds (VOCs). The metal concentrations were considered representative of general background groundwater quality in the area of the site. The VOCs were potentially associated with the natural breakdown and degradation of minor spillages of fuels at the site. Based on proposals to remove the tank and the testing undertaken to date, no remediation in terms of risks to groundwater is required at this stage. However, further localised investigation should be undertaken in the area of the diesel tank following demolition and site clearance.
	Ground Gas	A Detailed Quantitative Gas Risk Assessment has been undertaken by Geo-Environmental for the site (ref. GE20584/DQGRA/JUN22, dated 30 th June 2022). The assessment concluded that the site should be considered a Characteristic Situation 1 classification, with no requirement for gas protection measures.
	Radon Gas	No radon protection measures are required.
	Built Environment	On the basis of testing undertaken to date, barrier pipe would be required within the area of WS202 due to recorded TPH in the C11-C20 range and SVOC concentrations. The remaining analysis indicates that PE pipework would likely be suitable in other areas of the site.
	Waste Disposal	The following information is provided for preliminary guidance purposes, as different facilities or operators may have differing acceptance criteria and further waste characterisation and Waste Acceptance Criteria (WAC) analysis may be required to confirm the exact classification. The soil analyses from the site were assessed using HazWasteOnline software. The sample from WS202 at 1.00m bgl was assessed to be hazardous waste due to the recorded TPH concentration. None of the other samples assessed were indicated to represent potentially hazardous waste.

EXECUTIVE SUMMARY

Further Action:

- Post demolition investigation of the Park Farm Area to confirm the extent of asbestos and PAH impacted Made Ground along with localised investigation in the area of the above ground diesel tank following removal.
- A discovery strategy must be maintained during development such that if any abnormal conditions (geotechnical or potential contamination) are identified an appropriate course of action can be followed and their potential impact on the proposed development assessed prior to determining any potential mitigation measures.
- If abnormal conditions are encountered, Geotechnical/Geo-Environmental advice must be sought (at the earliest practicable opportunity) to determine a suitable source of action.

This Executive Summary is intended to provide a brief summary of the main findings and conclusions of the investigation. For detailed information, the reader is referred to the main report ref. GE20584/GAR/JUN22.



1.0 INTRODUCTION

1.1 General

Geo-Environmental Services Limited (Geo-Environmental) was appointed by Jackson Rowe on behalf of Bellway Homes and Miller Homes (the joint Client) to undertake an investigation of the geo-environmental factors pertaining to the proposed development of land at Park Farm, Boorley Gardens, Winchester Road, Hedge End, Southampton, SO32 2UA (herein referred to as 'the site').

The Park Farm Area lies within the wider Boorley Gardens site. The site's location is presented in Figure 1.

The site has been subject to a desk study and two phases of intrusive investigations undertaken by third parties. Details and an overview of the findings of these reports are summarised in Section 2.1.

1.2 Form of Development

The proposed development is understood to comprise a residential development with private gardens, associated landscaping and public open space, vehicular access and parking provision together with associated development infrastructure. The proposed development is shown on Figure 4.

1.3 Objectives

The investigation was undertaken to update the quantitative risk assessment for soils and controlled waters as well as to provide data for a detailed quantitative ground gas risk assessment (DQGRA) for the site.

A detailed quantitative risk assessment was undertaken as part of this report. The objective of the risk assessment was to evaluate the risks posed to the proposed redevelopment, adjacent land uses and the wider environment, in the context of likely planning requirements, immediate liabilities under the Environmental Protection Act 1990 and risks posed to Controlled Waters under the Water Resources Act from the current status of the site and in line with the proposed redevelopment.

1.4 Standards and References

Where practicable, the ground investigation and subsequent geotechnical and environmental assessments were undertaken in accordance with the following documents and guidance.

- National Planning Policy Framework – July 2021;
- Land Contamination Risk Management (LCRM), April 2021;
- Model Procedures for the Management of Contaminated Land, CLR11, DEFRA and Environment Agency 2004 (withdrawn);
- Environment Agency Guidance on Requirements for Land Contamination Reports, Version 1 dated July 2005;
- BS10175:2011+A2:2017 - Investigation of Potentially Contaminated Sites - Code of Practice, BSI 2017;
- BS5930: 2015+A1:2020 - Code of Practice for Site Investigations, BSI 2020;
- CIRIA C665 – Assessing risks posed by hazardous ground gases to buildings (2007);
- NHBC 10627-R01(04)- Guidance on evaluation of development proposals on sites where methane and carbon dioxide are present (2007);
- BS8485:2015+A1:2019 Code of practice for the characterisation and remediation from ground gas in affected developments.



1.5 Conditions

This report does not purport to be a “Geotechnical Design Report” as defined in Clause 2.8 of Eurocode 7 (Geotechnical Design BS EN 1997-1:2004) and some of the data used to support this preliminary geotechnical assessment may not be fully compliant with that design code. It is considered possible that further detailed ground investigations could be required to facilitate the detailed geotechnical design process and should be carried out on a structure specific basis if necessary.

The data collected from the investigations have been used to provide an interpretation of the geotechnical and/or environmental conditions pertaining to the site. The recommendations and opinions expressed in this report are based on the data obtained. Geo-Environmental takes no responsibility for conditions that either have not been revealed in the available records, or that occur between or under points of physical investigation, or that result from updates to desk based data utilised subsequent to that presented herein and at the time of writing which may in turn alter the presented assessment. Whilst every effort has been made to interpret the conditions, such information is only indicative and liability cannot be accepted for its accuracy.

It should be noted that in particular the concentrations and levels of mobile liquid and gaseous materials are likely to vary with time. The results obtained may therefore only be representative of the conditions at the time of sampling. The absence of asbestos within soil samples analysed does not guarantee the absence of asbestos within buildings, within or bonded to concrete, as discrete burials, or within the soils mass elsewhere within a site. This report must not be taken as any guarantee that a site is free of hazardous or potentially contaminative materials.

Information contained in this report is intended for the use of the Client and Geo-Environmental can take no responsibility for the use of this information by any party for uses other than that described in this report. Geo-Environmental makes no warranty or representation whatsoever express or implied with respect to the use of this information by any third party. Geo-Environmental does not indemnify the Client or any third parties against any dispute or claim arising from any finding or other result of this investigation report or any consequential losses.

Assessment criteria or other parameters developed for the evaluation of contamination on this site are based on a number of assumptions regarding exposure and toxicology. Exposure to contaminants and levels of adverse effects may therefore vary. Whilst reasonable care and expertise has been employed in the development of such criteria, no liability is accepted in this respect. Other criteria or guidance on the development of assessment criteria may be published in the future and no liability is accepted in this respect.

The absence of asbestos noted during the site walkover or within any soil samples analysed does not guarantee the absence of asbestos within buildings, within or bonded to concrete, as discrete burials, or within the soil mass elsewhere within a site. This report must not be taken as, or assumed to imply, any guarantee that a site is free of hazardous or potentially contaminative materials.

This report remains the property of Geo-Environmental and the Client has no rights to, or reliance upon this document or supporting documents until such time as payment has been received in full for all invoices for works undertaken in connection with this report.



2.0 SITE CONTEXT

2.1 Previous Reports

A desk study and two phases of third party intrusive investigations have been undertaken for the wider Boorley Gardens site including the Park Farm Area, details of which are provided below:

- Desk Study Report, Ref. E-E1589/LJE/CDS, dated November 2014, prepared by Opus International Consultants (UK) Ltd for Gleeson Developments, Miller Homes and Welbeck Strategic Land LLP;
- Geo Environmental Site Investigation Report, Ref. BRD2924-OR1-C, dated 21st July 2017, prepared by BRD Environmental for Gleeson Strategic Land and Miller Homes;
- Geo-Environmental Report, Ref. CRM.1668.012.GE.R.001.A, dated January 2021, prepared by Enzygo Geoenvironmental for Bellway Homes.

An overview of salient findings of the investigations pertaining to the site to date is presented below. For further information, the original reports should be referred to directly. The factual correctness of third party information is assumed and no liability can be accepted for errors, omissions or inaccuracies in such information within the data reported, or assessment undertaken and based on any such erroneous information. It is assumed that the Client has formal reliance on these third party reports.

Opus (2014)

The report comprised a review of historical mapping and environmental dataset information pertaining to the site, an account of a site walkover and a preliminary risk assessment for the proposed development at the site (stated as up to 680 dwellings, a local centre, a primary school and public open space).

The report identified the underlying geology at the site to comprise Wittering Formation or Earnley Sand in the southern portion of the site. Superficial Alluvium was recorded along the northern site boundary. Reference to the environmental information indicated no radon protection measures were required at the site.

The Wittering Formation and Earnley Sand were classified as Secondary 'A' aquifers. An aquifer status was not reported for the Alluvium. The site was noted to lay outside any Source Protection Zone (SPZ). No groundwater abstractions were recorded within 1km.

The nearest surface water was reportedly a tertiary river running along the northern boundary. The nearest surface water abstraction was recorded c.310m east of the site. The nearest discharge consent was recorded c.45m west and comprised public sewage to a freshwater stream/river. The nearest pollution incident occurred in 1998, c.15m west of the site involving the release of petrol into a storm drain recorded as a minor (Category 3) incident.

No historic or active landfills or waste treatment sites were recorded within 1km of the site. Nine contemporary trade entries were recorded within 100m of the site including general engineers, joinery, road haulage, door manufacturers, macadam laying contractors, gate manufacturers, and pet food and animal feeds.

Historically, the site was reported as predominantly farmland with a railway line on the western boundary throughout the mapping editions reviewed. Park Farm, a complex of farm buildings, was located in the east of the site from the 1960s. Hedge End and Boorley Green became increasingly expanded with predominantly residential developments over the mapped period.

A site walkover was undertaken as part of the desk study. At that time, the site largely comprised grazing pasture for sheep and horses. A number of drainage ditches were noted within the site. A stream was reported on the northern boundary. Park Farm in the east comprised a farmhouse with garden, a milking parlour and various barns utilised for livestock housing and haylage and straw storage. Severally of the barns were noted to be roofed and



clad with what was potentially asbestos cement. Three old 205 litre storage drums were noted adjacent to a lean-to. An above ground oil tank in a was noted in the garden of the farmhouse. An above ground diesel storage tank with integrated bund was recorded adjacent to one of the farm buildings. No visual or olfactory evidence of hydrocarbon contamination was reportedly observed at either tank location. During the walkover survey, a representative from Opus was advised that a horse was buried in one of the paddocks at Park Farm.

The Preliminary Risk Assessment identified the oil and diesel tanks, agrochemicals, manure piles, and asbestos within buildings as potential on-site sources of contamination. The adjacent railway and Braxell Cottage haulage vehicle repair to the east were identified as potential off-site sources. Risk ratings of low to medium were generally assigned to receptors, with a medium risk assigned to future site users in relation to soil contamination, and a medium to high risk assigned in terms of the asbestos containing materials in the farm buildings.

The report recommended a ground investigation including laboratory analysis of soil samples was undertaken.

BRD Environmental (2017)

BRD Environmental's intrusive investigation at the site comprised 31No. machine excavated trial pits to depths of up to 3m bgl and 15No. windowless sample boreholes to depths of 3m to 5m bgl. Soakage testing was undertaken in 6No. trial pits. Combined gas and groundwater monitoring boreholes were installed to 4m bgl in 10No. of the boreholes. Ground gas and groundwater monitoring was undertaken on 6No. occasions during August and September 2017.

The investigation reportedly encountered a mantle of Topsoil or Topsoil containing very low proportions of anthropogenic materials (brick and charcoal) overlying clay soils of the Wittering Formation and London Clay Formation. Made Ground to depths of between 0.20m and 0.25m bgl was reported in two locations (WS5 and WS6) within the yard area of Park Farm in the east of the site. During the return monitoring, groundwater was reported at depths ranging between 0.75m to 2.76m bgl.

A human health risk assessment of the results of geochemical laboratory testing undertaken on soil samples obtained during this investigation reported elevated concentrations of PAH compounds (Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(a)pyrene and Dibenzo(a,h)anthracene) in one location (WS6 at 0.20m bgl) and chrysotile asbestos fibres in two locations (WS5 at 0.10m bgl and WS6 at 0.20m bgl). All elevated contaminant concentrations were recorded within the Made Ground soils encountered in the Park Farm yard. Recommendations were made for further investigation in the Park Farm area of the site to assess the extent of contaminated soils followed by a reduced dig and off-site disposal of impacted soils or re-use under hardstanding (if/where deemed to be suitable).

The BRD Environmental report indicated the only source of ground gases to be natural soils with low organic content and identified the risk as negligible. Nevertheless, ground gas monitoring was undertaken in 10No. boreholes across the site on 6No. occasions between August and September 2017. The monitoring reported methane at concentrations between 0.0% and 0.2%, carbon dioxide between 0.5% and 13.1% and oxygen between 5.2% and 20.3%. Flow rates were recorded between <0.0l/hr and 0.5l/hr. Atmospheric pressure was recorded between 1006mb and 1021mb. Based on the maximum concentrations of carbon dioxide recorded, the report stated the gas regime of the Park Farm area of the site was NHBC Amber 1, for which gas protection measures would be required. The report stated that the area of the site outside Park Farm could be classified Green as elevated carbon dioxide was only recorded in three boreholes (WS3, WS5 and WS6) in or near Park Farm. Recommendations were made for further investigation and gas monitoring in the area of Park Farm to 'delineate' the extent of elevated carbon dioxide concentrations. Zonation of the site in terms of the recorded ground gas concentrations alone is not in line with best practice and a detailed ground gas risk assessment should be undertaken for the site.

The report stated that, the soil contaminant concentrations recorded at the site were not considered to present any significant risk to groundwater.

Enzygo Geoenvironmental (2021)

The report gave an account and interpretation of a supplementary investigation undertaken at the site. The investigation was undertaken in two fields where BRD Environmental were unable to access in 2017 and in the area around Park Farm including additional ground gas monitoring.

The investigation comprised 12No. window sampler boreholes to a maximum depth of up to 5.0m bgl, five of which were in the area surrounding Park Farm. Five boreholes were installed with combined gas and groundwater monitoring standpipes, three of which were in the fields immediately surrounding Park Farm. Ground gas and groundwater monitoring was undertaken on 6No. occasions during January and February 2021. Borehole WS6 from the BRD investigation was also monitored of 4No. occasions.

The investigation recorded Made Ground to between 0.2m to 0.9m bgl in all locations, formed of sandy clay with occasional brick and ash. Clay and sand-based soil of the Wittering Formation were encountered below the Made Ground. Groundwater was recorded at between 2m and 4m bgl during the investigation and between 0.11m and 1.15m bgl during the return monitoring.

Twelve samples of Made Ground were submitted for laboratory testing for a suite of common brownfield contaminants. No elevated contaminant concentrations were identified when screening against Tier 1 assessment criteria by Enzygo, but the report referenced the elevated PAH and asbestos reported within the BRD report. The report recommended removal of the impacted Made Ground identified by BRD in the Park Farm area where soft landscaping is proposed.

The Enzygo report initially identified a negligible risk of ground gases at the site. However, ground gas monitoring was undertaken on 6No. occasions over a one month period. The monitoring recorded methane at <0.1% throughout, carbon dioxide ranging between 0.9% and 16.9% and oxygen between 5.2% and 20.3%. Flows were recorded between <0.0009l/hr and <0.0172l/hr. Atmospheric pressure ranged between 986mb and 1035mb. Carbon dioxide was noted to be recorded in excess of 5% in WS101, WS103, WS105 and WS6. These were attributed to the potential presence of a former cesspit at Park Farm, although no evidence for such a feature was presented. Recommendations were made for the site to be zoned as Characteristic Situation 1 in areas outside of Park Farm and Characteristic Situation 2 within the area of Park Farm, which would require gas protection measures. Again, zonation of the site in terms of the recorded ground gas concentrations alone is not in line with best practice and a detailed ground gas risk assessment should be undertaken for the site.

2.2 Site Description

The Park Farm Area (referred to as 'the site' herein) is located in the northeast of the wider Boorley Gardens site at NGR 450346, 115099. The wider site was noted to comprise agricultural grass fields with the early stages of a residential development site in the centre.

At the time of the intrusive investigation, the site comprised a farmyard, farmhouse and adjoining grass fields utilised for cattle farming. Topographically, the site sloped very gently downhill to the west.

The farmyard comprised six barns with associated lean-to structures surrounded by concrete hardstanding which was noted to be in poor condition with many cracks evident. The barns were predominantly empty with a tractor and other farm machinery noted within the two northernmost barns. Hay bales were stored in the south-westernmost barns with other barns containing cattle stalls and various non-contaminative agricultural paraphernalia. Seven 10 litre plastic containers of Ad-Blue urea along with approximately 20 empty containers were noted in the easternmost barn. The easternmost two barns were constructed from concrete blocks with corrugated asbestos cement roof sheets. The remaining barns were steel framed with corrugated asbestos cement roof sheets with a mixture of half height concrete panel walls, corrugated steel cladding and corrugated asbestos cement sheet cladding. Asbestos cement rainwater goods were present on most of the barns. Some damage to the asbestos



cement cladding was noted on the western elevation of the northernmost barn, with broken cement fragments noted on the site surface below. All the barns at the site were noted to have concrete floors.

In the west of the farmyard was the partially broken floor slab of a former barn, understood to have been recently removed by the farmer. The external yard areas contained a stack of haylage/silage bales, metal gates, trailers, various agricultural implements and stacks of wooden pallets. To the east of the northernmost barn were several stacks of corrugated asbestos cement sheets, presumably removed from the demolished barn in the west of the farmyard.

To the west of the farmyard stood a two storey brick house surrounded by a garden laid to lawn with a number of small trees and shrubs. Grass fields were located to the south, west and northwest of the farmyard. A septic tank (targeted by WS203) was located in the field to the south, which was understood to be in current usage and to discharge to a ditch on the southern field boundary.

To the northwest of the farmhouse a steel single skin heating oil above ground storage tank (targeted by WS201) raised on brick piers was noted. The tank volume was estimated to be approximately 1,200 litres. No staining or leakage was visually evident on the tank, the piers or the underlying ground surface.

To the northeast of the two easternmost barns, a diesel above ground storage tank (AST) was observed (targeted by WS202). The tank was approximately 2,000 litres in volume, self-bunded and constructed from plastic. Some staining on the tank was noted below the access panel on the front of the tank. It is understood from the farmer that the tank replaced a steel single skin AST which was present from the 1950s.

The farmer also indicated a former cesspit (targeted by WS204) to the west of the farmhouse which overflowed into a septic tank further west (targeted by WS205) which discharged to a drain running through the yard to a ditch to the north of the farmyard. The current septic tank serving the site (targeted by WS203) was located in the field in the south of the site and discharged to a ditch on the southern boundary.

The site boundaries comprised semi-mature and mature trees and hedgerows to the south, east and west with timber close-boarded fencing to the north. Winchester Road was located to the east of the site. A residential development was present to the north. Grass fields, part of the wider Boorley Gardens site, were located to the northwest and west. A construction site, also part of the wider Boorley Gardens site, with parking area, site offices and compound, was located to the south.

An annotated site plan is included as Figure 3. A photographic record is included in Appendix A.

2.3 Geology

With reference to British Geological Survey (BGS) mapping, the geology of the site was anticipated to comprise Wittering Formation overlying London Clay Formation. No superficial deposits were mapped at the site. In addition, given the previous agricultural land use and nearby development, there remains the possibility that there may be areas of reworked, disturbed or Made Ground across the site.

BS5930:2015 defines **Made Ground** as anthropogenic ground in which the material has been placed without engineering control and/or manufactured by man in some way, such as through crushing or washing, or arising from an industrial process. Great variations in material type, thickness and degree of compaction invariably occur and there can be deleterious or harmful matter, as well as potentially methanogenic organic material. In addition, where identified it is not uncommon for asbestos to be present within Made Ground soils.

Wittering Formation is the lowest unit of the Bracklesham Group and was deposited by intertidal sedimentation during the Eocene. It comprises mainly brown grey laminated sandy clays and clayey sands with beds of green to brown glauconitic sands. Lignite beds may be encountered towards the base of the formation.

Within the Southampton area the **London Clay Formation** consists predominantly of silty sand sandy clay and silty sand, sporadic claystones occur and thin but persistent bands of rounded flint pebbles occur at the bases of sedimentary cycles.

2.4 Hydrogeology

The Wittering Formation was recorded as Secondary 'A' aquifer and the London Clay was recorded as Unproductive Strata.

Secondary 'A' aquifers are 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.

Unproductive Strata are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.

The site was not recorded as being located within a Source Protection Zone.



3.0 GROUND INVESTIGATION

3.1 Scope of Works

The following scope of works for the intrusive investigation was agreed with the Client:

- Attendance of a specialist surveyor to undertake a buried utilities clearance survey of the proposed exploratory hole locations using radio-detection and ground penetrating radar techniques. The survey included capture of co-ordinates and levels of exploratory holes using GPS surveying.
- Attendance of a Geo-Environmental Engineer to set out and supervise the intrusive investigation, undertake sampling, in-situ testing and logging of recovered soils from exploratory holes.
- Construction of 5No. dynamic sampler boreholes (WS201 to WS205) to depths of up to 5m bgl targeting above ground storage tanks (ASTs), former cesspit and septic tanks.
- Installation of 5No. ground gas monitoring wells to depths of 5m bgl to facilitate return monitoring.
- Return ground gas and VOC spot monitoring on 3No. occasions between 26th May and 15th June 2022.
- Geochemical laboratory testing on soil and groundwater samples to support the contamination assessment for the site.
- Provision of a Ground Appraisal Report.

A Detailed Quantitative Gas Risk Assessment was also undertaken as part of the 2022 phase of assessments and is presented as a separate report (GE20584/DQGRA/JUN22).

3.2 Investigation Strategy

The positioning of exploratory holes was determined on site to target specific areas identified as potential sources of soil contamination and/or ground gases. Table 3.1 sets out the investigation strategy adopted.

Area of Concern	Investigation	Positions
General ground conditions	Exploratory holes located across the site with sampling and laboratory analysis.	All
Potential contamination of near surface soils		All
Heating oil AST	Exploratory hole with sampling and laboratory analysis.	WS201
Diesel AST		WS202
Current septic tank		WS203
Former cesspit		WS204
Former septic tank		WS205
Gassing regime below the site	Monitoring standpipes installed within boreholes and ground gas monitoring	All

Table 3.1 Summary of the Investigation Strategy

Soil samples were collected and placed into amber jars and cool boxes on site for transit to the office, where they were stored under chilled conditions (<4°C) prior to final transportation in cool boxes to the laboratory by their in-house courier. Both the geotechnical and contamination testing were undertaken by UKAS accredited laboratories. Contamination testing of soil samples was also undertaken in accordance with accredited MCERTS protocols. Samples were stored in temperature controlled conditions from sampling until receipt at the laboratory from which time sample preparation and storage was determined by testing requirements and in line with laboratory's protocols.



4.0 ENCOUNTERED CONDITIONS

A factual record of the conditions encountered during the physical investigation of the site is presented in the following section.

For further details of the encountered ground conditions, reference should be made to the exploratory hole logs presented in Appendix B, the geochemical testing results in Appendix C and the ground gas monitoring results in Appendix D.

The physical ground investigation works were undertaken on 19th May 2022.

The locations of the exploratory holes are shown on Figures 2 & 3.

Unless stated otherwise, all depths are reported as metres below ground level (m bgl).

4.1 Ground Conditions

The ground conditions encountered by this investigation comprised a mantle of Topsoil or Made Ground overlying Wittering Formation overlying London Clay.

A summary of the encountered soil conditions is presented in Table 4.1.

Top (m bgl)	Base (m bgl)	Geology	Positions
0.00	0.15 – 0.20	TOPSOIL: Grass over brown fine SAND with varying silt and gravel content; Grass over dark brown sandy slightly gravelly CLAY with rare rootlets. Rootlets present throughout.	WS201, WS202, WS204 & WS205
0.00	0.30	MADE GROUND: Grass over brown silty slightly gravelly fine sand with some gravel sized brick and lime mortar fragments.	WS203
0.15 – 0.30	3.60 – 4.10	WITTERING FORMATION: CLAY with low to medium proportions of sand and gravel and, less commonly, silt. CLAY with no secondary constituents recorded at depth along with layers containing mudstone gravel or lithorelicts. Colouration was various combinations of grey, brown, orange, orange brown, grey brown, light brown and yellow brown.	All
3.60 – 4.10	>5.00	LONDON CLAY FORMATION: Grey or brown CLAY or silty CLAY.	All

Table 4.1 Summary of Ground Conditions

Visual and olfactory evidence of hydrocarbon contamination was recorded in WS202 as detailed below:

- 0.00m to 0.20m bgl – Faint diesel odour in Topsoil;
- 0.20m to 2.20m bgl – Mild diesel odour. Greenish hue possible staining;
- 2.20m to 3.50m bgl – Faint diesel odour.

For more detailed descriptions of the ground conditions at specific locations, reference should be made to the exploratory hole logs presented in Appendix B.

4.2 Groundwater

Groundwater was encountered during the investigation as summarised in Table 4.2.



Location	Strike Depth (m bgl)	Depth After 20 Minutes (m bgl)
WS202	2.00	1.20
WS203	1.45	1.30
WS205	1.15	0.90

Table 4.2 Groundwater Summary

Groundwater monitoring was undertaken within the borehole standpipes of three occasions between 26th May and 15th June 2022. The results are summarised in Table 4.3.

Location	Depth to water (m bgl)		
	26/05/2022	08/06/2022	15/06/2022
WS201	2.98	2.08	1.97
WS202	1.45	1.00	1.42
WS203	1.19	1.19	1.27
WS204	3.51	1.90	1.65
WS205	0.88	0.66	0.59

Table 4.3 Summary of Groundwater Encountered within Monitoring Wells

4.3 Obstructions

No obstructions were encountered during the intrusive investigation works undertaken. The presence of natural and/or manmade obstructions elsewhere on site cannot be discounted.

4.4 Geochemical Analysis

In order to assess the general chemical quality of the strata encountered, samples of soils recovered from the exploratory holes were submitted for analysis for a range of potential contaminants supported by the joint National House Building Council (NHBC), Environment Agency (EA) and Chartered Institute of Environmental Health (CIEH) publication, 'Guidance for the Safe Development of Housing on Land Affected by Contamination' (2008).

Soil samples were placed into plastic containers for general inorganic analysis and into amber jars for organic analysis. Samples were stored in temperature-controlled conditions from sampling until receipt at the laboratory from which time sample preparation and storage was determined by testing requirements and in line with the laboratory's protocols.

Representative samples of Topsoil, Made Ground and natural soils were submitted for analysis for a suite of commonly occurring brownfield contaminants, including asbestos, with selected samples submitted for total petroleum hydrocarbon (TPH), VOC and SVOC testing. A groundwater sample was also obtained from WS202 and submitted for analysis for a suite of commonly occurring brownfield contaminants including metals, PAH, TPH, VOC and SVOC.

4.5 Ground Gas and Vapour Monitoring

Three return 'spot' ground gas monitoring visits have been undertaken on 26th May, 8th June and 15th June 2022. Monitoring was undertaken within standpipes installed within dynamic windowless sampler boreholes WS201 to WS205. These locations were selected to target potential sources of ground gases/vapours.

The spot monitoring undertaken to date detected the presence of methane between 0.1% and 4.6%. Carbon dioxide has been detected at concentrations in the range of 0.0% to 6.3% and oxygen in the range 0.2% to 21.0%. Borehole flows were measured at 0.0l/hr throughout. VOCs were recorded up to 19.2ppm during the monitoring. Atmospheric pressure was recorded between 1002mb and 1023mb during the visits undertaken to date.

The gas monitoring results are included as Appendix D. The implications of the gas monitoring data are considered



in Section 5 of this report.



5.0 ENVIRONMENTAL CONSIDERATIONS

A Generic Quantitative Risk Assessment (GQRA) utilising the results of the ground investigation was undertaken in accordance with LCRM, the findings of which are presented in the following sections.

5.1 Environmental Risk Assessment

A number of plausible pollutant linkages were identified within the Desk Study Report and previous third party reports for the site. The investigation did not encounter conditions that warranted a revision of the preliminary Conceptual Site Model.

5.2 Ground Gases

A Detailed Quantitative Gas Risk Assessment has been undertaken by Geo-Environmental for the site (ref. GE20584/DQGRA/JUN22, dated 30th June 2022). The assessment was based on the findings of this latest investigation and the investigations and reported detailed in Section 2.1.

The assessment considered that no potential sources of bulk gas generation were present at the site and that the recorded methane and carbon dioxide by monitoring undertaken to date was resultant from the presence of localised hydrocarbon contamination (WS202) and the long-term use of the site for livestock farming which did not represent a risk to the proposed development.

The assessment concluded that the site should be considered a Characteristic Situation 1 classification, with no requirement for gas protection measures. For further details reference should be made to the DQGRA report.

5.3 Soil Contamination vs. End Users

The presence of a possible contaminant does not necessarily imply that a site or area is contaminated or that there is any unacceptable risk to human health. A Preliminary Quantitative Risk Assessment has been undertaken in accordance with LCRM, in order to evaluate any unacceptable risks posed to human health with respect to the proposed redevelopment. It should be noted that this assessment is protective of the chronic long-term effects of contaminants, which is also likely to be protective of any possible immediate acute effects.

A quantitative risk assessment has been undertaken by comparing the results of the laboratory chemical testing of shallow soils against Tier 1 screening criteria in the first instance. These criteria comprise the Atkins ATRISK soil screening values (SSVs), the Suitable for Use Levels (S4ULs) published by LQM (Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3453. All rights reserved) and the Category 4 Screening Levels (C4SLs) published by DEFRA. Although the C4SLs were released for Part 2A use, the associated policy companion document for the C4SLs indicated that they may also be used for planning. Although the C4SLs represent a marginally higher risk level than the SSVs and S4ULs (low risk rather than minimal risk) it is considered that the risk levels remain very low. Therefore, the final C4SLs are considered to be suitable to assess soils under the planning regime.

The exploratory holes were targeted to specific areas identified as potential sources of soil contamination. Samples were selected to provide coverage of these areas and where visible or olfactory evidence of contamination was recorded on site. Analysis was undertaken on soil samples collected from these exploratory holes, comprising Topsoil, Made Ground and natural soils.

In the first instance the results of the sample analysis were compared to the Tier 1 screening criteria where available. Table 5.1 shows the exceedances identified on site above the respective generic guideline values for a proposed residential land use with plant uptake.



Determinand	Tier 1 Criteria (mg/kg)	Location	Depth (m bgl)	Concentration (mg/kg)	Geology
Aromatic TPH >C12-C16	165 – SSV (1% SOM) 268 – SSAC	WS202	1.00	210	Wittering Formation
2,6-Dinitrotoluene	0.902 – SSV (1% SOM) 111 – SSAC	WS202	1.00	3.0	Wittering Formation

Table 5.1 Summary of contaminant exceedance above respective threshold for residential end use

The results were assessed further in order to clarify the initial screening assessment, through the development of Site-Specific Assessment Criteria (SSAC). The generated SSAC are shown within Table 5.1 for ease of comparison. SSAC were developed for soils where the Tier 1 exceedances were identified.

The assumptions made as part of the CLEA v1.07 calculations for a residential end use with plant uptake are presented in Table 5.2. Copies of the CLEA calculations are enclosed in Appendix C.

	Assumptions			Comments
Land Use	Residential with home grown produce			Commensurate with proposed residential development.
Receptor	Female (res)			A conservative assumption using the most sensitive possible receptor.
Receptor Age	1 to 6			Critical receptor age from birth to age 6.
Building	Semi-detached House			A conservative assumption of the private residence use proposed.
Soil Type	Sandy clay loam	pH 8.3	SOM 0.62%	Based on the geochemical test results.
Exposure Pathways	Oral	Direct soil & dust ingestion; consumption of home grown produce; soil attached to home grown produce		Default setting for land use.
	Dermal	Indoor & outdoor		Default setting for land use.
	Inhalation	Indoor & outdoor dust & vapour		Default setting for land use.
Occupancy	days/year	hours/day (indoors)	hour/day (outdoors)	Default settings for the critical receptor.
	180 - 365	19 - 23	1	

Table 5.2 Assumptions for SSAC Calculation (CLEA v1.07 Software)

The tier 1 exceedances were screened against the Site Specific Assessment Criteria (SSAC) calculated for the site. The initial exceedances were found to be below the SSAC.

Geochemical testing of the shallow soils sampled has not returned any positive identification for asbestos.

No elevated soil contaminants of concern in terms of human health have been identified by this phase of investigation. However, elevated PAH and asbestos has been recorded during a previous phase of investigation within the Made Ground soils in the Park Farm Area. Further post demolition investigation will be undertaken to confirm the extent and status of the Made Ground soils in due course and this report will be updated.

A remediation strategy and verification plan has been developed for the site by Geo-Environmental based on the results of the previous third party investigations (ref. GE20346/RSVPv3/APR22). The strategy sets out a reduced dig exercise to remove the PAH and asbestos containing Made Ground from the site. The strategy will be updated following completion of the post demolition investigation which will inform the extent of reduced dig required.



5.4 Soil Contamination vs. Adjacent land Users

Surrounding land uses were identified as residential and open land to be development for residential usage. On the basis of the testing undertaken to date and the proposed remediation at the site, it is considered that no significant risks to adjacent land users exist in relation to on-site soils.

However, it is recommended that dust suppression techniques, e.g. damping down exposed soils, are employed during the construction phases on site in order to minimise the potential for airborne migration of specific hazards and to manage potential nuisance issues for adjacent land users.

5.5 Soil Contamination vs. Soft Landscaping

British Standard BS3882:2015 *Specification for topsoil* provides assessment criteria for a number of potentially phytotoxic contaminants in terms of new planting.

The results of the chemical analysis for determinands known to pose a potential phytotoxic risk to plant growth are summarised in Table 5.3 together with the respective adopted Generic Assessment Criteria (GAC) for plant growth. The compliance criteria set out in BS3882:2015 are pH dependent and thus the GAC used relate to the pH range measured on samples recovered from the site.

Determinand	Phytotoxicity GAC (mg/kg)			GAC Exceedances
	pH <6.0	pH 6.0-7.0	pH >7.0	
Zinc	200	200	300	No
Copper	100	135	200	No
Nickel	60	75	110	No

Table 5.3 Summary of Plant Phytotoxicity Assessment

The phytotoxicity assessment did not record any contaminant concentrations which exceeded the assessment criteria for phytotoxicity. Therefore, no further action is required in this respect.

5.6 Soil Contamination vs. Building Materials

The current guidance on the selection of materials for water supply pipes to be laid in contaminated land is contained in UK Water Industry Research's (UKWIR) report reference 10/WM/03/21 (re-issued 2010). However, the guidance is not mandatory and there has been concerns raised by various industry technical associations regarding the document and the methodologies proposed.

Although there are concerns regarding the document, in lieu of any further guidance in the first instance the results of this investigation have been compared with the proposed thresholds published in UKWIR Table 3.1. The analysis undertaken has identified barrier pipe would be required within the area of WS202 due to recorded TPH in the C11-C20 range and SVOC concentrations. The remaining analysis indicates that PE pipework would likely be suitable in other areas of the site.

The utility company should be consulted in order to confirm their specific requirements in this respect. At this time subject to further confirmation, it is considered that specific protection measures are unlikely to be required for potable water supply. As a matter of good practice and to maximise the protection to maintenance workers, it is recommended that clean, granular backfill is used in service runs and that marker tapes are used for all buried services.

5.7 Soil Contamination vs. Groundwater

The site overlies a Secondary 'A' Aquifer (Wittering Formation) and Unproductive Strata (London Clay Formation).



A current heating oil AST (WS201), current diesel AST and former diesel AST (in the same location, WS202) have been identified at the site and subjected to targeted investigation. Groundwater has been recorded at depths of between 0.59m and 2.98m bgl during return monitoring.

No evidence of gross soil impact or significant potentially mobile contaminants was recorded during the investigation, with the exception of diesel odour and potential staining to a depth of 3.50m bgl in WS202 in the location of the current and former diesel ASTs. Geochemical testing of soil samples in this location recorded TPH concentrations above the laboratory limit of detection at 1.00m bgl with TPH concentrations below the limit of detection at 3.70m bgl. These results are likely to be representative of long term minor diesel spillage rather than an ongoing leakage. A groundwater sample was obtained from WS202 on 8th June 2022 to assess the groundwater quality in the area of the diesel AST.

The results of the groundwater analyses were compared against the Environmental Quality Standards for freshwater (EQS), Water Framework Directive and the Water Supply (Water Quality) Regulations 2000. A summary of contaminant concentrations encountered above the respective EQS, WFD and DWS guideline values, where values are set is presented in Table 5.4 below.

Determinand	Guideline Value (µg/l)	Location	Concentration (µg/l)
Arsenic	50 ^{EQS}	WS202	93
Cadmium	5 ^{EQS}		14
Nickel	50 ^{EQS}		360
Lead	50 ^{EQS}		1000
Selenium	10 ^{EQS}		84
Isopropylbenzene	NGV		100
N-Propylbenzene	NGV		61
1,2,4-Trimethylbenzene	NGV		50

NOTES: ^{EQS} - Environmental Quality Standards for freshwater; NGV – no guideline value available

Table 5.4 Contaminant exceedances within Groundwater analysis

Assessment of the groundwater results has identified elevated Arsenic, Cadmium, Nickel, Lead and Selenium against the relevant guideline values. Three VOC compounds were also recorded above the laboratory limit of detection for which no guideline values were available. No other VOC or SVOC compounds were recorded above the limit of detection in the groundwater sample tested. TPH was also not recorded above the limited of detection.

The elevated metal concentrations are considered to be representative of general background groundwater quality in the area of the site. No source of gross metal contamination has been identified within the Park Farm Area or the wider Boorley Gardens site and no elevated metal concentrations were recorded in soil samples to date. The recorded VOC compounds are potentially associated with the natural breakdown and degradation of minor spillages of fuels at the site, including the recorded diesel usage, but also including potential historical usage of more volatile petrol and petrol paraffin oil mixtures (tractor vaporising oil).

Proposals at the site are for the removal of the existing tanks and demolition of the farm buildings prior to redevelopment. As such, the potential sources of continuing groundwater contamination from the site will be removed and it is considered that natural attenuation of organics contamination would also continue. Therefore, it is considered that no specific remediation is required in terms of risks to groundwater at this stage. However, further localised investigation should be undertaken in the area of the diesel AST following demolition and removal of the buildings and floor slabs at the site to confirm this assessment.

Should significant hydrocarbon contamination within the soils or free product be identified beneath the site it is recommended that this been removed and/or treated to reduce the presence of an ongoing potential source on the site.



Removal of the existing tanks at the site should be undertaken under the appropriate duty of care with any remaining product removed from the tanks prior to their removal from the site. Tanks and fuel lines must only be broken using cold cutting methods, e.g. demolition shears, and on a surface which prevents loss of any residual fluids to the ground (e.g. sheeting, or a lined skip). Waste product and the tanks should be disposed of off-site to a suitable licenced treatment/disposal facility.

5.8 Groundwater Contamination vs End Users

The results of the groundwater analysis have been compared against the 'Atkins Water Screening Values for a Residential Land Use' (2011) to assess the vapour risk to end users from groundwater beneath the site.

No TPH or VOC concentrations were recorded above the relevant screening value. As such, it is considered that no specific protection measures are considered likely to be required in this respect.

5.9 Groundwater Contamination vs Soft Landscaping

Groundwater was encountered at varying depths within the Wittering Formation beneath the site noted between 0.59m and 2.98m bgl during investigation works and as such was considered to be predominantly outside of the primary root zone of influence for the soft landscaping on the site. Notwithstanding this, the vegetation on and around the site showed no evidence of stress. As such, it is considered that no specific action is warranted with respect to soft landscaping.

5.10 Groundwater Contamination vs Built Environment

Recommendations for the Built Environment as discussed in Section 5.6 are considered appropriate.

5.11 Waste Disposal

The soil analyses from the site were assessed using HazWasteOnline software. The sample from WS202 at 1.00m bgl was assessed to be hazardous waste due to the recorded TPH concentration. None of the other samples assessed were indicated to represent potentially hazardous waste. The HazWasteOnline assessment is included within Appendix E.

Excess natural soils at the site are likely to be classified as Inert Waste (under the respective EWC codes for naturally occurring soils), suitable for disposal at an inert landfill facility.

It must be noted that any waste classification assessment is indicative only and actual classification would depend on permit status of the final disposal facility. Once soils for disposal have been identified it is recommended that further testing waste categorisation and WAC testing of these specific soils be undertaken in order to confirm the above assessment.

In accordance with the CL:AIRE Definition of Waste Code of Practice (2011) materials are only considered waste if 'they are discarded, intended to be discarded or required to be discarded by the holder'.

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

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



In order to comply with the Code of Practice, a Material Management Plan that confirms the above criteria are met has to be prepared. The Material Management Plan must be reviewed by a 'Qualified Person' who then issues a declaration to the Environment Agency. Geo-Environmental can provide this service should it be required.

Where materials do not meet the required criteria, it may be possible to treat them under an environmental permit so that they may be re-used on site. In addition, where material is discarded as waste, it may still be possible to re-use the waste on site under a standard rules environmental permit or a U1 waste exemption. However, strict limits on the volumes that can be reused apply in these cases.

Under current legislation, where wastes are to be disposed of to landfill they may, depending on their classification, require pre-treatment. Pre-treatment shall comprise a chemical, physical (including sorting), thermal or biological process. The pre-treatment is required to change the characteristics of the waste, reduce its volume, reduce its hazardous nature, and facilitate its handling and enhance its recovery.

Other materials disposed of from site as part of the demolition or remediation process may require disposal separately. All materials containing dangerous substances e.g. tar or bitumen, asbestos, mercury, hydrocarbons and PCBs are likely to be classified as Hazardous Waste and therefore susceptible to the relevant legislative controls.



6.0 DISCOVERY STRATEGY

Whilst an intrusive investigation has been undertaken on the site, it remains possible that unexpected soil ground and/or groundwater conditions may be encountered during the process of construction.

Should previously undiscovered contamination or unforeseen ground conditions be encountered during construction, this must be reported to the site manager immediately in order that the consultant is notified. Where deemed necessary, the consultant shall attend the site to inspect the discovery and provide recommendations on the further actions required, if any. Where necessary the regulatory authority shall be informed. Post any additional investigation or laboratory testing the results and any proposed remedial measures shall be reported to the regulatory authority or other appropriate organisation for consent, before proceeding or implementing the remedial measures.

A copy of the discovery strategy must be lodged on site, and provisions made to ensure that all workers are made aware of their responsibility to observe, report, and act on any potentially suspicious, abnormal unforeseen or contaminated soils ground and/or groundwater conditions they may encounter.

Depending on the type, nature and extent of any such 'discovery', it may be necessary to halt works in that location until such time as the assessment has been completed. This shall be reviewed on a 'discovery' specific basis and in conjunction with regulatory consultation with the client, other technical personnel and/or regulatory/appraisal organisations.

As a general guide, where such unexpected conditions are encountered the following approach is required as a minimum:

- All discoveries are to be reported to the Site Manager immediately and works at that location are to halt until further notice;
- The Site Manager is to report any such discoveries to the Client and the Consultant;
- Following notification from the Site Manager, the Consultant shall discuss the discovery with the Local Authority and/or other relevant parties and if considered necessary, arrange to meet an Officer on site to view the discovery;
- The Consultant shall attend the site to record the location, extent and nature of the discovery and implement an appropriate sampling and analysis regime, taking due account of the type and nature of the discovery, known and probable land uses in that area of the site;
- Where remedial action is required, regulatory consultation and approval will be sought;
- A record will be produced by the Consultant and held on site (with copies held by the Consultant, Client and Local Authority/other relevant organisation), detailing the discovery, assessment works undertaken, findings thereof, confirmation either of no action required or detailing the remedial action taken and validation thereof.

The process is shown overleaf.

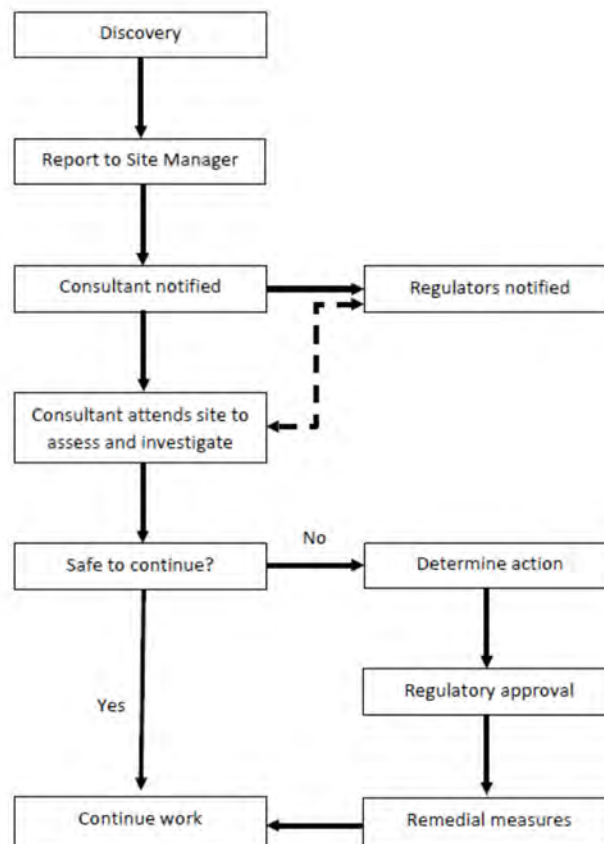
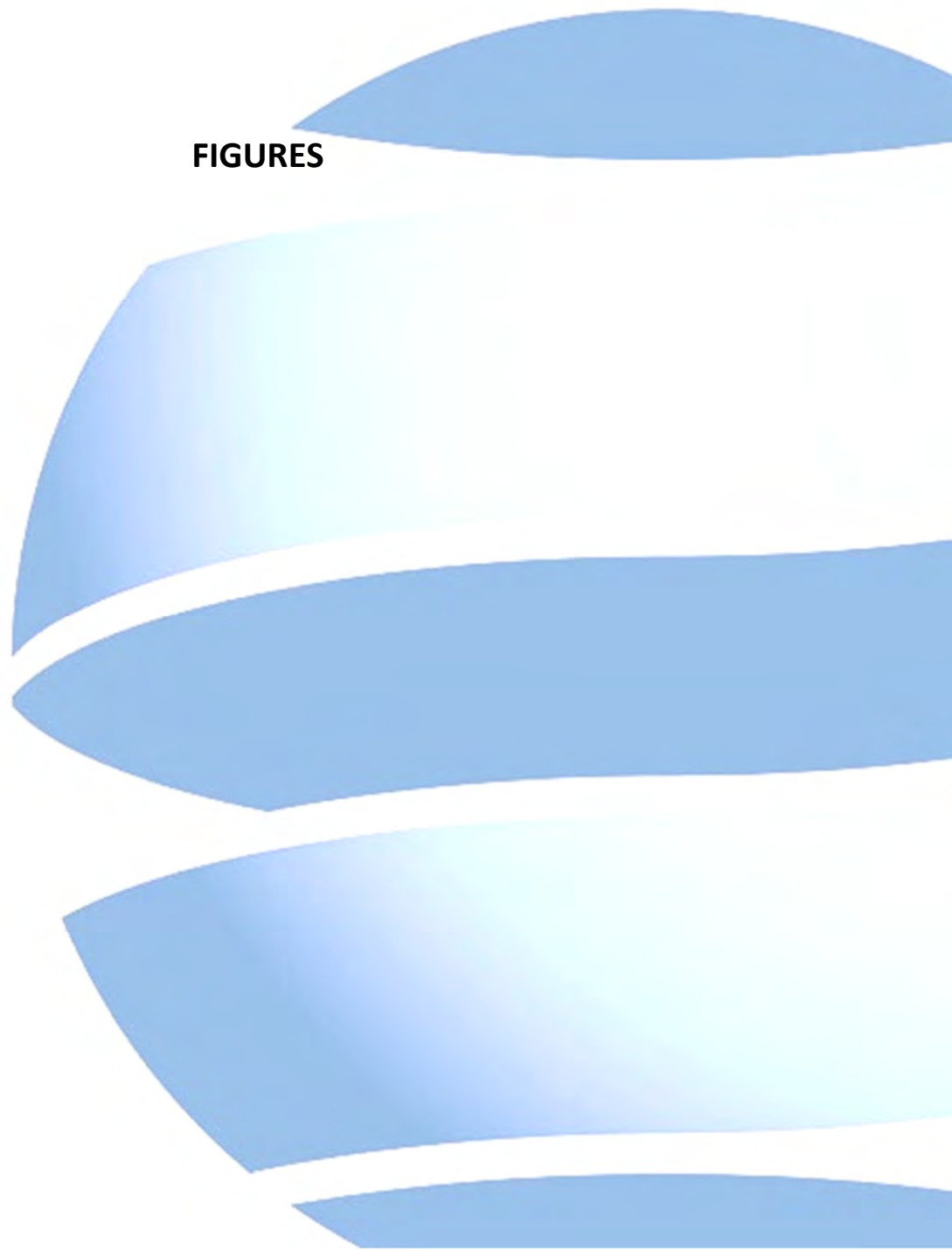


Chart 1 Discovery Strategy Process

A copy of this strategy will be lodged on site, and provisions made to ensure that all workers are made aware of their responsibility to observe, report, and act on any potentially suspicious or contaminated materials they may encounter.

FIGURES





Project:	Park Farm, Winchester Road, Southampton, SO32 2BX			Title	Site Location Plan	
Client:	Bellway Homes & Miller Homes			Geo-Environmental Services Ltd Unit 7 Danworth Farm, Cuckfield Road Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net	 Geo-Environmental	
Ref No:	GE20584	Revision:	1			
Drawn:	SA	Date:	20/06/2022			
Figure:	1	Scale:	Not To Scale			



Project Title: Boorley Gardens
Location : Winchester Road, Hedge End
Project No. : GE20584
Client : Bellway Homes & Miller Homes

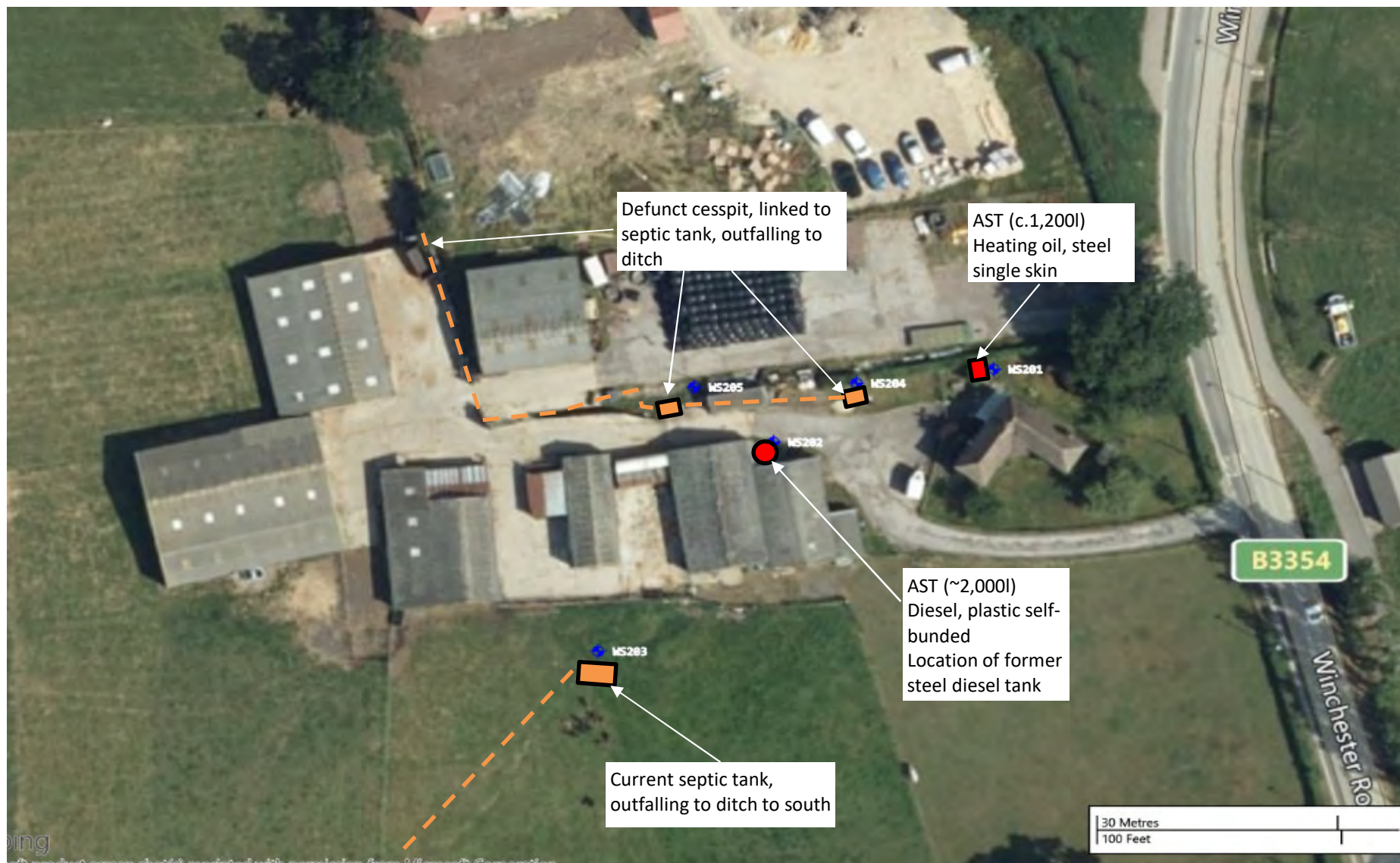
Title : Figure 2 - Exploratory Hole Location Plan
Scale: 1:750
Engineer: SA



- Legend Key
- Locations By Type - Empty
 - ◆ Locations By Type - WLS



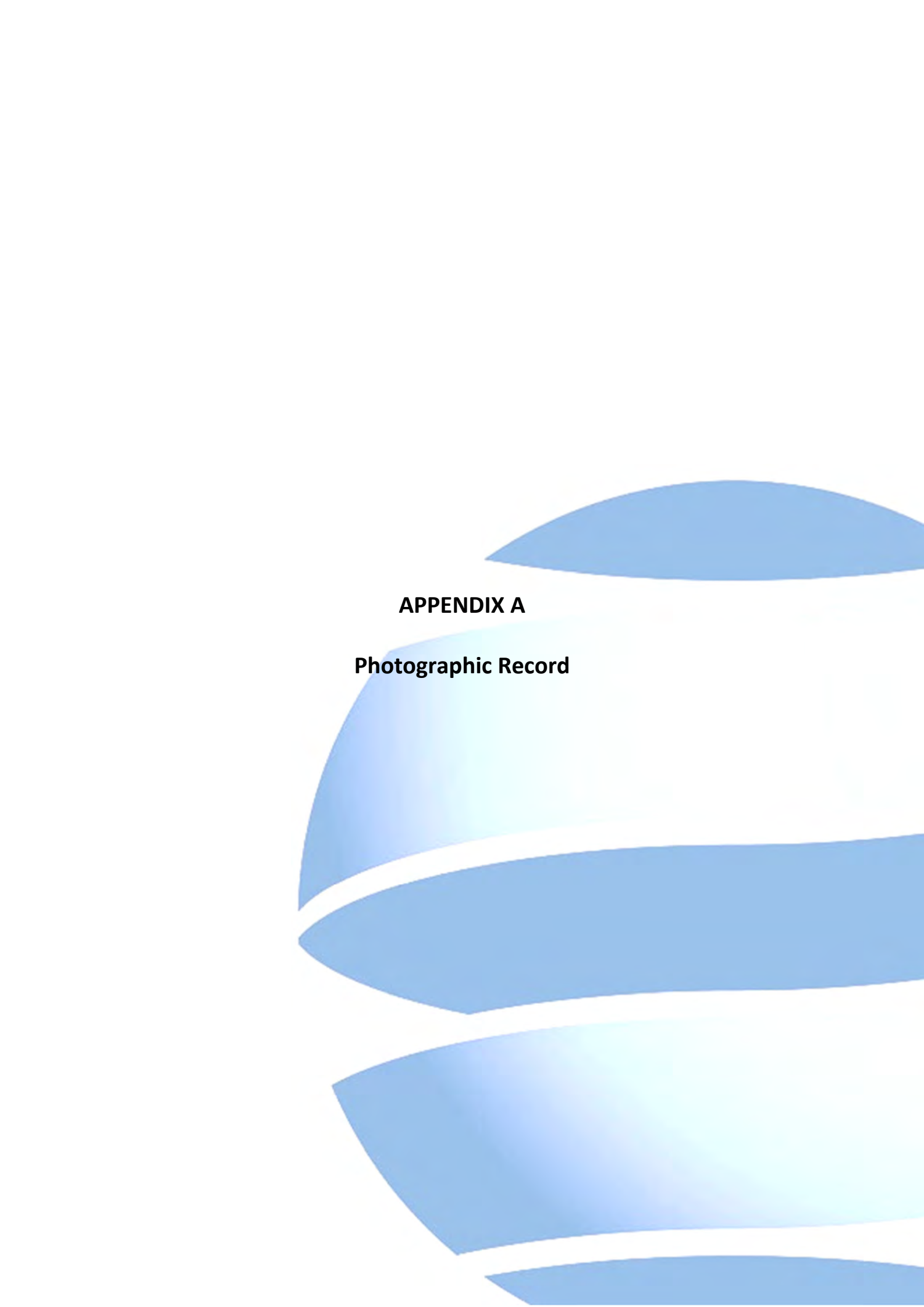
Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation



Project:	Park Farm, Winchester Road, Southampton, SO32 2BX			Title	Annotated Site Plan	
Client:	Bellway Homes & Miller Homes			Geo-Environmental Services Ltd Unit 7 Danworth Farm, Cuckfield Road Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net	 Geo-Environmental	
Ref No:	GE20584	Revision:	0			
Drawn:	SA	Date:	20/05/2022			
Figure:	3	Scale:	Not To Scale			



Project:	Park Farm, Winchester Road, Southampton, SO32 2BX			Title	Proposed Development Plan	
Client:	Bellway Homes & Miller Homes			Geo-Environmental Services Ltd Unit 7 Danworth Farm, Cuckfield Road Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net  Geo-Environmental		
Ref No:	GE20584	Revision:	0			
Drawn:	SA	Date:	20/06/2022			
Figure:	4	Scale:	Not To Scale			

The background of the page features a series of overlapping, wavy, horizontal bands in shades of light blue and white, creating a sense of movement and depth. The waves are more pronounced on the right side of the page.

APPENDIX A

Photographic Record



Plate 1 – View east across the site



Plate 2 – View north across the site



Plate 3 – View west across the site



Plate 4 – View east across the site



Plate 5 – View northeast across the site



Plate 6 – Broken concrete from the former barn floor slab



Plate 7 – View northeast across the site



Plate 8 – View southeast across the site



Plate 9 – Farmhouse in the east of the site



Plate 10 – Heating oil AST



Plate 11 – Diesel AST and location of former steel diesel AST



Plate 12 – Former cesspit location (concrete slab behind pole)



Plate 13 – Defunct septic tank location



Plate 14 – Current septic tank in south of the site



Plate 15 – Adblue urea storage in the easternmost barn



Plate 16 – Broken asbestos cement adjacent to western elevation of the northernmost barn

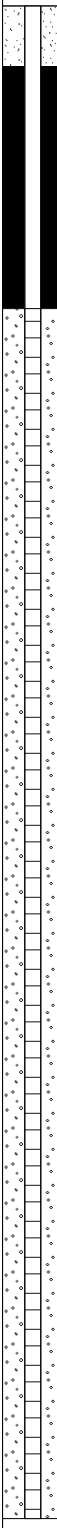


Plate 17 – Stacks of asbestos cement east of the northernmost barn

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APPENDIX B

Exploratory Hole Logs

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net			Borehole Log				Borehole No. WS201 Sheet 1 of 2		
Project Name: Boorley Gardens			Project No. GE20584		Co-ords: 450384E - 115103N		Hole Type WLS		
Location: Winchester Road, Hedge End					Level: 28.80		Scale 1:25		
Client: Bellway Homes & Miller Homes					Dates: 19/05/2022		Logged By SA		
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES		0.20	28.60		Grass over brown very silty slightly gravelly fine SAND with some rootlets. TOPSOIL	1
		0.50	PP	1.2kg/cm2				Firm mottled yellow brown, orange and light grey slightly sandy CLAY. Occasional 1-4mm roots to 1.0m. WITTERING FORMATION	
		0.70	ES						
		1.00	D						
		1.00	PP	1.0kg/cm2					
					1.25	27.55			2
		1.50	PP	1.8kg/cm2				Stiff mottled yellow brown, orange and light grey CLAY. WITTERING FORMATION	
		2.00	D						
		2.00	PP	2.2kg/cm2					
					2.20	26.60			3
		2.50	PP	2.2kg/cm2				Stiff pale grey occasionally brown and orange CLAY. WITTERING FORMATION	
		2.75	ES						
		2.85			2.75	26.05		Firm friable brown and dark brown silty CLAY. WITTERING FORMATION	
		3.00	D						
		3.00	PP	3.2kg/cm2				Very stiff grey brown with occasional orange pockets CLAY. WITTERING FORMATION	
	3.50	PP	3.2kg/cm2						
				3.60	25.20			4	
	4.00	D					Stiff grey slightly silty CLAY. LONDON CLAY		
	4.00	PP	2.2kg/cm2						
	4.50	PP	2.8kg/cm2						
	5.00	D						5	
				5.00	23.80		Continued on Next Sheet		
Dynamic Sampling Run Details		Water Strike - Details		Remarks					
Depth Top	Depth Base	Diameter	Depth Water Value	Depth Water	No groundwater encountered. Monitoring standpipe installed				





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Borehole Log

Borehole No.

WS201

Sheet 2 of 2

Project Name: Boorley Gardens

Project No.
GE20584

Co-ords: 450384E - 115103N

Hole Type	WLS
-----------	-----

Location: Winchester Road, Hedge End

Level:	28.80
--------	-------

Scale
1:25

Client: Bellway Homes & Miller Homes

Dates: 19/05/2022

Logged By
SA

[illegible]

Dynamic Sampling Run Details			Water Strike - Details		Remarks
Depth Top	Depth Base	Diameter	Depth Water Value	Depth Water	
					No groundwater encountered. Monitoring standpipe installed





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Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Borehole Log

Borehole No.

WS202

Sheet 1 of 1

Project Name: Boorley Gardens

Project No.
GE20584

Co-ords: 450357E - 115093N

Hole Type
WLS

Location: Winchester Road, Hedge End

Level: 28.20

Scale
1:25

Client: Bellway Homes & Miller Homes

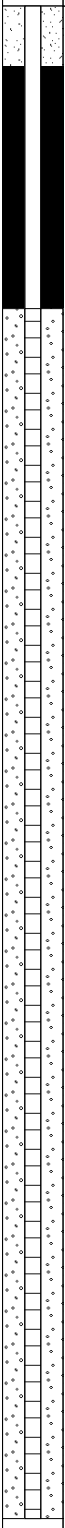
Dates: 19/05/2022

Logged By
SA

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES		0.20	28.00		Grass over dark brown sandy slightly gravelly CLAY with rare rootlets. Faint diesel odour. TOPSOIL	1
		0.50	PP	0.5kg/cm2				Soft to firm mottled greenish grey, brown and orange brown sandy CLAY. Mild diesel odour. Greenish hue possible straining. Dead root at 1m. WITTERING FORMATION	
		1.00	ES						2
		1.00	PP	0.5kg/cm2					
		1.50	PP	0.5kg/cm2					3
		2.00	PP	0.5kg/cm2	2.20	26.00			
		2.40 - 2.60	ES					Firm mottled light grey and yellow brown CLAY. Faint diesel odour. WITTERING FORMATION	4
		2.50	PP	1.2kg/cm2					
		3.00	PP	1.2kg/cm2					5
		3.50	PP	1.5kg/cm2	3.50	24.70			
		3.70 - 3.90	ES					Stiff mottled light grey and yellow brown CLAY. WITTERING FORMATION	6
		4.00	PP	2.0kg/cm2	4.00	24.20		No recovery	
					4.60	23.60		Very stiff brown CLAY. LONDON CLAY	7
		5.00	PP	3.5kg/cm2	5.00	23.20		End of Borehole at 5.00m	

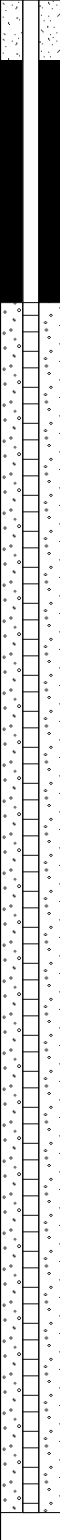
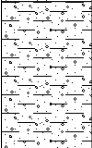
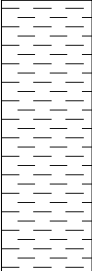
Dynamic Sampling Run Details			Water Strike - Details		Remarks	
Depth Top	Depth Base	Diameter	Depth Water Value	Depth Water		
			1.20	1.200	Groundwater at 2.0m rising to 1.2m after 20 minutes. Monitoring standpipe installed	

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log		Borehole No. WS203 Sheet 1 of 1	
Project Name: Boorley Gardens		Project No. GE20584		Co-ords: 450335E - 115065N	
Location: Winchester Road, Hedge End		Level: 26.94		Hole Type WLS	
Client: Bellway Homes & Miller Homes		Dates: 19/05/2022		Scale 1:25	
Logged By SA					

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.30	26.64	Grass over brown silty slightly gravelly fine sand with some gravel sized brick and lime mortar fragments. MADE GROUND	1	
	0.50 0.60	PP ES	0.8kg/cm2				Soft brown, yellow brown and orange brown very sandy slightly gravelly CLAY. Sand is fine, gravel is fmc subangular flint. WITTERING FORMATION		
	1.00 1.00	D PP	0.2kg/cm2		1.50	25.44	Firm orange with light grey mottling slightly sandy CLAY. WITTERING FORMATION	2	
	1.50 1.50	ES PP	1.2kg/cm2				Stiff mottled pale grey, orange brown and yellow brown CLAY. WITTERING FORMATION		
	2.00 2.00	D PP	2.5kg/cm2		1.90	25.04	Stiff friable dark brown very gravelly CLAY. Gravel is fine and medium subangular extremely weak mudstone. WITTERING FORMATION	3	
	2.50	PP	2.0kg/cm2				Very stiff grey CLAY. LONDON CLAY		
	3.00 3.00	D PP	2.8kg/cm2		2.80	24.14	No recovery.	4	
	3.50	PP	2.0kg/cm2				Firm grey CLAY. LONDON CLAY		
	4.00 4.00	D PP	3.0kg/cm2		4.00	22.94		5	
	4.50	PP	1.5kg/cm2						
	5.00	PP	2.5kg/cm2		5.00	21.94	End of Borehole at 5.00m		

Dynamic Sampling Run Details			Water Strike - Details		Remarks
Depth Top	Depth Base	Diameter	Depth Water Value	Depth Water	
			1.30	1.300	

Groundwater at 1.45m rising to 1.30m after 20 minutes. Monitoring standpipe installed
 

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net			Borehole Log				Borehole No. WS204 Sheet 1 of 1		
Project Name: Boorley Gardens			Project No. GE20584		Co-ords: 450367E - 115101N		Hole Type WLS		
Location: Winchester Road, Hedge End					Level: 28.56		Scale 1:25		
Client: Bellway Homes & Miller Homes					Dates: 19/05/2022		Logged By SA		
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES		0.20	28.36	 Grass over brown silty gravelly fine SAND with occasional rootlets. TOPSOIL		
		0.50	PP	1.0kg/cm2					
		1.00	PP	1.0kg/cm2		1.80	26.76	 Soft mottled orange and grey silty sandy slightly gravelly CLAY. Gravel is fine to medium subrounded ironstone. WITTERING FORMATION	2
		1.50	PP	1.2kg/cm2					
		2.00 - 2.20	ES			3.70	24.86	 Firm dark brown and grey CLAY with frequent fine gravel sized mudstone lithorelicts. WITTERING FORMATION	4
		2.00	PP	0.5kg/cm2					
		2.50	PP	1.8kg/cm2		4.10	24.46	 Stiff grey CLAY with rare fine brown partings. LONDON CLAY	5
		3.00	PP	2.0kg/cm2					
		3.50	PP	1.8kg/cm2					
		4.00	PP	2.0kg/cm2					
	4.50	PP	2.8kg/cm2						
	5.00	PP	2.0kg/cm2						

Dynamic Sampling Run Details			Water Strike - Details		Remarks
Depth Top	Depth Base	Diameter	Depth Water Value	Depth Water	

No groundwater encountered. Monitoring standpipe installed





Geo-Environmental www.gesl.net

Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Borehole Log

Borehole No.

WS205

Sheet 1 of 1

Project Name: Boorley Gardens

Project No.
GE20584

Co-ords: 450347E - 115100N

Hole Type
WLS

Location: Winchester Road, Hedge End

Level: 27.86

Scale
1:25

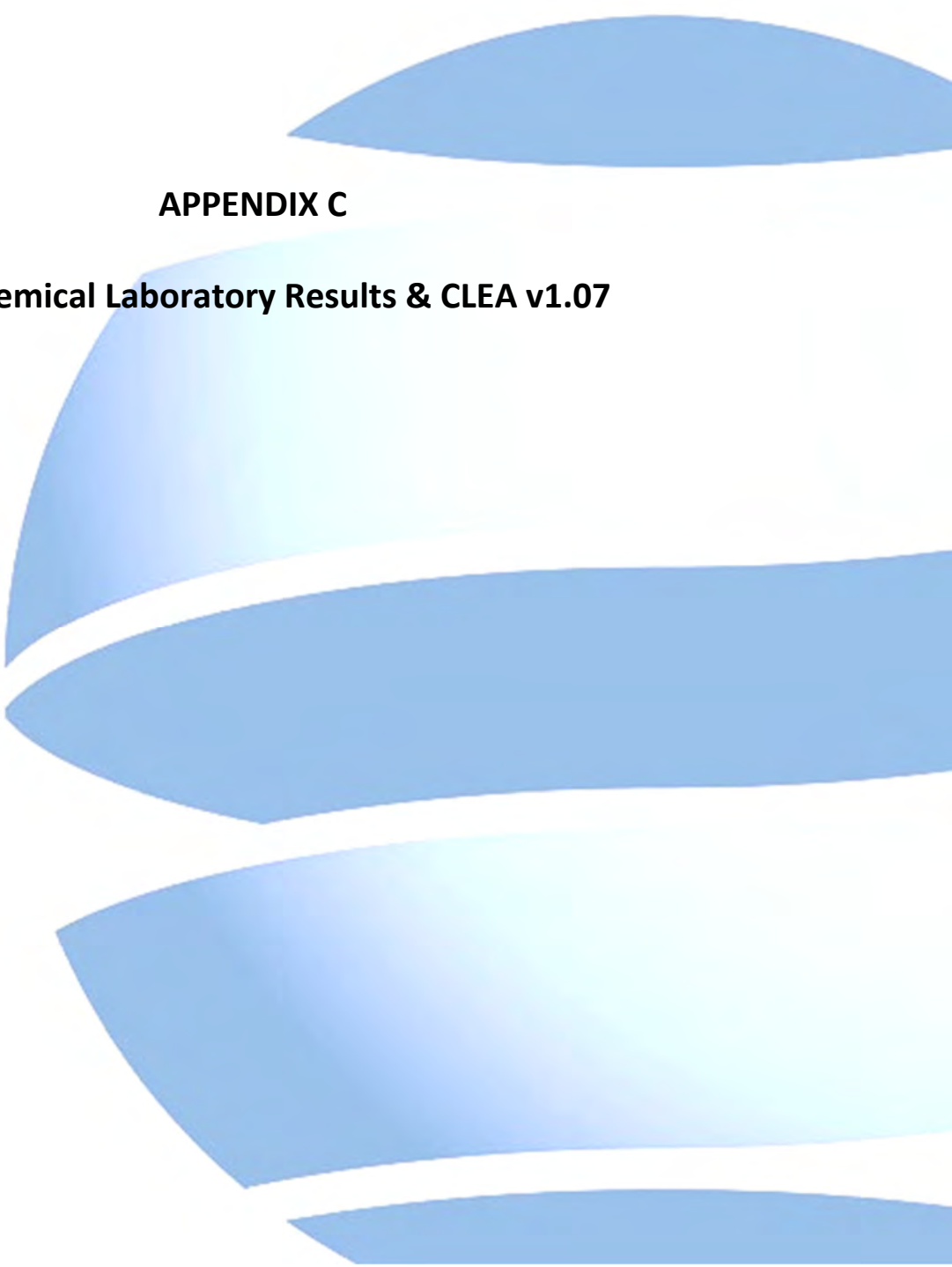
Client: Bellway Homes & Miller Homes

Dates: 19/05/2022

Logged By
SA

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15			0.15	27.71		Grass over brown silty slightly gravelly fine SAND with occasional rootlets. TOPSOIL	1
		0.40	ES					Soft grey brown and orange sandy CLAY. WITTERING FORMATION	
		0.50	PP	0.5kg/cm2					
		1.00	ES						
		1.00	PP	0.5kg/cm2					
		1.30			1.30	26.56			
		1.50	D					Firm mottled orange and light grey slightly sandy CLAY. WITTERING FORMATION	2
		1.50	PP	1.2kg/cm2					
		2.00	PP	1.2kg/cm2					
		2.30			2.30	25.56		Stiff mottled light grey, orange brown and brown CLAY. WITTERING FORMATION	3
		2.50	D						
		2.50	PP	2.0kg/cm2					
		3.00	PP	2.5kg/cm2	3.00	24.86		No recovery.	4
		3.60	D		3.60	24.26		Very stiff friable brown and dark brown CLAY with frequent fine gravel sized mudstone lithorelicts. WITTERING FORMATION	
		4.00	PP	4.2kg/cm2	4.00	23.86		No recovery.	5
		4.70			4.70	23.16		Firm grey CLAY. LONDON CLAY	
		5.00	PP	1.2kg/cm2	5.00	22.86		End of Borehole at 5.00m	

Dynamic Sampling Run Details			Water Strike - Details		Remarks	
Depth Top	Depth Base	Diameter	Depth Water Value	Depth Water		
			0.90	0.900	Groundwater at 1.15m rising to 0.90m after 20 minutes. Monitoring standpipe installed	



APPENDIX C

Geochemical Laboratory Results & CLEA v1.07



Final Report

Report No.: 22-19200-1
Initial Date of Issue: 30-May-2022
Client Geo-Environmental Services Ltd

Client Address: Unit 7, Danworth Farm
Cuckfield Road
Hurstpierpoint
West Sussex
BN6 9GL

Contact(s): Laura Legate
Reporting
Shaun Armitage

Project GE20584 Park Farm, Boorley Gardens

Quotation No.: Q22-27574 **Date Received:** 23-May-2022

Order No.: PO-5326 **Date Instructed:** 23-May-2022

No. of Samples: 10

Turnaround (Wkdays): 5 **Results Due:** 27-May-2022

Date Approved: 30-May-2022

Approved By:



Details: Stuart Henderson, Technical
Manager

Results - Soil

Project: GE20584 Park Farm, Boorley Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:				22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200
Quotation No.: Q22-27574	Chemtest Sample ID.:				1434111	1434112	1434114	1434115	1434117	1434118	1434121	1434122
	Client Sample ID.:				WS201	WS201	WS202	WS202	WS202	WS203	WS204	WS204
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.1	0.7	0.1	1.0	3.7	0.2	0.1	2.0
	Bottom Depth (m):								3.9			2.2
	Date Sampled:				19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022
	Asbestos Lab:				DURHAM		DURHAM			DURHAM	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD								
ACM Type	U	2192		N/A	-		-			-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected		No Asbestos Detected			No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	11	18	20	19	21	10	7.8	21
Soil Colour	N	2040		N/A	Brown		Brown			Brown	Brown	Brown
Other Material	N	2040		N/A	Roots		Stones			Stones	Roots and Stones	Stones
Soil Texture	N	2040		N/A	Sand		Clay			Sand	Sand	Sand
pH	M	2010		4.0	7.8		8.0			8.1	5.9	7.9
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	< 0.40		0.42			0.75	< 0.40	1.3
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.037		< 0.010			< 0.010	< 0.010	0.011
Sulphur (Elemental)	M	2180	mg/kg	1.0	< 1.0		4.0			1.3	< 1.0	12
Chloride (Water Soluble)	M	2220	g/l	0.010	< 0.010		0.019			< 0.010	0.010	0.019
Cyanide (Total)	M	2300	mg/kg	0.50	0.80		< 0.50			< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	2.1		5.4			3.2	3.5	32
Sulphate (Total)	U	2430	mg/kg	100	380		450			620	820	570
Arsenic	M	2455	mg/kg	0.5	3.1		3.3			2.4	5.8	4.6
Beryllium	U	2455	mg/kg	0.5	< 0.5		< 0.5			< 0.5	< 0.5	< 0.5
Cadmium	M	2455	mg/kg	0.10	< 0.10		0.21			< 0.10	0.13	0.12
Chromium	M	2455	mg/kg	0.5	11		8.3			6.7	19	15
Copper	M	2455	mg/kg	0.50	8.6		13			7.8	13	10
Mercury	M	2455	mg/kg	0.05	< 0.05		0.05			< 0.05	0.05	< 0.05
Nickel	M	2455	mg/kg	0.50	3.3		3.8			2.7	8.2	6.3
Lead	M	2455	mg/kg	0.50	37		56			18	150	110
Selenium	M	2455	mg/kg	0.25	< 0.25		< 0.25			< 0.25	0.43	0.40
Vanadium	U	2455	mg/kg	0.5	13		14			10	22	18
Zinc	M	2455	mg/kg	0.50	32		130			53	70	54
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50		< 0.50			< 0.50	< 0.50	< 0.50
Organic Matter	M	2625	%	0.40		0.41		0.62	0.50			
Total Organic Carbon	M	2625	%	0.20	2.1		1.8			2.0	1.8	0.23
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	530	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	810	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	250	< 1.0	< 1.0	32	< 1.0

Results - Soil

Project: GE20584 Park Farm, Boorley Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:				22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200
Quotation No.: Q22-27574	Chemtest Sample ID.:				1434111	1434112	1434114	1434115	1434117	1434118	1434121	1434122
	Client Sample ID.:				WS201	WS201	WS202	WS202	WS202	WS203	WS204	WS204
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.1	0.7	0.1	1.0	3.7	0.2	0.1	2.0
	Bottom Depth (m):								3.9			2.2
	Date Sampled:				19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022
	Asbestos Lab:				DURHAM		DURHAM			DURHAM	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD								
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	1600	< 5.0	< 5.0	32	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	210	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	210	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10	1800	< 10	< 10	32	< 10
Dichlorodifluoromethane	U	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
Chloromethane	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
Vinyl Chloride	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
Bromomethane	M	2760	µg/kg	20		< 20		< 20	< 20			
Chloroethane	U	2760	µg/kg	2.0		< 2.0		< 2.0	< 2.0			
Trichlorofluoromethane	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
1,1-Dichloroethene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
Trans 1,2-Dichloroethene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
1,1-Dichloroethane	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
cis 1,2-Dichloroethene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
Bromochloromethane	U	2760	µg/kg	5.0		< 5.0		< 5.0	< 5.0			
Trichloromethane	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
1,1,1-Trichloroethane	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
Tetrachloromethane	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
1,1-Dichloropropene	U	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
Benzene	M	2760	mg/kg	0.0010	< 0.0010		< 0.0010			< 0.0010	< 0.0010	< 0.0010
Benzene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
1,2-Dichloroethane	M	2760	µg/kg	2.0		< 2.0		< 2.0	< 2.0			
Trichloroethene	N	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
1,2-Dichloropropane	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
Dibromomethane	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			
Bromodichloromethane	M	2760	µg/kg	5.0		< 5.0		< 5.0	< 5.0			
cis-1,3-Dichloropropene	N	2760	µg/kg	10		< 10		< 10	< 10			
Toluene	M	2760	mg/kg	0.0010	< 0.0010		< 0.0010			< 0.0010	< 0.0010	< 0.0010
Toluene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0			

Results - Soil

Project: GE20584 Park Farm, Boorley Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:				22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200
Quotation No.: Q22-27574	Chemtest Sample ID.:				1434111	1434112	1434114	1434115	1434117	1434118	1434121	1434122	
	Client Sample ID.:				WS201	WS201	WS202	WS202	WS202	WS203	WS204	WS204	
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	Top Depth (m):				0.1	0.7	0.1	1.0	3.7	0.2	0.1	2.0	
	Bottom Depth (m):								3.9			2.2	
	Date Sampled:				19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	
	Asbestos Lab:				DURHAM		DURHAM			DURHAM	DURHAM	DURHAM	
Determinand	Accred.	SOP	Units	LOD									
Trans-1,3-Dichloropropene	N	2760	µg/kg	10		< 10		< 10	< 10				
1,1,2-Trichloroethane	M	2760	µg/kg	10		< 10		< 10	< 10				
Tetrachloroethene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
1,3-Dichloropropane	U	2760	µg/kg	2.0		< 2.0		< 2.0	< 2.0				
Dibromochloromethane	U	2760	µg/kg	10		< 10		< 10	< 10				
1,2-Dibromoethane	M	2760	µg/kg	5.0		< 5.0		< 5.0	< 5.0				
Chlorobenzene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
1,1,1,2-Tetrachloroethane	M	2760	µg/kg	2.0		< 2.0		< 2.0	< 2.0				
Ethylbenzene	M	2760	mg/kg	0.0010	< 0.0010		< 0.0010			< 0.0010	< 0.0010	< 0.0010	
Ethylbenzene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
m & p-Xylene	M	2760	mg/kg	0.0010	< 0.0010		< 0.0010			< 0.0010	< 0.0010	< 0.0010	
m & p-Xylene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
o-Xylene	M	2760	mg/kg	0.0010	< 0.0010		< 0.0010			< 0.0010	< 0.0010	< 0.0010	
o-Xylene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
Styrene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
Tribromomethane	U	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
Isopropylbenzene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
Bromobenzene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
1,2,3-Trichloropropane	N	2760	µg/kg	50		< 50		< 50	< 50				
N-Propylbenzene	U	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
2-Chlorotoluene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
1,3,5-Trimethylbenzene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
4-Chlorotoluene	U	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
Tert-Butylbenzene	U	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
1,2,4-Trimethylbenzene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
Sec-Butylbenzene	U	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
1,3-Dichlorobenzene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
4-Isopropyltoluene	U	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
1,4-Dichlorobenzene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
N-Butylbenzene	U	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
1,2-Dichlorobenzene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
1,2-Dibromo-3-Chloropropane	U	2760	µg/kg	50		< 50		< 50	< 50				
1,2,4-Trichlorobenzene	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
Hexachlorobutadiene	U	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				
1,2,3-Trichlorobenzene	U	2760	µg/kg	2.0		< 2.0		< 2.0	< 2.0				
Methyl Tert-Butyl Ether	M	2760	mg/kg	0.0010	< 0.0010		< 0.0010			< 0.0010	< 0.0010	< 0.0010	
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0		< 1.0		< 1.0	< 1.0				

Results - Soil

Project: GE20584 Park Farm, Boorley Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:				22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200
Quotation No.: Q22-27574	Chemtest Sample ID.:				1434111	1434112	1434114	1434115	1434117	1434118	1434121	1434122	
	Client Sample ID.:				WS201	WS201	WS202	WS202	WS202	WS203	WS204	WS204	
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	Top Depth (m):				0.1	0.7	0.1	1.0	3.7	0.2	0.1	2.0	
	Bottom Depth (m):								3.9			2.2	
	Date Sampled:				19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	
	Asbestos Lab:				DURHAM		DURHAM			DURHAM	DURHAM	DURHAM	
Determinand	Accred.	SOP	Units	LOD									
N-Nitrosodimethylamine	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Phenol	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
2-Chlorophenol	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Bis-(2-Chloroethyl)Ether	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
1,3-Dichlorobenzene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
1,4-Dichlorobenzene	N	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
1,2-Dichlorobenzene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
2-Methylphenol	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Bis(2-Chloroisopropyl)Ether	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Hexachloroethane	N	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
N-Nitrosodi-n-propylamine	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
4-Methylphenol	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Nitrobenzene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Isophorone	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
2-Nitrophenol	N	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
2,4-Dimethylphenol	N	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Bis(2-Chloroethoxy)Methane	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
2,4-Dichlorophenol	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
1,2,4-Trichlorobenzene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Naphthalene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
4-Chloroaniline	N	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Hexachlorobutadiene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
4-Chloro-3-Methylphenol	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
2-Methylnaphthalene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
4-Nitrophenol	N	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
2,4,6-Trichlorophenol	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
2,4,5-Trichlorophenol	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
2-Chloronaphthalene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
2-Nitroaniline	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Acenaphthylene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Dimethylphthalate	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
2,6-Dinitrotoluene	M	2790	mg/kg	0.50		< 0.50		3.0	< 0.50				
Acenaphthene	M	2790	mg/kg	0.50		< 0.50		0.84	< 0.50				
3-Nitroaniline	N	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Dibenzofuran	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
4-Chlorophenylphenylether	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				

Results - Soil

Project: GE20584 Park Farm, Boorley Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:				22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200
Quotation No.: Q22-27574	Chemtest Sample ID.:				1434111	1434112	1434114	1434115	1434117	1434118	1434121	1434122	
	Client Sample ID.:				WS201	WS201	WS202	WS202	WS202	WS203	WS204	WS204	
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	Top Depth (m):				0.1	0.7	0.1	1.0	3.7	0.2	0.1	2.0	
	Bottom Depth (m):								3.9			2.2	
	Date Sampled:				19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	
	Asbestos Lab:				DURHAM		DURHAM			DURHAM	DURHAM	DURHAM	
Determinand	Accred.	SOP	Units	LOD									
2,4-Dinitrotoluene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Fluorene	M	2790	mg/kg	0.50		< 0.50		1.1	< 0.50				
Diethyl Phthalate	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
4-Nitroaniline	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Azobenzene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
4-Bromophenylphenyl Ether	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Hexachlorobenzene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Pentachlorophenol	N	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Phenanthrene	M	2790	mg/kg	0.50		< 0.50		2.5	< 0.50				
Anthracene	M	2790	mg/kg	0.50		< 0.50		0.67	< 0.50				
Carbazole	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Di-N-Butyl Phthalate	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Fluoranthene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Pyrene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Butylbenzyl Phthalate	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Benzo[a]anthracene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Chrysene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Di-N-Octyl Phthalate	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Benzo[b]fluoranthene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Benzo[k]fluoranthene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Benzo[a]pyrene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Indeno(1,2,3-c,d)Pyrene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Dibenz(a,h)Anthracene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Benzo[g,h,i]perylene	M	2790	mg/kg	0.50		< 0.50		< 0.50	< 0.50				
Naphthalene	N	2800	mg/kg	0.010	< 0.010		< 0.010			< 0.010	< 0.010	< 0.010	
Acenaphthylene	N	2800	mg/kg	0.010	< 0.010		< 0.010			< 0.010	< 0.010	< 0.010	
Acenaphthene	N	2800	mg/kg	0.010	< 0.010		< 0.010			< 0.010	< 0.010	< 0.010	
Fluorene	N	2800	mg/kg	0.010	< 0.010		< 0.010			< 0.010	< 0.010	< 0.010	
Phenanthrene	N	2800	mg/kg	0.010	0.45		0.18			< 0.010	< 0.010	< 0.010	
Anthracene	N	2800	mg/kg	0.010	0.13		0.12			< 0.010	< 0.010	< 0.010	
Fluoranthene	N	2800	mg/kg	0.010	1.1		0.49			0.11	< 0.010	< 0.010	
Pyrene	N	2800	mg/kg	0.010	0.99		0.56			0.12	< 0.010	< 0.010	
Benzo[a]anthracene	N	2800	mg/kg	0.010	0.58		0.36			< 0.010	< 0.010	< 0.010	
Chrysene	N	2800	mg/kg	0.010	0.54		0.38			< 0.010	< 0.010	< 0.010	
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	0.77		0.47			< 0.010	< 0.010	< 0.010	

Results - Soil

Project: GE20584 Park Farm, Boorley Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:				22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200	22-19200
Quotation No.: Q22-27574	Chemtest Sample ID.:				1434111	1434112	1434114	1434115	1434117	1434118	1434121	1434122
	Client Sample ID.:				WS201	WS201	WS202	WS202	WS202	WS203	WS204	WS204
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.1	0.7	0.1	1.0	3.7	0.2	0.1	2.0
	Bottom Depth (m):								3.9			2.2
	Date Sampled:				19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022	19-May-2022
	Asbestos Lab:				DURHAM		DURHAM			DURHAM	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD								
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	0.26		0.13			< 0.010	< 0.010	< 0.010
Benzo[a]pyrene	N	2800	mg/kg	0.010	0.69		0.54			< 0.010	< 0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	0.44		0.46			< 0.010	< 0.010	< 0.010
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	0.13		0.075			< 0.010	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	0.49		0.58			< 0.010	< 0.010	< 0.010
Total Of 16 PAH's	N	2800	mg/kg	0.20	6.6		4.4			0.23	< 0.20	< 0.20
Total Phenols	M	2920	mg/kg	0.10	< 0.10		< 0.10			< 0.10	< 0.10	< 0.10
SVOC TIC	N	2790	mg/kg	N/A		None Detected		None Detected	None Detected			
VOC TIC	N	2760	µg/kg	N/A		None Detected		None Detected	None Detected			

Results - Soil

Project: GE20584 Park Farm, Boorley Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:				22-19200	22-19200
Quotation No.: Q22-27574	Chemtest Sample ID.:				1434123	1434124
	Client Sample ID.:				WS205	WS205
	Sample Type:				SOIL	SOIL
	Top Depth (m):				0.4	1.0
	Bottom Depth (m):					
	Date Sampled:				19-May-2022	19-May-2022
	Asbestos Lab:				DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD		
ACM Type	U	2192		N/A	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	20	21
Soil Colour	N	2040		N/A	Brown	Brown
Other Material	N	2040		N/A	None	None
Soil Texture	N	2040		N/A	Clay	Clay
pH	M	2010		4.0	7.9	8.7
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	< 0.40	< 0.40
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	< 0.010	< 0.010
Sulphur (Elemental)	M	2180	mg/kg	1.0	1.6	13
Chloride (Water Soluble)	M	2220	g/l	0.010	< 0.010	< 0.010
Cyanide (Total)	M	2300	mg/kg	0.50	0.60	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	20	3.3
Sulphate (Total)	U	2430	mg/kg	100	170	100
Arsenic	M	2455	mg/kg	0.5	2.1	1.8
Beryllium	U	2455	mg/kg	0.5	< 0.5	< 0.5
Cadmium	M	2455	mg/kg	0.10	< 0.10	< 0.10
Chromium	M	2455	mg/kg	0.5	8.1	11
Copper	M	2455	mg/kg	0.50	2.8	3.5
Mercury	M	2455	mg/kg	0.05	< 0.05	< 0.05
Nickel	M	2455	mg/kg	0.50	2.1	1.7
Lead	M	2455	mg/kg	0.50	8.9	4.4
Selenium	M	2455	mg/kg	0.25	< 0.25	< 0.25
Vanadium	U	2455	mg/kg	0.5	11	13
Zinc	M	2455	mg/kg	0.50	23	11
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50
Organic Matter	M	2625	%	0.40		
Total Organic Carbon	M	2625	%	0.20	0.55	< 0.20
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0

Results - Soil

Project: GE20584 Park Farm, Boorley Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:				22-19200	22-19200
Quotation No.: Q22-27574	Chemtest Sample ID.:				1434123	1434124
	Client Sample ID.:				WS205	WS205
	Sample Type:				SOIL	SOIL
	Top Depth (m):				0.4	1.0
	Bottom Depth (m):					
	Date Sampled:				19-May-2022	19-May-2022
	Asbestos Lab:				DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD		
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10
Dichlorodifluoromethane	U	2760	µg/kg	1.0		
Chloromethane	M	2760	µg/kg	1.0		
Vinyl Chloride	M	2760	µg/kg	1.0		
Bromomethane	M	2760	µg/kg	20		
Chloroethane	U	2760	µg/kg	2.0		
Trichlorofluoromethane	M	2760	µg/kg	1.0		
1,1-Dichloroethene	M	2760	µg/kg	1.0		
Trans 1,2-Dichloroethene	M	2760	µg/kg	1.0		
1,1-Dichloroethane	M	2760	µg/kg	1.0		
cis 1,2-Dichloroethene	M	2760	µg/kg	1.0		
Bromochloromethane	U	2760	µg/kg	5.0		
Trichloromethane	M	2760	µg/kg	1.0		
1,1,1-Trichloroethane	M	2760	µg/kg	1.0		
Tetrachloromethane	M	2760	µg/kg	1.0		
1,1-Dichloropropene	U	2760	µg/kg	1.0		
Benzene	M	2760	mg/kg	0.0010	< 0.0010	< 0.0010
Benzene	M	2760	µg/kg	1.0		
1,2-Dichloroethane	M	2760	µg/kg	2.0		
Trichloroethene	N	2760	µg/kg	1.0		
1,2-Dichloropropane	M	2760	µg/kg	1.0		
Dibromomethane	M	2760	µg/kg	1.0		
Bromodichloromethane	M	2760	µg/kg	5.0		
cis-1,3-Dichloropropene	N	2760	µg/kg	10		
Toluene	M	2760	mg/kg	0.0010	< 0.0010	< 0.0010
Toluene	M	2760	µg/kg	1.0		

Results - Soil

Project: GE20584 Park Farm, Boorley Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:				22-19200	22-19200
Quotation No.: Q22-27574	Chemtest Sample ID.:				1434123	1434124
	Client Sample ID.:				WS205	WS205
	Sample Type:				SOIL	SOIL
	Top Depth (m):				0.4	1.0
	Bottom Depth (m):					
	Date Sampled:				19-May-2022	19-May-2022
	Asbestos Lab:				DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD		
Trans-1,3-Dichloropropene	N	2760	µg/kg	10		
1,1,2-Trichloroethane	M	2760	µg/kg	10		
Tetrachloroethene	M	2760	µg/kg	1.0		
1,3-Dichloropropane	U	2760	µg/kg	2.0		
Dibromochloromethane	U	2760	µg/kg	10		
1,2-Dibromoethane	M	2760	µg/kg	5.0		
Chlorobenzene	M	2760	µg/kg	1.0		
1,1,1,2-Tetrachloroethane	M	2760	µg/kg	2.0		
Ethylbenzene	M	2760	mg/kg	0.0010	< 0.0010	< 0.0010
Ethylbenzene	M	2760	µg/kg	1.0		
m & p-Xylene	M	2760	mg/kg	0.0010	< 0.0010	< 0.0010
m & p-Xylene	M	2760	µg/kg	1.0		
o-Xylene	M	2760	mg/kg	0.0010	< 0.0010	< 0.0010
o-Xylene	M	2760	µg/kg	1.0		
Styrene	M	2760	µg/kg	1.0		
Tribromomethane	U	2760	µg/kg	1.0		
Isopropylbenzene	M	2760	µg/kg	1.0		
Bromobenzene	M	2760	µg/kg	1.0		
1,2,3-Trichloropropane	N	2760	µg/kg	50		
N-Propylbenzene	U	2760	µg/kg	1.0		
2-Chlorotoluene	M	2760	µg/kg	1.0		
1,3,5-Trimethylbenzene	M	2760	µg/kg	1.0		
4-Chlorotoluene	U	2760	µg/kg	1.0		
Tert-Butylbenzene	U	2760	µg/kg	1.0		
1,2,4-Trimethylbenzene	M	2760	µg/kg	1.0		
Sec-Butylbenzene	U	2760	µg/kg	1.0		
1,3-Dichlorobenzene	M	2760	µg/kg	1.0		
4-Isopropyltoluene	U	2760	µg/kg	1.0		
1,4-Dichlorobenzene	M	2760	µg/kg	1.0		
N-Butylbenzene	U	2760	µg/kg	1.0		
1,2-Dichlorobenzene	M	2760	µg/kg	1.0		
1,2-Dibromo-3-Chloropropane	U	2760	µg/kg	50		
1,2,4-Trichlorobenzene	M	2760	µg/kg	1.0		
Hexachlorobutadiene	U	2760	µg/kg	1.0		
1,2,3-Trichlorobenzene	U	2760	µg/kg	2.0		
Methyl Tert-Butyl Ether	M	2760	mg/kg	0.0010	< 0.0010	< 0.0010
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0		

Results - Soil

Project: GE20584 Park Farm, Boorley Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:				22-19200	22-19200
Quotation No.: Q22-27574	Chemtest Sample ID.:				1434123	1434124
	Client Sample ID.:				WS205	WS205
	Sample Type:				SOIL	SOIL
	Top Depth (m):				0.4	1.0
	Bottom Depth (m):					
	Date Sampled:				19-May-2022	19-May-2022
	Asbestos Lab:				DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD		
N-Nitrosodimethylamine	M	2790	mg/kg	0.50		
Phenol	M	2790	mg/kg	0.50		
2-Chlorophenol	M	2790	mg/kg	0.50		
Bis-(2-Chloroethyl)Ether	M	2790	mg/kg	0.50		
1,3-Dichlorobenzene	M	2790	mg/kg	0.50		
1,4-Dichlorobenzene	N	2790	mg/kg	0.50		
1,2-Dichlorobenzene	M	2790	mg/kg	0.50		
2-Methylphenol	M	2790	mg/kg	0.50		
Bis(2-Chloroisopropyl)Ether	M	2790	mg/kg	0.50		
Hexachloroethane	N	2790	mg/kg	0.50		
N-Nitrosodi-n-propylamine	M	2790	mg/kg	0.50		
4-Methylphenol	M	2790	mg/kg	0.50		
Nitrobenzene	M	2790	mg/kg	0.50		
Isophorone	M	2790	mg/kg	0.50		
2-Nitrophenol	N	2790	mg/kg	0.50		
2,4-Dimethylphenol	N	2790	mg/kg	0.50		
Bis(2-Chloroethoxy)Methane	M	2790	mg/kg	0.50		
2,4-Dichlorophenol	M	2790	mg/kg	0.50		
1,2,4-Trichlorobenzene	M	2790	mg/kg	0.50		
Naphthalene	M	2790	mg/kg	0.50		
4-Chloroaniline	N	2790	mg/kg	0.50		
Hexachlorobutadiene	M	2790	mg/kg	0.50		
4-Chloro-3-Methylphenol	M	2790	mg/kg	0.50		
2-Methylnaphthalene	M	2790	mg/kg	0.50		
4-Nitrophenol	N	2790	mg/kg	0.50		
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50		
2,4,6-Trichlorophenol	M	2790	mg/kg	0.50		
2,4,5-Trichlorophenol	M	2790	mg/kg	0.50		
2-Chloronaphthalene	M	2790	mg/kg	0.50		
2-Nitroaniline	M	2790	mg/kg	0.50		
Acenaphthylene	M	2790	mg/kg	0.50		
Dimethylphthalate	M	2790	mg/kg	0.50		
2,6-Dinitrotoluene	M	2790	mg/kg	0.50		
Acenaphthene	M	2790	mg/kg	0.50		
3-Nitroaniline	N	2790	mg/kg	0.50		
Dibenzofuran	M	2790	mg/kg	0.50		
4-Chlorophenylphenylether	M	2790	mg/kg	0.50		

Results - Soil

Project: GE20584 Park Farm, Boorley Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:				22-19200	22-19200
Quotation No.: Q22-27574	Chemtest Sample ID.:				1434123	1434124
	Client Sample ID.:				WS205	WS205
	Sample Type:				SOIL	SOIL
	Top Depth (m):				0.4	1.0
	Bottom Depth (m):					
	Date Sampled:				19-May-2022	19-May-2022
	Asbestos Lab:				DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD		
2,4-Dinitrotoluene	M	2790	mg/kg	0.50		
Fluorene	M	2790	mg/kg	0.50		
Diethyl Phthalate	M	2790	mg/kg	0.50		
4-Nitroaniline	M	2790	mg/kg	0.50		
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50		
Azobenzene	M	2790	mg/kg	0.50		
4-Bromophenylphenyl Ether	M	2790	mg/kg	0.50		
Hexachlorobenzene	M	2790	mg/kg	0.50		
Pentachlorophenol	N	2790	mg/kg	0.50		
Phenanthrene	M	2790	mg/kg	0.50		
Anthracene	M	2790	mg/kg	0.50		
Carbazole	M	2790	mg/kg	0.50		
Di-N-Butyl Phthalate	M	2790	mg/kg	0.50		
Fluoranthene	M	2790	mg/kg	0.50		
Pyrene	M	2790	mg/kg	0.50		
Butylbenzyl Phthalate	M	2790	mg/kg	0.50		
Benzo[a]anthracene	M	2790	mg/kg	0.50		
Chrysene	M	2790	mg/kg	0.50		
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50		
Di-N-Octyl Phthalate	M	2790	mg/kg	0.50		
Benzo[b]fluoranthene	M	2790	mg/kg	0.50		
Benzo[k]fluoranthene	M	2790	mg/kg	0.50		
Benzo[a]pyrene	M	2790	mg/kg	0.50		
Indeno(1,2,3-c,d)Pyrene	M	2790	mg/kg	0.50		
Dibenz(a,h)Anthracene	M	2790	mg/kg	0.50		
Benzo[g,h,i]perylene	M	2790	mg/kg	0.50		
Naphthalene	N	2800	mg/kg	0.010	< 0.010	< 0.010
Acenaphthylene	N	2800	mg/kg	0.010	< 0.010	< 0.010
Acenaphthene	N	2800	mg/kg	0.010	< 0.010	< 0.010
Fluorene	N	2800	mg/kg	0.010	< 0.010	< 0.010
Phenanthrene	N	2800	mg/kg	0.010	< 0.010	< 0.010
Anthracene	N	2800	mg/kg	0.010	< 0.010	< 0.010
Fluoranthene	N	2800	mg/kg	0.010	0.087	< 0.010
Pyrene	N	2800	mg/kg	0.010	0.12	< 0.010
Benzo[a]anthracene	N	2800	mg/kg	0.010	< 0.010	< 0.010
Chrysene	N	2800	mg/kg	0.010	< 0.010	< 0.010
Benzo[b]fluoranthene	N	2800	mg/kg	0.010	< 0.010	< 0.010

Results - Soil

Project: GE20584 Park Farm, Boorley Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:				22-19200	22-19200
Quotation No.: Q22-27574	Chemtest Sample ID.:				1434123	1434124
	Client Sample ID.:				WS205	WS205
	Sample Type:				SOIL	SOIL
	Top Depth (m):				0.4	1.0
	Bottom Depth (m):					
	Date Sampled:				19-May-2022	19-May-2022
	Asbestos Lab:				DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD		
Benzo[k]fluoranthene	N	2800	mg/kg	0.010	< 0.010	< 0.010
Benzo[a]pyrene	N	2800	mg/kg	0.010	< 0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	2800	mg/kg	0.010	< 0.010	< 0.010
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.010	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	2800	mg/kg	0.010	< 0.010	< 0.010
Total Of 16 PAH's	N	2800	mg/kg	0.20	0.21	< 0.20
Total Phenols	M	2920	mg/kg	0.10	< 0.10	< 0.10
SVOC TIC	N	2790	mg/kg	N/A		
VOC TIC	N	2760	µg/kg	N/A		

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2220	Water soluble Chloride in Soils	Chloride	Aqueous extraction and measurement by 'Aquakem 600' Discrete Analyser using ferric nitrate / mercuric thiocyanate.
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N-dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8,>C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35- C44Aromatics: >C5-C7, >C7-C8, >C8- C10, >C10-C12, >C12-C16, >C16- C21, >C21- C35, >C35- C44	Dichloromethane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2790	Semi-Volatile Organic Compounds (SVOCs) in Soils by GC-MS	Semi-volatile organic compounds(cf. USEPA Method 8270)	Acetone/Hexane extraction / GC-MS
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenzo[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

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

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

All Asbestos testing is performed at the indicated laboratory

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

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt

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

Charges may apply to extended sample storage

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

customerservices@chemtest.com

CLEA Software Version 1.071

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Report generated 22-Jun-22

Report title Park Farm Area, Boorley Gardens

Created by SA at GESL



RESULTS

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CLEA Software Version 1.071		Page 1 of 5
Report generated	22/06/2022	
Report title	Park Farm Area, Boorley Gardens	
Created by	SA at GESL	

BASIC SETTINGS

Land Use	Residential with produce (C4SL)				
Building	Semi-detached house				
Receptor	Female (res C4SL)	Start age class	1	End age class	6
Soil	Sandy clay loam	Exposure Duration	6	years	

Exposure Pathways	Direct soil and dust ingestion	☒	Dermal contact with indoor dust	☒	Inhalation of indoor dust	☒
	Consumption of homegrown produce	☒	Dermal contact with soil	☒	Inhalation of soil dust	☒
	Soil attached to homegrown produce	☒			Inhalation of indoor vapour	☒
					Inhalation of outdoor vapour	☒



Land Use Residential with produce (C4SL)

Receptor Female (res C4SL)

Age Class	Exposure Frequencies (days yr ⁻¹)						Occupation Periods (hr day ⁻¹)		Soil to skin adherence factors (mg cm ²)		Direct soil ingestion rate (g day ⁻¹)	Body weight (kg)	Body height (m)	Inhalation rate (m ³ day ⁻¹)	Max exposed skin factor		Total skin area (m ²)
	Direct soil ingestion	Consumption of homegrown produce	Dermal contact with indoor dust	Dermal contact with soil	Inhalation of dust and vapour, indoor	Inhalation of dust and vapour, outdoor	Indoors	Outdoors									
									Indoor	Outdoor							
1	180	180	180	170	365	365	23.0	1.0	0.06	0.10	0.10	5.60	0.7	5.4	0.32	0.26	3.43E-01
2	365	365	365	170	365	365	23.0	1.0	0.06	0.10	0.10	9.80	0.8	8.0	0.33	0.26	4.84E-01
3	365	365	365	170	365	365	23.0	1.0	0.06	0.10	0.10	12.70	0.9	8.9	0.32	0.25	5.82E-01
4	365	365	365	170	365	365	23.0	1.0	0.06	0.10	0.10	15.10	0.9	10.1	0.35	0.28	6.36E-01
5	365	365	365	170	365	365	19.0	1.0	0.06	0.10	0.10	16.90	1.0	10.1	0.35	0.28	7.04E-01
6	365	365	365	170	365	365	19.0	1.0	0.06	0.10	0.10	19.70	1.1	10.1	0.33	0.26	7.94E-01
7	0	0	0	0	0	0	0.0	0.0	0.00	0.00	0.00	22.10	1.2	12.0	0.22	0.15	8.73E-01
8	0	0	0	0	0	0	0.0	0.0	0.00	0.00	0.00	25.30	1.2	12.0	0.22	0.15	9.36E-01
9	0	0	0	0	0	0	0.0	0.0	0.00	0.00	0.00	27.50	1.3	12.0	0.22	0.15	1.01E+00
10	0	0	0	0	0	0	0.0	0.0	0.00	0.00	0.00	31.40	1.3	12.0	0.22	0.15	1.08E+00
11	0	0	0	0	0	0	0.0	0.0	0.00	0.00	0.00	35.70	1.4	12.0	0.22	0.14	1.19E+00
12	0	0	0	0	0	0	0.0	0.0	0.00	0.00	0.00	41.30	1.4	15.2	0.22	0.14	1.29E+00
13	0	0	0	0	0	0	0.0	0.0	0.00	0.00	0.00	47.20	1.5	15.2	0.22	0.14	1.42E+00
14	0	0	0	0	0	0	0.0	0.0	0.00	0.00	0.00	51.20	1.6	15.2	0.22	0.14	1.52E+00
15	0	0	0	0	0	0	0.0	0.0	0.00	0.00	0.00	56.70	1.6	15.2	0.21	0.14	1.60E+00
16	0	0	0	0	0	0	0.0	0.0	0.00	0.00	0.00	59.00	1.6	15.2	0.21	0.14	1.63E+00
17	0	0	0	0	0	0	0.0	0.0	0.00	0.00	0.00	70.00	1.6	15.7	0.33	0.27	1.78E+00
18	0	0	0	0	0	0	0.0	0.0	0.00	0.00	0.00	70.90	1.6	13.6	0.33	0.27	1.80E+00

Consumption Rates



Age Class	Consumption rates (α FW kg^{-1} bodyweight day^{-1}) by Produce Group											
	MEAN RATES						90TH PERCENTILE RATES					
	Green veg	Root veg	Tuber veg	Herb. Fruit	Shrub fruit	Tree fruit	Green veg	Root veg	Tuber veg	Herb. Fruit	Shrub fruit	Tree fruit
1	3.47E+00	5.22E+00	9.22E+00	8.90E-01	1.07E+00	1.87E+00	7.12E+00	1.07E+01	1.60E+01	1.83E+00	2.23E+00	3.82E+00
2	3.34E+00	1.61E+00	3.14E+00	1.93E+00	2.60E-01	5.84E+00	5.87E+00	2.83E+00	6.60E+00	3.39E+00	4.60E-01	1.03E+01
3	3.34E+00	1.61E+00	3.14E+00	1.93E+00	2.60E-01	5.84E+00	5.87E+00	2.83E+00	6.60E+00	3.39E+00	4.60E-01	1.03E+01
4	3.34E+00	1.61E+00	3.14E+00	1.93E+00	2.60E-01	5.84E+00	5.87E+00	2.83E+00	6.60E+00	3.39E+00	4.60E-01	1.03E+01
5	2.54E+00	1.20E+00	2.65E+00	1.25E+00	1.10E-01	2.89E+00	4.53E+00	2.14E+00	4.95E+00	2.24E+00	1.90E-01	5.16E+00
6	2.54E+00	1.20E+00	2.65E+00	1.25E+00	1.10E-01	2.89E+00	4.53E+00	2.14E+00	4.95E+00	2.24E+00	1.90E-01	5.16E+00
7	2.54E+00	1.20E+00	2.65E+00	1.25E+00	1.10E-01	2.89E+00	4.53E+00	2.14E+00	4.95E+00	2.24E+00	1.90E-01	5.16E+00
8	2.54E+00	1.20E+00	2.65E+00	1.25E+00	1.10E-01	2.89E+00	4.53E+00	2.14E+00	4.95E+00	2.24E+00	1.90E-01	5.16E+00
9	2.54E+00	1.20E+00	2.65E+00	1.25E+00	1.10E-01	2.89E+00	4.53E+00	2.14E+00	4.95E+00	2.24E+00	1.90E-01	5.16E+00
10	2.54E+00	1.20E+00	2.65E+00	1.25E+00	1.10E-01	2.89E+00	4.53E+00	2.14E+00	4.95E+00	2.24E+00	1.90E-01	5.16E+00
11	2.54E+00	1.20E+00	2.65E+00	1.25E+00	1.10E-01	2.89E+00	4.53E+00	2.14E+00	4.95E+00	2.24E+00	1.90E-01	5.16E+00
12	1.03E+00	4.90E-01	1.60E+00	5.10E-01	4.00E-02	1.18E+00	1.87E+00	8.90E-01	3.05E+00	9.30E-01	8.00E-02	2.13E+00
13	1.03E+00	4.90E-01	1.60E+00	5.10E-01	4.00E-02	1.18E+00	1.87E+00	8.90E-01	3.05E+00	9.30E-01	8.00E-02	2.13E+00
14	1.03E+00	4.90E-01	1.60E+00	5.10E-01	4.00E-02	1.18E+00	1.87E+00	8.90E-01	3.05E+00	9.30E-01	8.00E-02	2.13E+00
15	1.03E+00	4.90E-01	1.60E+00	5.10E-01	4.00E-02	1.18E+00	1.87E+00	8.90E-01	3.05E+00	9.30E-01	8.00E-02	2.13E+00
16	1.03E+00	4.90E-01	1.60E+00	5.10E-01	4.00E-02	1.18E+00	1.87E+00	8.90E-01	3.05E+00	9.30E-01	8.00E-02	2.13E+00
17	1.26E+00	6.00E-01	1.18E+00	6.90E-01	9.00E-02	1.27E+00	2.36E+00	1.12E+00	2.35E+00	1.29E+00	1.80E-01	2.38E+00
18	1.35E+00	6.40E-01	1.25E+00	7.40E-01	1.00E-01	1.36E+00	2.34E+00	1.12E+00	2.36E+00	1.28E+00	1.80E-01	2.37E+00

Top 2 applied? Yes

Where top 2 method is applied, two produce categories use 90th percentile rates, while the remainder use the mean. Produce categories vary on a chemical-by-chemical basis. Where top 2 method is not used, all produce categories for all chemicals assume 90th percentile rates.

Building Semi-detached house**Soil** Sandy clay loam

Building footprint (m ²)	4.30E+01
Living space air exchange rate (hr ⁻¹)	5.00E-01
Living space height (above ground, m)	4.80E+00
Living space height (below ground, m)	0.00E+00
Pressure difference (soil to enclosed space, Pa)	3.10E+00
Foundation thickness (m)	1.50E-01
Floor crack area (cm ²)	5.25E+02
Dust loading factor (µg m ⁻³)	5.00E+01

Porosity, Total (cm ³ cm ⁻³)	5.30E-01
Porosity, Air-Filled (cm ³ cm ⁻³)	1.60E-01
Porosity, Water-Filled (cm ³ cm ⁻³)	3.70E-01
Residual soil water content (cm ³ cm ⁻³)	1.50E-01
Saturated hydraulic conductivity (cm s ⁻¹)	2.37E-03
van Genuchten shape parameter <i>m</i> (dimensionless)	3.10E-01
Bulk density (g cm ⁻³)	1.20E+00
Threshold value of wind speed at 10m (m s ⁻¹)	7.20E+00
Empirical function (<i>F_w</i>) for dust model (dimensionless)	1.22E+00
Ambient soil temperature (K)	2.83E+02
Soil pH	8.30E+00
Soil Organic Matter content (%)	6.20E-01
Fraction of organic carbon (g g ⁻¹)	3.60E-03
Effective total fluid saturation (unitless)	5.79E-01
Intrinsic soil permeability (cm ²)	3.16E-08
Relative soil air permeability (unitless)	5.78E-01
Effective air permeability (cm ²)	1.83E-08

Soil - Vapour Model

Depth to top of source (no building) (cm)	0
Depth to top of source (beneath building) (cm)	65
Default soil gas ingress rate?	Yes
Soil gas ingress rate ($\text{cm}^3 \text{s}^{-1}$)	2.50E+01
Building ventilation rate ($\text{cm}^3 \text{s}^{-1}$)	2.87E+04
Averaging time surface emissions (yr)	6
Finite vapour source model?	No
Thickness of contaminated layer (cm)	200

Air Dispersion Model

Mean annual windspeed at 10m (m s^{-1})	5.00
Air dispersion factor at height of 0.8m *	2400.00
Air dispersion factor at height of 1.6m *	0.00
Fraction of site cover ($\text{m}^2 \text{m}^{-2}$)	0.75

* Air dispersion factor in $\text{g m}^{-2} \text{s}^{-1}$ per kg m^{-3} **Soil - Plant Model**

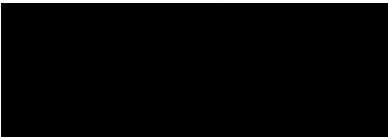
	Dry weight conversion factor	Homegrown fraction		Soil loading factor	Preparation correction factor
	g DW g^{-1} FW	Average	High		
		dimensionless		g g^{-1} DW	dimensionless
Green vegetables	0.096	0.05	0.33	1.00E-03	2.00E-01
Root vegetables	0.103	0.06	0.40	1.00E-03	1.00E+00
Tuber vegetables	0.210	0.02	0.13	1.00E-03	1.00E+00
Herbaceous fruit	0.058	0.06	0.40	1.00E-03	6.00E-01
Shrub fruit	0.166	0.09	0.60	1.00E-03	6.00E-01
Tree fruit	0.157	0.04	0.27	1.00E-03	6.00E-01

Gardener type Average



2183

Final Report

Report No.:	22-21689-1		
Initial Date of Issue:	16-Jun-2022		
Client	Geo-Environmental Services Ltd		
Client Address:	Unit 7, Danworth Farm Cuckfield Road Hurstpierpoint West Sussex BN6 9GL		
Contact(s):	Shaun Armitage Travis Underdown Reporting		
Project	GE20584 Borely Gardens		
Quotation No.:	Q22-27853	Date Received:	10-Jun-2022
Order No.:	PO-9351	Date Instructed:	10-Jun-2022
No. of Samples:	1		
Turnaround (Wkdays):	5	Results Due:	16-Jun-2022
Date Approved:	16-Jun-2022		
Approved By:			
Details:	Stuart Henderson, Technical Manager		

Results - Water

Project: GE20584 Borely Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:		22-21689		
Quotation No.: Q22-27853	Chemtest Sample ID.:		1445949		
	Client Sample ID.:		WS02		
	Sample Type:		WATER		
	Top Depth (m):		2.5		
	Date Sampled:		08-Jun-2022		
Determinand	Accred.	SOP	Units	LOD	
pH	U	1010		N/A	7.0
Chloride	U	1220	mg/l	1.0	30
Sulphate	U	1220	mg/l	1.0	120
Cyanide (Total)	U	1300	mg/l	0.050	< 0.050
Sulphide	U	1325	mg/l	0.050	0.32
Arsenic (Dissolved)	U	1455	µg/l	0.20	93
Boron (Dissolved)	U	1455	µg/l	10.0	1300
Beryllium (Dissolved)	U	1455	µg/l	1.00	24
Cadmium (Dissolved)	U	1455	µg/l	0.11	14
Chromium (Dissolved)	U	1455	µg/l	0.50	250
Copper (Dissolved)	U	1455	µg/l	0.50	1200
Mercury (Dissolved)	U	1455	µg/l	0.05	0.70
Nickel (Dissolved)	U	1455	µg/l	0.50	360
Lead (Dissolved)	U	1455	µg/l	0.50	1000
Selenium (Dissolved)	U	1455	µg/l	0.50	84
Vanadium (Dissolved)	U	1455	µg/l	0.50	350
Zinc (Dissolved)	U	1455	µg/l	2.5	2400
Low-Level Chromium (Hexavalent)	U	1495	µg/l	0.10	< 0.10
Total Organic Carbon	U	1610	mg/l	2.0	720
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	µg/l	10	< 10
Dichlorodifluoromethane	U	1760	µg/l	1.0	< 1.0

Results - Water

Project: GE20584 Borely Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:		22-21689		
Quotation No.: Q22-27853	Chemtest Sample ID.:		1445949		
	Client Sample ID.:		WS02		
	Sample Type:		WATER		
	Top Depth (m):		2.5		
	Date Sampled:		08-Jun-2022		
Determinand	Accred.	SOP	Units	LOD	
Chloromethane	U	1760	µg/l	1.0	< 1.0
Vinyl Chloride	N	1760	µg/l	1.0	< 1.0
Bromomethane	U	1760	µg/l	5	< 5
Chloroethane	U	1760	µg/l	2.0	< 2.0
Trichlorofluoromethane	U	1760	µg/l	1.0	< 1.0
1,1-Dichloroethene	U	1760	µg/l	1.0	< 1.0
Trans 1,2-Dichloroethene	U	1760	µg/l	1.0	< 1.0
1,1-Dichloroethane	U	1760	µg/l	1.0	< 1.0
cis 1,2-Dichloroethene	U	1760	µg/l	1.0	< 1.0
Bromochloromethane	U	1760	µg/l	5	< 5
Trichloromethane	U	1760	µg/l	1.0	< 1.0
1,1,1-Trichloroethane	U	1760	µg/l	1.0	< 1.0
Tetrachloromethane	U	1760	µg/l	1.0	< 1.0
1,1-Dichloropropene	U	1760	µg/l	1.0	< 1.0
Benzene	U	1760	µg/l	1.0	< 1.0
1,2-Dichloroethane	U	1760	µg/l	2.0	< 2.0
Trichloroethene	N	1760	µg/l	1.0	< 1.0
1,2-Dichloropropane	U	1760	µg/l	1.0	< 1.0
Dibromomethane	U	1760	µg/l	10	< 10
Bromodichloromethane	U	1760	µg/l	5	< 5
cis-1,3-Dichloropropene	N	1760	µg/l	10	< 10
Toluene	U	1760	µg/l	1.0	< 1.0
Trans-1,3-Dichloropropene	N	1760	µg/l	10	< 10
1,1,2-Trichloroethane	U	1760	µg/l	10	< 10
Tetrachloroethene	U	1760	µg/l	1.0	< 1.0
1,3-Dichloropropane	U	1760	µg/l	2.0	< 2.0
Dibromochloromethane	U	1760	µg/l	10	< 10
1,2-Dibromoethane	U	1760	µg/l	5	< 5
Chlorobenzene	N	1760	µg/l	1.0	< 1.0
1,1,1,2-Tetrachloroethane	U	1760	µg/l	2.0	< 2.0
Ethylbenzene	U	1760	µg/l	1.0	< 1.0
m & p-Xylene	U	1760	µg/l	1.0	< 1.0
o-Xylene	U	1760	µg/l	1.0	< 1.0
Styrene	U	1760	µg/l	1.0	< 1.0
Tribromomethane	U	1760	µg/l	1.0	< 1.0
Isopropylbenzene	U	1760	µg/l	1.0	100
Bromobenzene	U	1760	µg/l	1.0	< 1.0
1,2,3-Trichloropropane	N	1760	µg/l	50	< 50
N-Propylbenzene	U	1760	µg/l	1.0	61

Results - Water

Project: GE20584 Borely Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:				22-21689
Quotation No.: Q22-27853	Chemtest Sample ID.:				1445949
	Client Sample ID.:				WS02
	Sample Type:				WATER
	Top Depth (m):				2.5
	Date Sampled:				08-Jun-2022
Determinand	Accred.	SOP	Units	LOD	
2-Chlorotoluene	U	1760	µg/l	1.0	< 1.0
1,3,5-Trimethylbenzene	U	1760	µg/l	1.0	< 1.0
4-Chlorotoluene	U	1760	µg/l	1.0	< 1.0
Tert-Butylbenzene	U	1760	µg/l	1.0	< 1.0
1,2,4-Trimethylbenzene	U	1760	µg/l	1.0	50
Sec-Butylbenzene	U	1760	µg/l	1.0	< 1.0
1,3-Dichlorobenzene	N	1760	µg/l	1.0	< 1.0
4-Isopropyltoluene	U	1760	µg/l	1.0	< 1.0
1,4-Dichlorobenzene	U	1760	µg/l	1.0	< 1.0
N-Butylbenzene	U	1760	µg/l	1.0	< 1.0
1,2-Dichlorobenzene	U	1760	µg/l	1.0	< 1.0
1,2-Dibromo-3-Chloropropane	U	1760	µg/l	50	< 50
1,2,4-Trichlorobenzene	U	1760	µg/l	1.0	< 1.0
Hexachlorobutadiene	U	1760	µg/l	1.0	< 1.0
1,2,3-Trichlorobenzene	U	1760	µg/l	2.0	< 2.0
Methyl Tert-Butyl Ether	N	1760	µg/l	1.0	< 1.0
N-Nitrosodimethylamine	N	1790	µg/l	0.50	< 0.50
Phenol	N	1790	µg/l	0.50	< 0.50
2-Chlorophenol	N	1790	µg/l	0.50	< 0.50
Bis-(2-Chloroethyl)Ether	N	1790	µg/l	0.50	< 0.50
1,3-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50
1,4-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50
1,2-Dichlorobenzene	N	1790	µg/l	0.50	< 0.50
2-Methylphenol (o-Cresol)	N	1790	µg/l	0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	N	1790	µg/l	0.50	< 0.50
Hexachloroethane	N	1790	µg/l	0.50	< 0.50
N-Nitrosodi-n-propylamine	N	1790	µg/l	0.50	< 0.50
4-Methylphenol	N	1790	µg/l	0.50	< 0.50
Nitrobenzene	N	1790	µg/l	0.50	< 0.50
Isophorone	N	1790	µg/l	0.50	< 0.50
2-Nitrophenol	N	1790	µg/l	0.50	< 0.50
2,4-Dimethylphenol	N	1790	µg/l	0.50	< 0.50
Bis(2-Chloroethoxy)Methane	N	1790	µg/l	0.50	< 0.50
2,4-Dichlorophenol	N	1790	µg/l	0.50	< 0.50
1,2,4-Trichlorobenzene	N	1790	µg/l	0.50	< 0.50
Naphthalene	N	1790	µg/l	0.50	< 0.50
4-Chloroaniline	N	1790	µg/l	0.50	< 0.50
Hexachlorobutadiene	N	1790	µg/l	0.50	< 0.50
4-Chloro-3-Methylphenol	N	1790	µg/l	0.50	< 0.50

Results - Water

Project: GE20584 Borely Gardens

Client: Geo-Environmental Services Ltd	Chemtest Job No.:				22-21689
Quotation No.: Q22-27853	Chemtest Sample ID.:				1445949
	Client Sample ID.:				WS02
	Sample Type:				WATER
	Top Depth (m):				2.5
	Date Sampled:				08-Jun-2022
Determinand	Accred.	SOP	Units	LOD	
2-Methylnaphthalene	N	1790	µg/l	0.50	< 0.50
Hexachlorocyclopentadiene	N	1790	µg/l	0.50	< 0.50
2,4,6-Trichlorophenol	N	1790	µg/l	0.50	< 0.50
2,4,5-Trichlorophenol	N	1790	µg/l	0.50	< 0.50
2-Chloronaphthalene	N	1790	µg/l	0.50	< 0.50
2-Nitroaniline	N	1790	µg/l	0.50	< 0.50
Acenaphthylene	N	1790	µg/l	0.50	< 0.50
Dimethylphthalate	N	1790	µg/l	0.50	< 0.50
2,6-Dinitrotoluene	N	1790	µg/l	0.50	< 0.50
Acenaphthene	N	1790	µg/l	0.50	< 0.50
3-Nitroaniline	N	1790	µg/l	0.50	< 0.50
Dibenzofuran	N	1790	µg/l	0.50	< 0.50
4-Chlorophenylphenylether	N	1790	µg/l	0.50	< 0.50
2,4-Dinitrotoluene	N	1790	µg/l	0.50	< 0.50
Fluorene	N	1790	µg/l	0.50	< 0.50
Diethyl Phthalate	N	1790	µg/l	0.50	< 0.50
4-Nitroaniline	N	1790	µg/l	0.50	< 0.50
2-Methyl-4,6-Dinitrophenol	N	1790	µg/l	0.50	< 0.50
Azobenzene	N	1790	µg/l	0.50	< 0.50
4-Bromophenylphenyl Ether	N	1790	µg/l	0.50	< 0.50
Hexachlorobenzene	N	1790	µg/l	0.50	< 0.50
Pentachlorophenol	N	1790	µg/l	0.50	< 0.50
Phenanthrene	N	1790	µg/l	0.50	< 0.50
Anthracene	N	1790	µg/l	0.50	< 0.50
Carbazole	N	1790	µg/l	0.50	< 0.50
Di-N-Butyl Phthalate	N	1790	µg/l	0.50	< 0.50
Fluoranthene	N	1790	µg/l	0.50	< 0.50
Pyrene	N	1790	µg/l	0.50	< 0.50
Butylbenzyl Phthalate	N	1790	µg/l	0.50	< 0.50
Benzo[a]anthracene	N	1790	µg/l	0.50	< 0.50
Chrysene	N	1790	µg/l	0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate	N	1790	µg/l	0.50	< 0.50
Di-N-Octyl Phthalate	N	1790	µg/l	0.50	< 0.50
Benzo[b]fluoranthene	N	1790	µg/l	0.50	< 0.50
Benzo[k]fluoranthene	N	1790	µg/l	0.50	< 0.50
Benzo[a]pyrene	N	1790	µg/l	0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene	N	1790	µg/l	0.50	< 0.50
Dibenz(a,h)Anthracene	N	1790	µg/l	0.50	< 0.50
Benzo[g,h,i]perylene	N	1790	µg/l	0.50	< 0.50

Results - Water

Project: **GE20584 Borely Gardens**

Client: Geo-Environmental Services Ltd	Chemtest Job No.:		22-21689		
Quotation No.: Q22-27853	Chemtest Sample ID.:		1445949		
	Client Sample ID.:		WS02		
	Sample Type:		WATER		
	Top Depth (m):		2.5		
	Date Sampled:		08-Jun-2022		
Determinand	Accred.	SOP	Units	LOD	
4-Nitrophenol	N	1790	µg/l	0.50	< 0.50
Naphthalene	N	1800	µg/l	0.010	< 0.010
Acenaphthylene	N	1800	µg/l	0.010	< 0.010
Acenaphthene	N	1800	µg/l	0.010	< 0.010
Fluorene	N	1800	µg/l	0.010	< 0.010
Phenanthrene	N	1800	µg/l	0.010	< 0.010
Anthracene	N	1800	µg/l	0.010	< 0.010
Fluoranthene	N	1800	µg/l	0.010	< 0.010
Pyrene	N	1800	µg/l	0.010	< 0.010
Benzo[a]anthracene	N	1800	µg/l	0.010	< 0.010
Chrysene	N	1800	µg/l	0.010	< 0.010
Benzo[b]fluoranthene	N	1800	µg/l	0.010	< 0.010
Benzo[k]fluoranthene	N	1800	µg/l	0.010	< 0.010
Benzo[a]pyrene	N	1800	µg/l	0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	µg/l	0.010	< 0.010
Dibenz(a,h)Anthracene	N	1800	µg/l	0.010	< 0.010
Benzo[g,h,i]perylene	N	1800	µg/l	0.010	< 0.010
Total Of 16 PAH's	N	1800	µg/l	0.20	< 0.20
Total Phenols	U	1920	mg/l	0.030	< 0.030

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1325	Sulphide in Waters	Sulphides	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using N,N-dimethyl-pphenylenediamine.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1495	Low Level Hexavalent Chromium in Waters	Chromium [VI]	Colorimetric determination of hexavalent chromium expressed as Cr (VI) µg/l in water, using Ion Chromatography and UV-visible spectrophotometry.
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenzo[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

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

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

All Asbestos testing is performed at the indicated laboratory

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

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

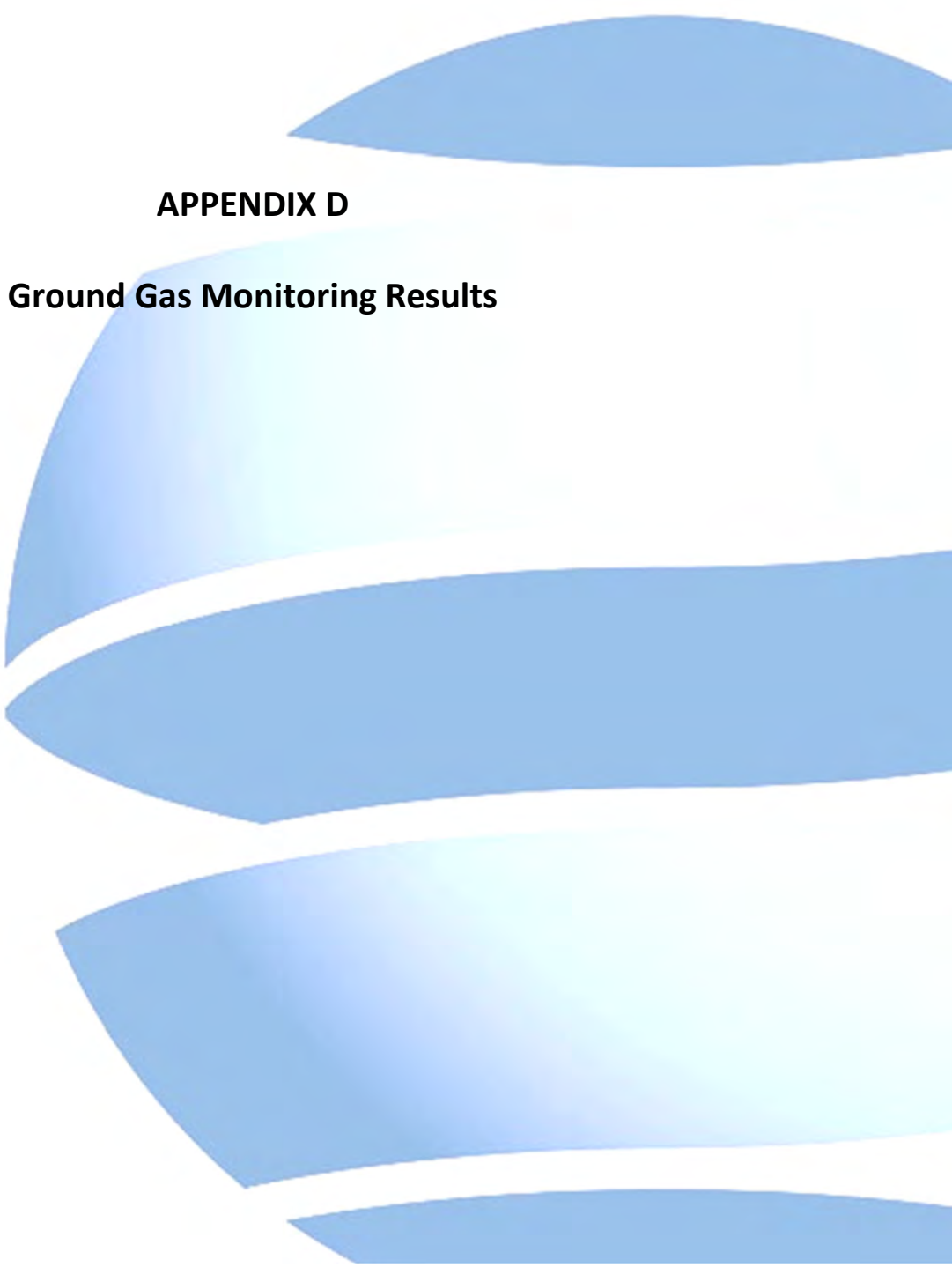
All soil samples will be retained for a period of 30 days from the date of receipt

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

Charges may apply to extended sample storage

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

customerservices@chemtest.com



APPENDIX D

Ground Gas Monitoring Results

Project: Park Farm, Boorley Gardens, Winchester Road, Southampton, SO32 2BX
Ref: GE20584
Client: Bellway Homes & Miller Homes



Location	Date	Time (sec)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	Flow (l/hr)	VOC (ppm)	Pressure (mb)	GWL (m bgl)	GSV/Qhgs		Characteristic Situation		CS1 Limiting Value Check			NHBC			
										CH ₄	CO ₂	BS8485 & C665		Flow	CH ₄	CO ₂	CH ₄		CO ₂	
												CH ₄	CO ₂				GSV	Conc.	GSV	Conc.
WS01	26/05/22	0	0.0	0.3	20.9	0.0	9.5	1023	2.98	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	26/05/22	10	0.0	2.8	18.9	0.0	9.5	1023	2.98	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	26/05/22	20	0.0	2.8	18.3	0.0	9.5	1023	2.98	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	26/05/22	30	0.0	2.8	18.2	0.0	9.5	1023	2.98	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	26/05/22	60	0.0	2.9	18.2	0.0	9.5	1023	2.98	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	26/05/22	90	0.0	2.9	18.2	0.0	9.5	1023	2.98	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	26/05/22	120	0.0	2.9	18.2	0.0	9.5	1023	2.98	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	26/05/22	180	0.0	2.8	18.3	0.0	9.5	1023	2.98	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS02	26/05/22	0	0.0	0.0	2.6	0.0	17.5	1022	1.45	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS02	26/05/22	10	3.8	3.1	10.1	0.0	17.5	1022	1.45	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	26/05/22	20	3.8	3.1	1.1	0.0	17.5	1022	1.45	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	26/05/22	30	3.9	3.1	0.4	0.0	17.5	1022	1.45	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	26/05/22	60	4.0	3.2	0.3	0.0	17.5	1022	1.45	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	26/05/22	90	4.0	3.2	0.2	0.0	17.5	1022	1.45	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	26/05/22	120	4.1	3.4	0.2	0.0	17.5	1022	1.45	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	26/05/22	180	4.2	3.6	0.2	0.0	17.5	1022	1.45	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS03	26/05/22	0	0.0	0.1	20.8	0.0	14.4	1023	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	26/05/22	10	0.0	2.7	19.8	0.0	14.4	1023	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	26/05/22	20	0.0	2.8	19.3	0.0	14.4	1023	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	26/05/22	30	0.0	2.8	19.3	0.0	14.4	1023	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	26/05/22	60	0.0	2.4	19.4	0.0	14.4	1023	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	26/05/22	90	0.0	2.3	19.4	0.0	14.4	1023	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	26/05/22	120	0.0	2.2	19.4	0.0	14.4	1023	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	26/05/22	180	0.0	2.1	19.5	0.0	14.4	1023	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	26/05/22	0	0.0	0.1	20.8	0.0	0.5	1022	3.51	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	26/05/22	10	0.0	2.2	20.1	0.0	0.5	1022	3.51	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	26/05/22	20	0.0	5.5	19.1	0.0	0.5	1022	3.51	0.000	0.000	CS1	CS1	NO	NO	CO2>CS1 limit	GREEN	GREEN	GREEN	AMBER 1
WS04	26/05/22	30	0.0	2.6	19.0	0.0	0.5	1022	3.51	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	26/05/22	60	0.0	6.3	18.9	0.0	0.5	1022	3.51	0.000	0.000	CS1	CS1	NO	NO	CO2>CS1 limit	GREEN	GREEN	GREEN	AMBER 1
WS04	26/05/22	90	0.0	2.1	19.0	0.0	0.5	1022	3.51	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	26/05/22	120	0.0	2.0	19.0	0.0	0.5	1022	3.51	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	26/05/22	180	0.0	1.8	19.1	0.0	0.5	1022	3.51	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	26/05/22	0	0.2	0.4	19.1	0.0	0.0	1023	0.88	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	26/05/22	10	0.2	1.2	17.9	0.0	0.0	1023	0.88	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	26/05/22	20				0.0	0.0	1023	0.88	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	26/05/22	30				0.0	0.0	1023	0.88	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	26/05/22	60				0.0	0.0	1023	0.88	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	26/05/22	90				0.0	0.0	1023	0.88	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	26/05/22	120				0.0	0.0	1023	0.88	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	26/05/22	180				0.0	0.0	1023	0.88	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	08/06/22	0	0.0	0.2	20.3	0.0	1.2	1002	2.08	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	08/06/22	10	0.0	2.4	19.9	0.0	1.2	1002	2.08	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	08/06/22	20	0.0	3.3	18.1	0.0	1.2	1002	2.08	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	08/06/22	30	0.0	3.3	17.2	0.0	1.2	1002	2.08	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	08/06/22	60	0.0	3.5	17.4	0.0	1.2	1002	2.08	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN

Project: Park Farm, Boorley Gardens, Winchester Road, Southampton, SO32 2BX
Ref: GE20584
Client: Bellway Homes & Miller Homes

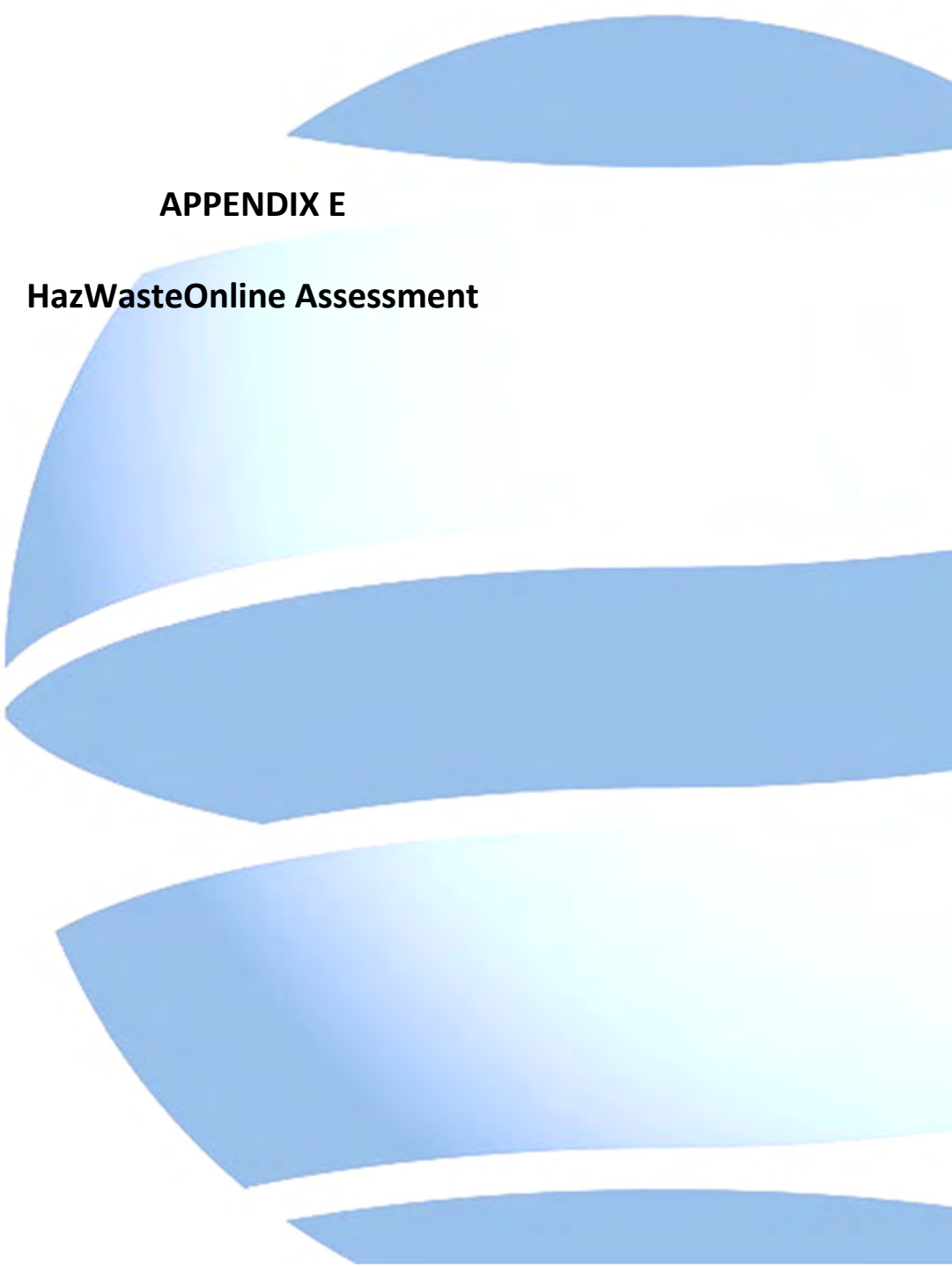


Location	Date	Time (sec)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	Flow (l/hr)	VOC (ppm)	Pressure (mb)	GWL (m bgl)	GSV/Qhgs		Characteristic Situation		CS1 Limiting Value Check			NHBC			
										CH ₄	CO ₂	BS8485 & C665		Flow	CH ₄	CO ₂	CH ₄		CO ₂	
												CH ₄	CO ₂				GSV	Conc.	GSV	Conc.
WS01	08/06/22	90	0.0	3.5	17.4	0.0	1.2	1002	2.08	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	08/06/22	120	0.0	3.5	17.3	0.0	1.2	1002	2.08	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	08/06/22	180	0.0	3.5	17.4	0.0	1.2	1002	2.08	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS02	08/06/22	0	0.0	0.0	20.3	0.0	0.7	1002	1.00	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS02	08/06/22	10	1.9	1.8	15.6	0.0	0.7	1002	1.00	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	08/06/22	20	2.4	2.4	13.5	0.0	0.7	1002	1.00	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	08/06/22	30	3.6	2.2	4.6	0.0	0.7	1002	1.00	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	08/06/22	60	3.9	2.1	1.0	0.0	0.7	1002	1.00	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	08/06/22	90	3.9	4.5	1.4	0.0	0.7	1002	1.00	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	08/06/22	120	4.4	5.4	0.4	0.0	0.7	1002	1.00	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	CO2>CS1 limit	GREEN	AMBER 1	GREEN	AMBER 1
WS02	08/06/22	180	4.5	5.9	0.4	0.0	0.7	1002	1.00	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	CO2>CS1 limit	GREEN	AMBER 1	GREEN	AMBER 1
WS03	08/06/22	0	0.0	0.5	18.1	0.0	3.2	1002	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	08/06/22	10	0.0	3.6	18.1	0.0	3.2	1002	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	08/06/22	20	0.0	4.0	18.4	0.0	3.2	1002	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	08/06/22	30	0.0	4.0	18.4	0.0	3.2	1002	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	08/06/22	60	0.0	4.0	18.5	0.0	3.2	1002	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	08/06/22	90	0.0	3.2	18.7	0.0	3.2	1002	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	08/06/22	120	0.0	3.0	18.8	0.0	3.2	1002	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	08/06/22	180	0.0	2.8	18.9	0.0	3.2	1002	1.19	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	08/06/22	0	0.0	0.0	20.7	0.0	2.5	1002	1.90	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	08/06/22	10	0.0	1.1	20.5	0.0	2.5	1002	1.90	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	08/06/22	20	0.0	1.4	20.1	0.0	2.5	1002	1.90	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	08/06/22	30	0.0	1.7	19.9	0.0	2.5	1002	1.90	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	08/06/22	60	0.0	1.5	19.9	0.0	2.5	1002	1.90	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	08/06/22	90	0.0	1.5	19.6	0.0	2.5	1002	1.90	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	08/06/22	120	0.0	1.4	19.7	0.0	2.5	1002	1.90	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	08/06/22	180	0.0	1.4	19.6	0.0	2.5	1002	1.90	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	08/06/22	0	0.0	0.3	19.8	0.0	0.6	1002	0.66	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	08/06/22	10	0.0	0.8	19.8	0.0	0.6	1002	0.66	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	08/06/22	20	0.0	0.8	19.9	0.0	0.6	1002	0.66	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	08/06/22	30	0.0	0.6	20.2	0.0	0.6	1002	0.66	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	08/06/22	60	0.0	0.3	20.5	0.0	0.6	1002	0.66	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	08/06/22	90	0.0	0.3	20.7	0.0	0.6	1002	0.66	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	08/06/22	120	0.0	0.4	20.6	0.0	0.6	1002	0.66	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	08/06/22	180	0.0	0.4	20.6	0.0	0.6	1002	0.66	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	15/06/22	0	0.0	0.0	20.5	0.0	6.3	1015	1.97	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	15/06/22	10	0.0	2.4	20.1	0.0	6.3	1015	1.97	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	15/06/22	20	0.0	3.2	19.0	0.0	6.3	1015	1.97	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	15/06/22	30	0.0	3.4	18.3	0.0	6.3	1015	1.97	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	15/06/22	60	0.0	3.4	18.2	0.0	6.3	1015	1.97	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	15/06/22	90	0.0	3.4	18.5	0.0	6.3	1015	1.97	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	15/06/22	120	0.0	3.4	18.5	0.0	6.3	1015	1.97	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS01	15/06/22	180	0.0	3.4	18.2	0.0	6.3	1015	1.97	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS02	15/06/22	0	0.0	0.1	21.0	0.0	19.2	1016	1.42	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS02	15/06/22	10	1.7	4.1	12.3	0.0	19.2	1016	1.42	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN

Project: Park Farm, Boorley Gardens, Winchester Road, Southampton, SO32 2BX
Ref: GE20584
Client: Bellway Homes & Miller Homes



Location	Date	Time (sec)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	Flow (l/hr)	VOC (ppm)	Pressure (mb)	GWL (m bgl)	GSV/Qhgs		Characteristic Situation		CS1 Limiting Value Check			NHBC			
										CH ₄	CO ₂	BS8485 & C665		Flow	CH ₄	CO ₂	CH ₄		CO ₂	
												CH ₄	CO ₂				GSV	Conc.	GSV	Conc.
WS02	15/06/22	20	3.0	4.7	3.1	0.0	19.2	1016	1.42	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	15/06/22	30	3.8	4.8	1.3	0.0	19.2	1016	1.42	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	15/06/22	60	4.2	4.8	0.5	0.0	19.2	1016	1.42	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	15/06/22	90	4.3	4.9	0.3	0.0	19.2	1016	1.42	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	15/06/22	120	4.4	4.9	0.3	0.0	19.2	1016	1.42	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS02	15/06/22	180	4.6	4.9	0.2	0.0	19.2	1016	1.42	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	NO	GREEN	AMBER 1	GREEN	GREEN
WS03	15/06/22	0	0.0	0.3	19.3	0.0	0.7	1015	1.27	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	15/06/22	10	0.0	2.6	19.6	0.0	0.7	1015	1.27	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	15/06/22	20	0.0	3.1	19.2	0.0	0.7	1015	1.27	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	15/06/22	30	0.0	3.2	19.1	0.0	0.7	1015	1.27	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	15/06/22	60	0.0	3.1	19.1	0.0	0.7	1015	1.27	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	15/06/22	90	0.0	2.8	19.2	0.0	0.7	1015	1.27	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	15/06/22	120	0.0	2.5	19.3	0.0	0.7	1015	1.27	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS03	15/06/22	180	0.0	2.4	19.3	0.0	0.7	1015	1.27	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	15/06/22	0	0.0	0.1	19.9	0.0	14.3	1015	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	15/06/22	10	0.0	1.0	20.1	0.0	14.3	1015	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	15/06/22	20	0.0	1.1	20.0	0.0	14.3	1015	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	15/06/22	30	0.0	1.1	19.9	0.0	14.3	1015	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	15/06/22	60	0.0	1.1	19.8	0.0	14.3	1015	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	15/06/22	90	0.0	1.1	19.8	0.0	14.3	1015	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	15/06/22	120	0.0	1.1	19.8	0.0	14.3	1015	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS04	15/06/22	180	0.0	1.1	19.8	0.0	14.3	1015	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	15/06/22	0	0.0	0.1	21.0	0.0	1.1	1016	0.59	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	15/06/22	10	0.0	0.4	21.0	0.0	1.1	1016	0.59	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	15/06/22	20	0.0	1.3	20.7	0.0	1.1	1016	0.59	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	15/06/22	30	0.0	2.1	20.1	0.0	1.1	1016	0.59	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	15/06/22	60	0.0	2.4	19.7	0.0	1.1	1016	0.59	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	15/06/22	90	0.0	3.2	19.5	0.0	1.1	1016	0.59	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	15/06/22	120				0.0	1.1	1016	0.59	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS05	15/06/22	180				0.0	1.1	1016	0.59	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
Max values			4.6	6.3	21.0	0.0	19.2	1023.0	3.51	0.000	0.000	CS1	CS1	NO	CH4>CS1 limit	CO2>CS1 limit	GREEN	AMBER 1	GREEN	AMBER 1
Min Vaules			0.0	0.0	0.2	0.0	0.0	1002.0	0.59	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
BH Flow LoD check			4.6	6.3	21.0	0.1	-	-	-	0.005	0.006	CS1	CS1	NO	CH4>CS1 limit	CO2>CS1 limit	GREEN	AMBER 1	GREEN	AMBER 1



APPENDIX E

HazWasteOnline Assessment

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:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



3R5SY-7SBY0-S0LKO

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in **pale yellow**.

Job name

GE20584 Waste Soil Assessment

Description/Comments

Eurofins Chemtest Report No.: 22-19200-1

Project

GE20584

Site

Park Farm, Boorley Gardens

Classified by

Name: **Shaun Armitage**
 Date: **22 Jun 2022 14:25 GMT**
 Telephone:
 Company: **Geo-Environmental Services**
Unit 7, Danworth Farm, Cuckfield Rd
Hurstpierpoint
BN6 9GL

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:

CERTIFIED

Course
 Hazardous Waste Classification

Date
 09 Jun 2022

Next 3 year Refresher due by Jun 2025

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	WS201-19/05/2022-0.1	0.1	Non Hazardous		2
2	WS201-19/05/2022-0.7	0.7	Non Hazardous		5
3	WS202-19/05/2022-0.1	0.1	Non Hazardous		10
4	WS202-19/05/2022-1.0	1.0	Hazardous	HP 7, HP 11	13
5	WS202-19/05/2022-3.7	3.7-3.9	Non Hazardous		19
6	WS203-19/05/2022-0.2	0.2	Non Hazardous		24
7	WS204-19/05/2022-0.1	0.1	Non Hazardous		27
8	WS204-19/05/2022-2.0	2.0-2.2	Non Hazardous		30
9	WS205-19/05/2022-0.4	0.4	Non Hazardous		33
10	WS205-19/05/2022-1.0	1.0	Non Hazardous		36

Related documents

#	Name	Description
1	HWOL_22-19200-20220622 150448.hwol	.hwol file used to create the Job
2	GESL Soils Waste Stream Template	waste stream template used to create this Job

Report

Created by: Shaun Armitage

Created date: 22 Jun 2022 14:25 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	39
Appendix B: Rationale for selection of metal species	43
Appendix C: Version	44

Classification of sample: WS201-19/05/2022-0.1

 **Non Hazardous Waste**
 Classified as **17 05 04**
 in the List of Waste

Sample details

Sample name:	LoW Code:
WS201-19/05/2022-0.1	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.1 m	
Moisture content:	
11%	
(wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 11% Wet Weight Moisture Correction applied (MC)

#		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									
1		arsenic { arsenic trioxide }				3.1	mg/kg	1.32	3.643	mg/kg	0.000364 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
2		beryllium { beryllium oxide }				<0.5	mg/kg	2.775	<1.388	mg/kg	<0.000139 %		<LOD
		004-003-00-8	215-133-1	1304-56-9									
3		boron { diboron trioxide; boric oxide }				<0.4	mg/kg	3.22	<1.288	mg/kg	<0.000129 %		<LOD
		005-008-00-8	215-125-8	1303-86-2									
4		cadmium { cadmium oxide }				<0.1	mg/kg	1.142	<0.114	mg/kg	<0.0000114 %		<LOD
		048-002-00-0	215-146-2	1306-19-0									
5		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				11	mg/kg	1.462	14.309	mg/kg	0.00143 %	✓	
			215-160-9	1308-38-9									
6		chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.5	mg/kg	2.27	<1.135	mg/kg	<0.000113 %		<LOD
		024-017-00-8											
7		copper { dicopper oxide; copper (I) oxide }				8.6	mg/kg	1.126	8.618	mg/kg	0.000862 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
8		lead { lead chromate }			1	37	mg/kg	1.56	51.365	mg/kg	0.00329 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
9		mercury { mercury dichloride }				<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.00000677 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
10		nickel { nickel chromate }				3.3	mg/kg	2.976	8.741	mg/kg	0.000874 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
11		selenium { nickel selenate }				<0.25	mg/kg	2.554	<0.638	mg/kg	<0.0000638 %		<LOD
		028-031-00-5	239-125-2	15060-62-5									
12		vanadium { divanadium pentaoxide; vanadium pentoxide }				13	mg/kg	1.785	20.655	mg/kg	0.00207 %	✓	
		023-001-00-8	215-239-8	1314-62-1									
13		zinc { zinc chromate }				32	mg/kg	2.774	79.008	mg/kg	0.0079 %	✓	
		024-007-00-3	236-878-9	13530-65-9									
14		TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
				TPH									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									

#	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	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
17	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-021-00-3	203-625-9	108-88-3								
18	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
19	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %			<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]								
20	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 }				0.8 mg/kg	1.884	1.341 mg/kg	0.000134 %	✓		
	006-007-00-5										
21	pH		PH		7.8 pH		7.8 pH	7.8 pH			
22	naphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
23	acenaphthylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-917-1	208-96-8								
24	acenaphthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		201-469-6	83-32-9								
25	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		201-695-5	86-73-7								
26	phenanthrene				0.45 mg/kg		0.401 mg/kg	0.0000401 %	✓		
		201-581-5	85-01-8								
27	anthracene				0.13 mg/kg		0.116 mg/kg	0.0000116 %	✓		
		204-371-1	120-12-7								
28	fluoranthene				1.1 mg/kg		0.979 mg/kg	0.0000979 %	✓		
		205-912-4	206-44-0								
29	pyrene				0.99 mg/kg		0.881 mg/kg	0.0000881 %	✓		
		204-927-3	129-00-0								
30	benzo[a]anthracene				0.58 mg/kg		0.516 mg/kg	0.0000516 %	✓		
	601-033-00-9	200-280-6	56-55-3								
31	chrysene				0.54 mg/kg		0.481 mg/kg	0.0000481 %	✓		
	601-048-00-0	205-923-4	218-01-9								
32	benzo[b]fluoranthene				0.77 mg/kg		0.685 mg/kg	0.0000685 %	✓		
	601-034-00-4	205-911-9	205-99-2								
33	benzo[k]fluoranthene				0.26 mg/kg		0.231 mg/kg	0.0000231 %	✓		
	601-036-00-5	205-916-6	207-08-9								
34	benzo[a]pyrene; benzo[def]chrysene				0.69 mg/kg		0.614 mg/kg	0.0000614 %	✓		
	601-032-00-3	200-028-5	50-32-8								
35	indeno[123-cd]pyrene				0.44 mg/kg		0.392 mg/kg	0.0000392 %	✓		
		205-893-2	193-39-5								
36	dibenz[a,h]anthracene				0.13 mg/kg		0.116 mg/kg	0.0000116 %	✓		
	601-041-00-2	200-181-8	53-70-3								
37	benzo[ghi]perylene				0.49 mg/kg		0.436 mg/kg	0.0000436 %	✓		
		205-883-8	191-24-2								
38	sulfur { sulfur }				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	016-094-00-1	231-722-6	7704-34-9								
39	monohydric phenols		P1186		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
Total:									0.0191 %		

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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS201-19/05/2022-0.7

 **Non Hazardous Waste**
 Classified as **17 05 04**
 in the List of Waste

Sample details

Sample name:	LoW Code:
WS201-19/05/2022-0.7	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.7 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
18%	
(wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 18% Wet Weight Moisture Correction applied (MC)

#	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							
1	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
2	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
3	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
4	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
5	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
6	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1]	95-47-6 [1]							
		203-396-5 [2]	106-42-3 [2]							
		203-576-3 [3]	108-38-3 [3]							
		215-535-7 [4]	1330-20-7 [4]							
7	naphthalene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
8	acenaphthylene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		205-917-1	208-96-8							
9	acenaphthene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		201-469-6	83-32-9							
10	fluorene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		201-695-5	86-73-7							
11	phenanthrene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		201-581-5	85-01-8							
12	anthracene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		204-371-1	120-12-7							
13	fluoranthene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		205-912-4	206-44-0							
14	pyrene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		204-927-3	129-00-0							
15	benzo[a]anthracene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
16	chrysene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	601-048-00-0	205-923-4	218-01-9							

#	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								
17	benzo[b]fluoranthene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
18	benzo[k]fluoranthene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
19	benzo[a]pyrene; benzo[def]chrysene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
20	indeno[123-cd]pyrene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
		205-893-2	193-39-5								
21	dibenz[a,h]anthracene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
22	benzo[ghi]perylene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
		205-883-8	191-24-2								
23	phenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
24	1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %			<LOD
		203-458-1, 200-863-5	107-06-2, 75-34-3								
25	tetrachloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-028-00-4	204-825-9	127-18-4								
26	carbon tetrachloride; tetrachloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-008-00-5	200-262-8	56-23-5								
27	trichloroethylene; trichloroethene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-027-00-9	201-167-4	79-01-6								
28	vinyl chloride; chloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-023-00-7	200-831-0	75-01-4								
29	hexachlorobenzene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	602-065-00-6	204-273-9	118-74-1								
30	dichlorodifluoromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
		200-893-9	75-71-8								
31	chloromethane; methyl chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-001-00-7	200-817-4	74-87-3								
32	bromomethane; methylbromide				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %			<LOD
	602-002-00-2	200-813-2	74-83-9								
33	chloroethane				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %			<LOD
	602-009-00-0	200-830-5	75-00-3								
34	trichlorofluoromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
		200-892-3	75-69-4								
35	1,1-dichloroethylene; vinylidene chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-025-00-8	200-864-0	75-35-4								
36	bromochloromethane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
		200-826-3	74-97-5								
37	chloroform; trichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-006-00-4	200-663-8	67-66-3								
38	1,1,1-trichloroethane; methyl chloroform				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-013-00-2	200-756-3	71-55-6								
39	1,1-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-031-00-0	209-253-3	563-58-6								
40	1,2-dichloropropane; propylene dichloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-020-00-0	201-152-2	78-87-5								
41	dibromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-003-00-8	200-824-2	74-95-3								
42	bromodichloromethane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
		200-856-7	75-27-4								
43	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	602-030-00-5	208-826-5 [1]	542-75-6 [1]								
		233-195-8 [2]	10061-01-5 [2]								
44	trans-1,3-dichloropropene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		431-460-4	10061-02-6								
45	1,1,2-trichloroethane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	602-014-00-8	201-166-9	79-00-5								

#	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							
46	1,3-dichloropropane	205-531-3	142-28-9		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
47	dibromochloromethane	204-704-0	124-48-1		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
48	1,2-dibromoethane	602-010-00-6	203-444-5	106-93-4	<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
49	chlorobenzene	602-033-00-1	203-628-5	108-90-7	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
50	1,1,1,2-tetrachloroethane	211-135-1		630-20-6	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
51	styrene	601-026-00-0	202-851-5	100-42-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
52	bromoform; tribromomethane	602-007-00-X	200-854-6	75-25-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
53	bromobenzene	602-060-00-9	203-623-8	108-86-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
54	1,2,3-trichloropropane	602-062-00-X	202-486-1	96-18-4	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
55	mesitylene; 1,3,5-trimethylbenzene	601-025-00-5	203-604-4	108-67-8	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
56	tert-butylbenzene		202-632-4	98-06-6	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
57	1,2,4-trimethylbenzene	601-043-00-3	202-436-9	95-63-6	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
58	sec-butylbenzene		205-227-0	135-98-8	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
59	1,3-dichlorobenzene	602-067-00-7	208-792-1	541-73-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
60	4-isopropyltoluene		202-796-7	99-87-6	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
61	1,4-dichlorobenzene; p-dichlorobenzene	602-035-00-2	203-400-5	106-46-7	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
62	n-butylbenzene		203-209-7	104-51-8	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
63	1,2-dichlorobenzene; o-dichlorobenzene	602-034-00-7	202-425-9	95-50-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
64	1,2-dibromo-3-chloropropane	602-021-00-6	202-479-3	96-12-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
65	1,2,4-trichlorobenzene	602-087-00-6	204-428-0	120-82-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
66	hexachlorobutadiene		201-765-5	87-68-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
67	1,2,3-trichlorobenzene		201-757-1	87-61-6	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
68	dimethylnitrosoamine; N-nitrosodimethylamine	612-077-00-3	200-549-8	62-75-9	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
69	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
70	bis(2-chloroethyl) ether	603-029-00-2	203-870-1	111-44-4	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
71	hexachloroethane		200-666-4	67-72-1	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
72	nitrosodipropylamine	612-098-00-8	210-698-0	621-64-7	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
73	nitrobenzene	609-003-00-7	202-716-0	98-95-3	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD

#	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								
74	3,5,5-trimethylcyclohex-2-enone; isophorone				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	606-012-00-8	201-126-0	78-59-1								
75	2-nitrophenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
		201-857-5	88-75-5								
76	3,4-xyleneol; [1] 2,5-xyleneol; [2] 2,4-xyleneol; [3] 2,3-xyleneol; [4] 2,6-xyleneol; [5] xyleneol; [6] 2,4(or 2,5)-xyleneol [7]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	604-006-00-X	202-439-5 [1]	95-65-8 [1] 95-87-4								
		202-461-5 [2]	[2] 105-67-9 [3]								
		203-321-6 [3]	526-75-0 [4]								
		208-395-3 [4]	576-26-1 [5]								
		209-400-1 [5]	1300-71-6 [6]								
		215-089-3 [6]	71975-58-1 [7]								
		276-245-4 [7]									
77	bis(2-chloroethoxy)methane				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
		203-920-2	111-91-1								
78	2,4-dichlorophenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	604-011-00-7	204-429-6	120-83-2								
79	4-chloroaniline				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	612-137-00-9	203-401-0	106-47-8								
80	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	604-014-00-3	200-431-6	59-50-7								
81	2-methyl naphthalene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
		202-078-3	91-57-6								
82	4-nitrophenol; p-nitrophenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	609-015-00-2	202-811-7	100-02-7								
83	hexachlorocyclopentadiene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	602-078-00-7	201-029-3	77-47-4								
84	2,4,6-trichlorophenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	604-018-00-5	201-795-9	88-06-2								
85	2,4,5-trichlorophenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	604-017-00-X	202-467-8	95-95-4								
86	2-chloronaphthalene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
		202-079-9	91-58-7								
87	dimethyl phthalate				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
		205-011-6	131-11-3								
88	2,6-dinitrotoluene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	609-049-00-8	210-106-0	606-20-2								
89	dibenzofuran				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
		205-071-3	132-64-9								
90	4-chlorophenylphenylether				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
		230-281-7	7005-72-3								
91	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	609-007-00-9	204-450-0 [1]	121-14-2 [1]								
		246-836-1 [2]	25321-14-6 [2]								
92	diethyl phthalate				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
		201-550-6	84-66-2								
93	DNOC (ISO); 4,6-dinitro-o-cresol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	609-020-00-X	208-601-1	534-52-1								
94	azobenzene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	611-001-00-6	203-102-5	103-33-3								
95	4-bromophenylphenylether				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
		202-952-4	101-55-3								
96	pentachlorophenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	604-002-00-8	201-778-6	87-86-5								
97	carbazole				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
		201-696-0	86-74-8								
98	dibutyl phthalate; DBP				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	607-318-00-4	201-557-4	84-74-2								
99	BBP; benzyl butyl phthalate				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	607-430-00-3	201-622-7	85-68-7								

#		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							
100		bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		607-317-00-9	204-211-0	117-81-7							
101	•	di-n-octyl phthalate				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
			204-214-7	117-84-0							
102		m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
		604-004-00-9	203-577-9 [1]	108-39-4 [1]							
			202-423-8 [2]	95-48-7 [2]							
			203-398-6 [3]	106-44-5 [3]							
			215-293-2 [4]	1319-77-3 [4]							
103		1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
		602-026-00-3	208-750-2 [1]	540-59-0 [1]							
			205-859-7 [2]	156-59-2 [2]							
			205-860-2 [3]	156-60-5 [3]							
104		cumene; [1] propylbenzene [2]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
		601-024-00-X	202-704-5 [1]	98-82-8 [1]							
			203-132-9 [2]	103-65-1 [2]							
105		2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
		602-040-00-X	202-424-3 [1]	95-49-8 [1]							
			203-580-5 [2]	108-41-8 [2]							
			203-397-0 [3]	106-43-4 [3]							
			246-698-2 [4]	25168-05-2 [4]							
106		o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<1.5 mg/kg		<1.5 mg/kg	<0.00015 %		<LOD
		612-012-00-9	201-855-4 [1]	88-74-4 [1]							
			202-729-1 [2]	99-09-2 [2]							
			202-810-1 [3]	100-01-6 [3]							
Total:									0.00387 %		

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)
<LOD	Below limit of detection
ND	Not detected

Classification of sample: WS202-19/05/2022-0.1

 **Non Hazardous Waste**
 Classified as **17 05 04**
 in the List of Waste

Sample details

Sample name:	LoW Code:
WS202-19/05/2022-0.1	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.1 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
20%	
(wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 20% Wet Weight Moisture Correction applied (MC)

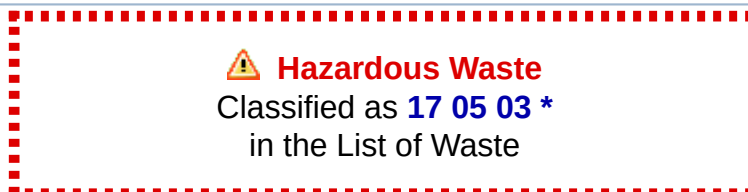
#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				3.3 mg/kg	1.32	3.486 mg/kg	0.000349 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				<0.5 mg/kg	2.775	<1.388 mg/kg	<0.000139 %		<LOD
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				0.42 mg/kg	3.22	1.082 mg/kg	0.000108 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.21 mg/kg	1.142	0.192 mg/kg	0.0000192 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				8.3 mg/kg	1.462	9.705 mg/kg	0.00097 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.5 mg/kg	2.27	<1.135 mg/kg	<0.000113 %		<LOD
	024-017-00-8									
7	copper { dicopper oxide; copper (I) oxide }				13 mg/kg	1.126	11.709 mg/kg	0.00117 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead chromate }			1	56 mg/kg	1.56	69.88 mg/kg	0.00448 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
9	mercury { mercury dichloride }				0.05 mg/kg	1.353	0.0541 mg/kg	0.00000541 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				3.8 mg/kg	2.976	9.048 mg/kg	0.000905 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				<0.25 mg/kg	2.554	<0.638 mg/kg	<0.0000638 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				14 mg/kg	1.785	19.994 mg/kg	0.002 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
13	zinc { zinc chromate }				130 mg/kg	2.774	288.511 mg/kg	0.0289 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
14	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							

#	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	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<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]							
20	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 }				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<LOD
	006-007-00-5									
21	pH		PH		8 pH		8 pH	8pH		
22	naphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
23	acenaphthylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8							
24	acenaphthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9							
25	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7							
26	phenanthrene				0.18 mg/kg		0.144 mg/kg	0.0000144 %	✓	
		201-581-5	85-01-8							
27	anthracene				0.12 mg/kg		0.096 mg/kg	0.0000096 %	✓	
		204-371-1	120-12-7							
28	fluoranthene				0.49 mg/kg		0.392 mg/kg	0.0000392 %	✓	
		205-912-4	206-44-0							
29	pyrene				0.56 mg/kg		0.448 mg/kg	0.0000448 %	✓	
		204-927-3	129-00-0							
30	benzo[a]anthracene				0.36 mg/kg		0.288 mg/kg	0.0000288 %	✓	
	601-033-00-9	200-280-6	56-55-3							
31	chrysene				0.38 mg/kg		0.304 mg/kg	0.0000304 %	✓	
	601-048-00-0	205-923-4	218-01-9							
32	benzo[b]fluoranthene				0.47 mg/kg		0.376 mg/kg	0.0000376 %	✓	
	601-034-00-4	205-911-9	205-99-2							
33	benzo[k]fluoranthene				0.13 mg/kg		0.104 mg/kg	0.0000104 %	✓	
	601-036-00-5	205-916-6	207-08-9							
34	benzo[a]pyrene; benzo[def]chrysene				0.54 mg/kg		0.432 mg/kg	0.0000432 %	✓	
	601-032-00-3	200-028-5	50-32-8							
35	indeno[123-cd]pyrene				0.46 mg/kg		0.368 mg/kg	0.0000368 %	✓	
		205-893-2	193-39-5							
36	dibenz[a,h]anthracene				0.075 mg/kg		0.06 mg/kg	0.000006 %	✓	
	601-041-00-2	200-181-8	53-70-3							
37	benzo[ghi]perylene				0.58 mg/kg		0.464 mg/kg	0.0000464 %	✓	
		205-883-8	191-24-2							
38	sulfur { sulfur }				4 mg/kg		3.2 mg/kg	0.00032 %	✓	
	016-094-00-1	231-722-6	7704-34-9							
39	monohydric phenols		P1186		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
Total:								0.041 %		

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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS202-19/05/2022-1.0



Sample details

Sample name:	LoW Code:
WS202-19/05/2022-1.0	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 03 * (Soil and stones containing hazardous substances)
1.0 m	
Moisture content:	
19%	
(wet weight correction)	

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.146%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.146%)

Determinands

Moisture content: 19% Wet Weight Moisture Correction applied (MC)

#	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							
1	TPH (C6 to C40) petroleum group				1800 mg/kg		1458 mg/kg	0.146 %	✓	
			TPH							
2	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
3	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
4	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
5	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
6	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<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]							
7	naphthalene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
8	acenaphthylene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		205-917-1	208-96-8							

#	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							
9	acenaphthene	201-469-6	83-32-9		0.84 mg/kg		0.68 mg/kg	0.000068 %	✓	
10	fluorene	201-695-5	86-73-7		1.1 mg/kg		0.891 mg/kg	0.0000891 %	✓	
11	phenanthrene	201-581-5	85-01-8		2.5 mg/kg		2.025 mg/kg	0.000202 %	✓	
12	anthracene	204-371-1	120-12-7		0.67 mg/kg		0.543 mg/kg	0.0000543 %	✓	
13	fluoranthene	205-912-4	206-44-0		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
14	pyrene	204-927-3	129-00-0		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
15	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
16	chrysene	601-048-00-0	205-923-4	218-01-9	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
17	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
18	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
19	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
20	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
21	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
22	benzo[ghi]perylene	205-883-8	191-24-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
23	phenol	604-001-00-2	203-632-7	108-95-2	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
24	1,1-dichloroethane and 1,2-dichloroethane (combined)	203-458-1, 200-863-5	107-06-2, 75-34-3		<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %		<LOD
25	tetrachloroethylene	602-028-00-4	204-825-9	127-18-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
26	carbon tetrachloride; tetrachloromethane	602-008-00-5	200-262-8	56-23-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
27	trichloroethylene; trichloroethene	602-027-00-9	201-167-4	79-01-6	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
28	vinyl chloride; chloroethylene	602-023-00-7	200-831-0	75-01-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
29	hexachlorobenzene	602-065-00-6	204-273-9	118-74-1	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
30	dichlorodifluoromethane	200-893-9	75-71-8		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
31	chloromethane; methyl chloride	602-001-00-7	200-817-4	74-87-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
32	bromomethane; methylbromide	602-002-00-2	200-813-2	74-83-9	<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
33	chloroethane	602-009-00-0	200-830-5	75-00-3	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
34	trichlorofluoromethane	200-892-3	75-69-4		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
35	1,1-dichloroethylene; vinylidene chloride	602-025-00-8	200-864-0	75-35-4	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
36	bromochloromethane	200-826-3	74-97-5		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
37	chloroform; trichloromethane	602-006-00-4	200-663-8	67-66-3	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	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							
38	1,1,1-trichloroethane; methyl chloroform 602-013-00-2	200-756-3	71-55-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
39	1,1-dichloropropene 602-031-00-0	209-253-3	563-58-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
40	1,2-dichloropropane; propylene dichloride 602-020-00-0	201-152-2	78-87-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
41	dibromomethane 602-003-00-8	200-824-2	74-95-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
42	bromodichloromethane 200-856-7	75-27-4			<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
43	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2] 602-030-00-5	208-826-5 [1] 233-195-8 [2]	542-75-6 [1] 10061-01-5 [2]		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
44	trans-1,3-dichloropropene 431-460-4	10061-02-6			<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
45	1,1,2-trichloroethane 602-014-00-8	201-166-9	79-00-5		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
46	1,3-dichloropropane 205-531-3	142-28-9			<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
47	dibromochloromethane 204-704-0	124-48-1			<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
48	1,2-dibromoethane 602-010-00-6	203-444-5	106-93-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
49	chlorobenzene 602-033-00-1	203-628-5	108-90-7		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
50	1,1,1,2-tetrachloroethane 211-135-1	630-20-6			<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
51	styrene 601-026-00-0	202-851-5	100-42-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
52	bromoform; tribromomethane 602-007-00-X	200-854-6	75-25-2		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
53	bromobenzene 602-060-00-9	203-623-8	108-86-1		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
54	1,2,3-trichloropropane 602-062-00-X	202-486-1	96-18-4		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
55	mesitylene; 1,3,5-trimethylbenzene 601-025-00-5	203-604-4	108-67-8		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
56	tert-butylbenzene 202-632-4	98-06-6			<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
57	1,2,4-trimethylbenzene 601-043-00-3	202-436-9	95-63-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
58	sec-butylbenzene 205-227-0	135-98-8			<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
59	1,3-dichlorobenzene 602-067-00-7	208-792-1	541-73-1		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
60	4-isopropyltoluene 202-796-7	99-87-6			<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
61	1,4-dichlorobenzene; p-dichlorobenzene 602-035-00-2	203-400-5	106-46-7		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
62	n-butylbenzene 203-209-7	104-51-8			<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
63	1,2-dichlorobenzene; o-dichlorobenzene 602-034-00-7	202-425-9	95-50-1		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
64	1,2-dibromo-3-chloropropane 602-021-00-6	202-479-3	96-12-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
65	1,2,4-trichlorobenzene 602-087-00-6	204-428-0	120-82-1		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
66	hexachlorobutadiene 201-765-5	87-68-3			<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD

#	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								
67	1,2,3-trichlorobenzene	201-757-1	87-61-6		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %			<LOD
68	dimethylnitrosoamine; N-nitrosodimethylamine	612-077-00-3	200-549-8	62-75-9	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
69	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
70	bis(2-chloroethyl) ether	603-029-00-2	203-870-1	111-44-4	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
71	hexachloroethane	200-666-4	67-72-1		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
72	nitrosodipropylamine	612-098-00-8	210-698-0	621-64-7	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
73	nitrobenzene	609-003-00-7	202-716-0	98-95-3	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
74	3,5,5-trimethylcyclohex-2-enone; isophorone	606-012-00-8	201-126-0	78-59-1	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
75	2-nitrophenol	201-857-5	88-75-5		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
76	3,4-xyleneol; [1] 2,5-xyleneol; [2] 2,4-xyleneol; [3] 2,3-xyleneol; [4] 2,6-xyleneol; [5] xyleneol; [6] 2,4(or 2,5)-xyleneol [7]	604-006-00-X	202-439-5 [1] 202-461-5 [2] 203-321-6 [3] 208-395-3 [4] 209-400-1 [5] 215-089-3 [6] 276-245-4 [7]	95-65-8 [1] 95-87-4 [2] 105-67-9 [3] 526-75-0 [4] 576-26-1 [5] 1300-71-6 [6] 71975-58-1 [7]	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
77	bis(2-chloroethoxy)methane	203-920-2	111-91-1		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
78	2,4-dichlorophenol	604-011-00-7	204-429-6	120-83-2	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
79	4-chloroaniline	612-137-00-9	203-401-0	106-47-8	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
80	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol	604-014-00-3	200-431-6	59-50-7	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
81	2-methyl naphthalene	202-078-3	91-57-6		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
82	4-nitrophenol; p-nitrophenol	609-015-00-2	202-811-7	100-02-7	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
83	hexachlorocyclopentadiene	602-078-00-7	201-029-3	77-47-4	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
84	2,4,6-trichlorophenol	604-018-00-5	201-795-9	88-06-2	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
85	2,4,5-trichlorophenol	604-017-00-X	202-467-8	95-95-4	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
86	2-chloronaphthalene	202-079-9	91-58-7		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
87	dimethyl phthalate	205-011-6	131-11-3		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
88	2,6-dinitrotoluene	609-049-00-8	210-106-0	606-20-2	3 mg/kg		2.43 mg/kg	0.000243 %	✓		
89	dibenzofuran	205-071-3	132-64-9		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
90	4-chlorophenylphenylether	230-281-7	7005-72-3		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
91	2,4-dinitrotoluene; [1] dinitrotoluene [2]	609-007-00-9	204-450-0 [1] 246-836-1 [2]	121-14-2 [1] 25321-14-6 [2]	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD

#	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							
92	● diethyl phthalate	201-550-6	84-66-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
93	DNOX (ISO); 4,6-dinitro-o-cresol	609-020-00-X	208-601-1	534-52-1	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
94	azobenzene	611-001-00-6	203-102-5	103-33-3	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
95	● 4-bromophenylphenylether	202-952-4	101-55-3		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
96	pentachlorophenol	604-002-00-8	201-778-6	87-86-5	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
97	● carbazole	201-696-0	86-74-8		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
98	dibutyl phthalate; DBP	607-318-00-4	201-557-4	84-74-2	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
99	BBP; benzyl butyl phthalate	607-430-00-3	201-622-7	85-68-7	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
100	bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP	607-317-00-9	204-211-0	117-81-7	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
101	● di-n-octyl phthalate	204-214-7	117-84-0		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
102	m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]	604-004-00-9	203-577-9 [1] 202-423-8 [2] 203-398-6 [3] 215-293-2 [4]	108-39-4 [1] 95-48-7 [2] 106-44-5 [3] 1319-77-3 [4]	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
103	1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]	602-026-00-3	208-750-2 [1] 205-859-7 [2] 205-860-2 [3]	540-59-0 [1] 156-59-2 [2] 156-60-5 [3]	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
104	cumene; [1] propylbenzene [2]	601-024-00-X	202-704-5 [1] 203-132-9 [2]	98-82-8 [1] 103-65-1 [2]	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
105	2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]	602-040-00-X	202-424-3 [1] 203-580-5 [2] 203-397-0 [3] 246-698-2 [4]	95-49-8 [1] 108-41-8 [2] 106-43-4 [3] 25168-05-2 [4]	<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
106	o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]	612-012-00-9	201-855-4 [1] 202-729-1 [2] 202-810-1 [3]	88-74-4 [1] 99-09-2 [2] 100-01-6 [3]	<1.5 mg/kg		<1.5 mg/kg	<0.00015 %		<LOD
Total:								0.149 %		

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)
<LOD	Below limit of detection
ND	Not detected

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 because No free phase liquid

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.146%)

Classification of sample: WS202-19/05/2022-3.7

 **Non Hazardous Waste**
 Classified as **17 05 04**
 in the List of Waste

Sample details

Sample name:	LoW Code:
WS202-19/05/2022-3.7	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
3.7-3.9 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
21%	
(wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 21% Wet Weight Moisture Correction applied (MC)

#	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							
1	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
2	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
3	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
4	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
5	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
6	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
	601-022-00-9	202-422-2 [1]	95-47-6 [1]							
		203-396-5 [2]	106-42-3 [2]							
		203-576-3 [3]	108-38-3 [3]							
		215-535-7 [4]	1330-20-7 [4]							
7	naphthalene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
8	acenaphthylene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		205-917-1	208-96-8							
9	acenaphthene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		201-469-6	83-32-9							
10	fluorene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		201-695-5	86-73-7							
11	phenanthrene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		201-581-5	85-01-8							
12	anthracene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		204-371-1	120-12-7							
13	fluoranthene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		205-912-4	206-44-0							
14	pyrene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		204-927-3	129-00-0							
15	benzo[a]anthracene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
16	chrysene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	601-048-00-0	205-923-4	218-01-9							

#	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								
17	benzo[b]fluoranthene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
18	benzo[k]fluoranthene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
19	benzo[a]pyrene; benzo[def]chrysene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
20	indeno[123-cd]pyrene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
		205-893-2	193-39-5								
21	dibenz[a,h]anthracene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
22	benzo[ghi]perylene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
		205-883-8	191-24-2								
23	phenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
24	1,1-dichloroethane and 1,2-dichloroethane (combined)				<0.003 mg/kg		<0.003 mg/kg	<0.0000003 %			<LOD
		203-458-1, 200-863-5	107-06-2, 75-34-3								
25	tetrachloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-028-00-4	204-825-9	127-18-4								
26	carbon tetrachloride; tetrachloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-008-00-5	200-262-8	56-23-5								
27	trichloroethylene; trichloroethene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-027-00-9	201-167-4	79-01-6								
28	vinyl chloride; chloroethylene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-023-00-7	200-831-0	75-01-4								
29	hexachlorobenzene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %			<LOD
	602-065-00-6	204-273-9	118-74-1								
30	dichlorodifluoromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
		200-893-9	75-71-8								
31	chloromethane; methyl chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-001-00-7	200-817-4	74-87-3								
32	bromomethane; methylbromide				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %			<LOD
	602-002-00-2	200-813-2	74-83-9								
33	chloroethane				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %			<LOD
	602-009-00-0	200-830-5	75-00-3								
34	trichlorofluoromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
		200-892-3	75-69-4								
35	1,1-dichloroethylene; vinylidene chloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-025-00-8	200-864-0	75-35-4								
36	bromochloromethane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
		200-826-3	74-97-5								
37	chloroform; trichloromethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-006-00-4	200-663-8	67-66-3								
38	1,1,1-trichloroethane; methyl chloroform				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-013-00-2	200-756-3	71-55-6								
39	1,1-dichloropropene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-031-00-0	209-253-3	563-58-6								
40	1,2-dichloropropane; propylene dichloride				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-020-00-0	201-152-2	78-87-5								
41	dibromomethane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	602-003-00-8	200-824-2	74-95-3								
42	bromodichloromethane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %			<LOD
		200-856-7	75-27-4								
43	1,3-dichloropropene; [1] (Z)-1,3-dichloropropene [2]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	602-030-00-5	208-826-5 [1]	542-75-6 [1]								
		233-195-8 [2]	10061-01-5 [2]								
44	trans-1,3-dichloropropene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		431-460-4	10061-02-6								
45	1,1,2-trichloroethane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	602-014-00-8	201-166-9	79-00-5								

#	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							
46	1,3-dichloropropane	205-531-3	142-28-9		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
47	dibromochloromethane	204-704-0	124-48-1		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
48	1,2-dibromoethane	602-010-00-6	203-444-5	106-93-4	<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
49	chlorobenzene	602-033-00-1	203-628-5	108-90-7	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
50	1,1,1,2-tetrachloroethane	211-135-1	630-20-6		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
51	styrene	601-026-00-0	202-851-5	100-42-5	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
52	bromoform; tribromomethane	602-007-00-X	200-854-6	75-25-2	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
53	bromobenzene	602-060-00-9	203-623-8	108-86-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
54	1,2,3-trichloropropane	602-062-00-X	202-486-1	96-18-4	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
55	mesitylene; 1,3,5-trimethylbenzene	601-025-00-5	203-604-4	108-67-8	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
56	tert-butylbenzene	202-632-4	98-06-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
57	1,2,4-trimethylbenzene	601-043-00-3	202-436-9	95-63-6	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
58	sec-butylbenzene	205-227-0	135-98-8		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
59	1,3-dichlorobenzene	602-067-00-7	208-792-1	541-73-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
60	4-isopropyltoluene	202-796-7	99-87-6		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
61	1,4-dichlorobenzene; p-dichlorobenzene	602-035-00-2	203-400-5	106-46-7	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
62	n-butylbenzene	203-209-7	104-51-8		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
63	1,2-dichlorobenzene; o-dichlorobenzene	602-034-00-7	202-425-9	95-50-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
64	1,2-dibromo-3-chloropropane	602-021-00-6	202-479-3	96-12-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
65	1,2,4-trichlorobenzene	602-087-00-6	204-428-0	120-82-1	<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
66	hexachlorobutadiene	201-765-5	87-68-3		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
67	1,2,3-trichlorobenzene	201-757-1	87-61-6		<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
68	dimethylnitrosoamine; N-nitrosodimethylamine	612-077-00-3	200-549-8	62-75-9	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
69	2-chlorophenol; [1] 4-chlorophenol; [2] 3-chlorophenol; [3] chlorophenol [4]	604-008-00-0	202-433-2 [1] 203-402-6 [2] 203-582-6 [3] 246-691-4 [4]	95-57-8 [1] 106-48-9 [2] 108-43-0 [3] 25167-80-0 [4]	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
70	bis(2-chloroethyl) ether	603-029-00-2	203-870-1	111-44-4	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
71	hexachloroethane	200-666-4	67-72-1		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
72	nitrosodipropylamine	612-098-00-8	210-698-0	621-64-7	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
73	nitrobenzene	609-003-00-7	202-716-0	98-95-3	<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD

#	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							
74	3,5,5-trimethylcyclohex-2-enone; isophorone				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	606-012-00-8	201-126-0	78-59-1							
75	2-nitrophenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		201-857-5	88-75-5							
76	3,4-xyleneol; [1] 2,5-xyleneol; [2] 2,4-xyleneol; [3] 2,3-xyleneol; [4] 2,6-xyleneol; [5] xyleneol; [6] 2,4(or 2,5)-xyleneol [7]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	604-006-00-X	202-439-5 [1]	95-65-8 [1]	95-87-4						
		202-461-5 [2]	[2] 105-67-9 [3]							
		203-321-6 [3]	526-75-0 [4]							
		208-395-3 [4]	576-26-1 [5]							
		209-400-1 [5]	1300-71-6 [6]							
		215-089-3 [6]	71975-58-1 [7]							
		276-245-4 [7]								
77	bis(2-chloroethoxy)methane				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		203-920-2	111-91-1							
78	2,4-dichlorophenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	604-011-00-7	204-429-6	120-83-2							
79	4-chloroaniline				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	612-137-00-9	203-401-0	106-47-8							
80	chlorocresol; 4-chloro-m-cresol; 4-chloro-3-methylphenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	604-014-00-3	200-431-6	59-50-7							
81	2-methyl naphthalene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		202-078-3	91-57-6							
82	4-nitrophenol; p-nitrophenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	609-015-00-2	202-811-7	100-02-7							
83	hexachlorocyclopentadiene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	602-078-00-7	201-029-3	77-47-4							
84	2,4,6-trichlorophenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	604-018-00-5	201-795-9	88-06-2							
85	2,4,5-trichlorophenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	604-017-00-X	202-467-8	95-95-4							
86	2-chloronaphthalene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		202-079-9	91-58-7							
87	dimethyl phthalate				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		205-011-6	131-11-3							
88	2,6-dinitrotoluene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	609-049-00-8	210-106-0	606-20-2							
89	dibenzofuran				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		205-071-3	132-64-9							
90	4-chlorophenylphenylether				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		230-281-7	7005-72-3							
91	2,4-dinitrotoluene; [1] dinitrotoluene [2]				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	609-007-00-9	204-450-0 [1]	121-14-2 [1]							
		246-836-1 [2]	25321-14-6 [2]							
92	diethyl phthalate				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		201-550-6	84-66-2							
93	DNOC (ISO); 4,6-dinitro-o-cresol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	609-020-00-X	208-601-1	534-52-1							
94	azobenzene				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	611-001-00-6	203-102-5	103-33-3							
95	4-bromophenylphenylether				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		202-952-4	101-55-3							
96	pentachlorophenol				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	604-002-00-8	201-778-6	87-86-5							
97	carbazole				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		201-696-0	86-74-8							
98	dibutyl phthalate; DBP				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	607-318-00-4	201-557-4	84-74-2							
99	BBP; benzyl butyl phthalate				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
	607-430-00-3	201-622-7	85-68-7							

#		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							
100		bis(2-ethylhexyl) phthalate; di-(2-ethylhexyl) phthalate; DEHP				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		607-317-00-9	204-211-0	117-81-7							
101	•	di-n-octyl phthalate				<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
			204-214-7	117-84-0							
102		m-cresol; [1] o-cresol; [2] p-cresol; [3] mix-cresol [4]				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
		604-004-00-9	203-577-9 [1]	108-39-4 [1]							
			202-423-8 [2]	95-48-7 [2]							
			203-398-6 [3]	106-44-5 [3]							
			215-293-2 [4]	1319-77-3 [4]							
103		1,2-dichloroethylene; [1] cis-dichloroethylene; [2] trans-dichloroethylene [3]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
		602-026-00-3	208-750-2 [1]	540-59-0 [1]							
			205-859-7 [2]	156-59-2 [2]							
			205-860-2 [3]	156-60-5 [3]							
104		cumene; [1] propylbenzene [2]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
		601-024-00-X	202-704-5 [1]	98-82-8 [1]							
			203-132-9 [2]	103-65-1 [2]							
105		2-chlorotoluene; [1] 3-chlorotoluene; [2] 4-chlorotoluene; [3] chlorotoluene [4]				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<LOD
		602-040-00-X	202-424-3 [1]	95-49-8 [1]							
			203-580-5 [2]	108-41-8 [2]							
			203-397-0 [3]	106-43-4 [3]							
			246-698-2 [4]	25168-05-2 [4]							
106		o-nitroaniline; [1] m-nitroaniline; [2] p-nitroaniline [3]				<1.5 mg/kg		<1.5 mg/kg	<0.00015 %		<LOD
		612-012-00-9	201-855-4 [1]	88-74-4 [1]							
			202-729-1 [2]	100-01-6 [3]							
			202-810-1 [3]								
Total:									0.00387 %		

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)
<LOD	Below limit of detection
ND	Not detected

Classification of sample: WS203-19/05/2022-0.2

 **Non Hazardous Waste**
 Classified as **17 05 04**
 in the List of Waste

Sample details

Sample name:	LoW Code:
WS203-19/05/2022-0.2	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.2 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
10%	
(wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 10% Wet Weight Moisture Correction applied (MC)

#	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							
1	arsenic { arsenic trioxide }				2.4 mg/kg	1.32	2.852 mg/kg	0.000285 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				<0.5 mg/kg	2.775	<1.388 mg/kg	<0.000139 %		<LOD
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				0.75 mg/kg	3.22	2.173 mg/kg	0.000217 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.1 mg/kg	1.142	<0.114 mg/kg	<0.0000114 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				6.7 mg/kg	1.462	8.813 mg/kg	0.000881 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.5 mg/kg	2.27	<1.135 mg/kg	<0.000113 %		<LOD
	024-017-00-8									
7	copper { dicopper oxide; copper (I) oxide }				7.8 mg/kg	1.126	7.904 mg/kg	0.00079 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead chromate }			1	18 mg/kg	1.56	25.269 mg/kg	0.00162 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				2.7 mg/kg	2.976	7.232 mg/kg	0.000723 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				<0.25 mg/kg	2.554	<0.638 mg/kg	<0.0000638 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				10 mg/kg	1.785	16.067 mg/kg	0.00161 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
13	zinc { zinc chromate }				53 mg/kg	2.774	132.327 mg/kg	0.0132 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
14	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							

#	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	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
17	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-021-00-3	203-625-9	108-88-3								
18	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
19	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %			<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]								
20	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 }				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %			<LOD
	006-007-00-5										
21	pH		PH		8.1 pH		8.1 pH	8.1 pH			
22	naphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
23	acenaphthylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-917-1	208-96-8								
24	acenaphthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		201-469-6	83-32-9								
25	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		201-695-5	86-73-7								
26	phenanthrene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		201-581-5	85-01-8								
27	anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		204-371-1	120-12-7								
28	fluoranthene				0.11 mg/kg		0.099 mg/kg	0.0000099 %		✓	
		205-912-4	206-44-0								
29	pyrene				0.12 mg/kg		0.108 mg/kg	0.0000108 %		✓	
		204-927-3	129-00-0								
30	benzo[a]anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
31	chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
32	benzo[b]fluoranthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
33	benzo[k]fluoranthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
34	benzo[a]pyrene; benzo[def]chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
35	indeno[123-cd]pyrene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-893-2	193-39-5								
36	dibenz[a,h]anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
37	benzo[ghi]perylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-883-8	191-24-2								
38	sulfur { sulfur }				1.3 mg/kg		1.17 mg/kg	0.000117 %		✓	
	016-094-00-1	231-722-6	7704-34-9								
39	monohydric phenols		P1186		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
Total:									0.0209 %		

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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS204-19/05/2022-0.1

 **Non Hazardous Waste**
 Classified as **17 05 04**
 in the List of Waste

Sample details

Sample name:	LoW Code:
WS204-19/05/2022-0.1	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.1 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
7.8%	
(wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 7.8% Wet Weight Moisture Correction applied (MC)

#	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							
1	arsenic { arsenic trioxide }				5.8 mg/kg	1.32	7.061 mg/kg	0.000706 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				<0.5 mg/kg	2.775	<1.388 mg/kg	<0.000139 %		<LOD
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.13 mg/kg	1.142	0.137 mg/kg	0.0000137 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				19 mg/kg	1.462	25.604 mg/kg	0.00256 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.5 mg/kg	2.27	<1.135 mg/kg	<0.000113 %		<LOD
	024-017-00-8									
7	copper { dicopper oxide; copper (I) oxide }				13 mg/kg	1.126	13.495 mg/kg	0.00135 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead chromate }			1	150 mg/kg	1.56	215.722 mg/kg	0.0138 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
9	mercury { mercury dichloride }				0.05 mg/kg	1.353	0.0624 mg/kg	0.00000624 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				8.2 mg/kg	2.976	22.502 mg/kg	0.00225 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				0.43 mg/kg	2.554	1.012 mg/kg	0.000101 %	✓	
	028-031-00-5	239-125-2	15060-62-5							
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				22 mg/kg	1.785	36.211 mg/kg	0.00362 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
13	zinc { zinc chromate }				70 mg/kg	2.774	179.043 mg/kg	0.0179 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
14	TPH (C6 to C40) petroleum group				32 mg/kg		29.504 mg/kg	0.00295 %	✓	
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							

#	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	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
17	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-021-00-3	203-625-9	108-88-3								
18	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
19	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %			<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]								
20	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 }				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %			<LOD
	006-007-00-5										
21	pH		PH		5.9 pH		5.9 pH	5.9 pH			
22	naphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
23	acenaphthylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-917-1	208-96-8								
24	acenaphthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		201-469-6	83-32-9								
25	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		201-695-5	86-73-7								
26	phenanthrene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		201-581-5	85-01-8								
27	anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		204-371-1	120-12-7								
28	fluoranthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-912-4	206-44-0								
29	pyrene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		204-927-3	129-00-0								
30	benzo[a]anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
31	chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
32	benzo[b]fluoranthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
33	benzo[k]fluoranthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
34	benzo[a]pyrene; benzo[def]chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
35	indeno[123-cd]pyrene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-893-2	193-39-5								
36	dibenz[a,h]anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
37	benzo[ghi]perylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-883-8	191-24-2								
38	sulfur { sulfur }				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	016-094-00-1	231-722-6	7704-34-9								
39	monohydric phenols		P1186		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
Total:									0.0459 %		

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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
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 because **No free phase liquid**

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00295%)

Classification of sample: WS204-19/05/2022-2.0

 **Non Hazardous Waste**
 Classified as **17 05 04**
 in the List of Waste

Sample details

Sample name:	LoW Code:
WS204-19/05/2022-2.0	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
2.0-2.2 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
21%	
(wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 21% Wet Weight Moisture Correction applied (MC)

#	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								
1	arsenic { arsenic trioxide }				4.6 mg/kg	1.32	4.798 mg/kg	0.00048 %		✓	
	033-003-00-0	215-481-4	1327-53-3								
2	beryllium { beryllium oxide }				<0.5 mg/kg	2.775	<1.388 mg/kg	<0.000139 %			<LOD
	004-003-00-8	215-133-1	1304-56-9								
3	boron { diboron trioxide; boric oxide }				1.3 mg/kg	3.22	3.307 mg/kg	0.000331 %		✓	
	005-008-00-8	215-125-8	1303-86-2								
4	cadmium { cadmium oxide }				0.12 mg/kg	1.142	0.108 mg/kg	0.0000108 %		✓	
	048-002-00-0	215-146-2	1306-19-0								
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				15 mg/kg	1.462	17.319 mg/kg	0.00173 %		✓	
		215-160-9	1308-38-9								
6	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.5 mg/kg	2.27	<1.135 mg/kg	<0.000113 %			<LOD
	024-017-00-8										
7	copper { dicopper oxide; copper (I) oxide }				10 mg/kg	1.126	8.895 mg/kg	0.000889 %		✓	
	029-002-00-X	215-270-7	1317-39-1								
8	lead { lead chromate }			1	110 mg/kg	1.56	135.548 mg/kg	0.00869 %		✓	
	082-004-00-2	231-846-0	7758-97-6								
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
10	nickel { nickel chromate }				6.3 mg/kg	2.976	14.813 mg/kg	0.00148 %		✓	
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { nickel selenate }				0.4 mg/kg	2.554	0.807 mg/kg	0.0000807 %		✓	
	028-031-00-5	239-125-2	15060-62-5								
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				18 mg/kg	1.785	25.385 mg/kg	0.00254 %		✓	
	023-001-00-8	215-239-8	1314-62-1								
13	zinc { zinc chromate }				54 mg/kg	2.774	118.345 mg/kg	0.0118 %		✓	
	024-007-00-3	236-878-9	13530-65-9								
14	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
			TPH								
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	603-181-00-X	216-653-1	1634-04-4								

#	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	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
17	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
18	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
19	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %		<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]							
20	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 }				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<LOD
	006-007-00-5									
21	pH		PH		7.9 pH		7.9 pH	7.9 pH		
22	naphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
23	acenaphthylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		205-917-1	208-96-8							
24	acenaphthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-469-6	83-32-9							
25	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-695-5	86-73-7							
26	phenanthrene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-581-5	85-01-8							
27	anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		204-371-1	120-12-7							
28	fluoranthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		205-912-4	206-44-0							
29	pyrene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		204-927-3	129-00-0							
30	benzo[a]anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
31	chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
32	benzo[b]fluoranthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
33	benzo[k]fluoranthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
34	benzo[a]pyrene; benzo[def]chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
35	indeno[123-cd]pyrene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		205-893-2	193-39-5							
36	dibenz[a,h]anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
37	benzo[ghi]perylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		205-883-8	191-24-2							
38	sulfur { sulfur }				12 mg/kg		9.48 mg/kg	0.000948 %	✓	
	016-094-00-1	231-722-6	7704-34-9							
39	monohydric phenols		P1186		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
Total:								0.0304 %		

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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS205-19/05/2022-0.4

 **Non Hazardous Waste**
 Classified as **17 05 04**
 in the List of Waste

Sample details

Sample name:	LoW Code:
WS205-19/05/2022-0.4	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.4 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
20%	
(wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 20% Wet Weight Moisture Correction applied (MC)

#	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							
1	arsenic { arsenic trioxide }				2.1 mg/kg	1.32	2.218 mg/kg	0.000222 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				<0.5 mg/kg	2.775	<1.388 mg/kg	<0.000139 %		<LOD
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.1 mg/kg	1.142	<0.114 mg/kg	<0.0000114 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				8.1 mg/kg	1.462	9.471 mg/kg	0.000947 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.5 mg/kg	2.27	<1.135 mg/kg	<0.000113 %		<LOD
	024-017-00-8									
7	copper { dicopper oxide; copper (I) oxide }				2.8 mg/kg	1.126	2.522 mg/kg	0.000252 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead chromate }			1	8.9 mg/kg	1.56	11.106 mg/kg	0.000712 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				2.1 mg/kg	2.976	5 mg/kg	0.0005 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				<0.25 mg/kg	2.554	<0.638 mg/kg	<0.0000638 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				11 mg/kg	1.785	15.71 mg/kg	0.00157 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
13	zinc { zinc chromate }				23 mg/kg	2.774	51.044 mg/kg	0.0051 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
14	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							

#	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	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
17	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-021-00-3	203-625-9	108-88-3								
18	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
19	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %			<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]								
20	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 }				0.6 mg/kg	1.884	0.904 mg/kg	0.0000904 %		✓	
	006-007-00-5										
21	pH				7.9 pH		7.9 pH	7.9 pH			
			P1186								
22	naphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
23	acenaphthylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-917-1	208-96-8								
24	acenaphthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		201-469-6	83-32-9								
25	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		201-695-5	86-73-7								
26	phenanthrene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		201-581-5	85-01-8								
27	anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		204-371-1	120-12-7								
28	fluoranthene				0.087 mg/kg		0.0696 mg/kg	0.00000696 %		✓	
		205-912-4	206-44-0								
29	pyrene				0.12 mg/kg		0.096 mg/kg	0.0000096 %		✓	
		204-927-3	129-00-0								
30	benzo[a]anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
31	chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
32	benzo[b]fluoranthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
33	benzo[k]fluoranthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
34	benzo[a]pyrene; benzo[def]chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
35	indeno[123-cd]pyrene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-893-2	193-39-5								
36	dibenz[a,h]anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
37	benzo[ghi]perylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-883-8	191-24-2								
38	sulfur { sulfur }				1.6 mg/kg		1.28 mg/kg	0.000128 %		✓	
	016-094-00-1	231-722-6	7704-34-9								
39	monohydric phenols				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
			P1186								
Total:									0.011 %		

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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS205-19/05/2022-1.0

 **Non Hazardous Waste**
 Classified as **17 05 04**
 in the List of Waste

Sample details

Sample name:	LoW Code:
WS205-19/05/2022-1.0	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.0 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
21%	
(wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 21% Wet Weight Moisture Correction applied (MC)

#		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								
1		arsenic { arsenic trioxide }				1.8 mg/kg	1.32	1.878 mg/kg	0.000188 %	✓		
		033-003-00-0	215-481-4	1327-53-3								
2		beryllium { beryllium oxide }				<0.5 mg/kg	2.775	<1.388 mg/kg	<0.000139 %		<LOD	
		004-003-00-8	215-133-1	1304-56-9								
3		boron { diboron trioxide; boric oxide }				<0.4 mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<LOD	
		005-008-00-8	215-125-8	1303-86-2								
4		cadmium { cadmium oxide }				<0.1 mg/kg	1.142	<0.114 mg/kg	<0.0000114 %		<LOD	
		048-002-00-0	215-146-2	1306-19-0								
5		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				11 mg/kg	1.462	12.701 mg/kg	0.00127 %	✓		
			215-160-9	1308-38-9								
6		chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				<0.5 mg/kg	2.27	<1.135 mg/kg	<0.000113 %		<LOD	
		024-017-00-8										
7		copper { dicopper oxide; copper (I) oxide }				3.5 mg/kg	1.126	3.113 mg/kg	0.000311 %	✓		
		029-002-00-X	215-270-7	1317-39-1								
8		lead { lead chromate }			1	4.4 mg/kg	1.56	5.422 mg/kg	0.000348 %	✓		
		082-004-00-2	231-846-0	7758-97-6								
9		mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD	
		080-010-00-X	231-299-8	7487-94-7								
10		nickel { nickel chromate }				1.7 mg/kg	2.976	3.997 mg/kg	0.0004 %	✓		
		028-035-00-7	238-766-5	14721-18-7								
11		selenium { nickel selenate }				<0.25 mg/kg	2.554	<0.638 mg/kg	<0.0000638 %		<LOD	
		028-031-00-5	239-125-2	15060-62-5								
12		vanadium { divanadium pentaoxide; vanadium pentoxide }				13 mg/kg	1.785	18.334 mg/kg	0.00183 %	✓		
		023-001-00-8	215-239-8	1314-62-1								
13		zinc { zinc chromate }				11 mg/kg	2.774	24.107 mg/kg	0.00241 %	✓		
		024-007-00-3	236-878-9	13530-65-9								
14		TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD	
				TPH								
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD	
		603-181-00-X	216-653-1	1634-04-4								

#	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	benzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
17	toluene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-021-00-3	203-625-9	108-88-3								
18	ethylbenzene				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
19	xylene				<0.002 mg/kg		<0.002 mg/kg	<0.0000002 %			<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]								
20	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 }				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %			<LOD
	006-007-00-5										
21	pH		PH		8.7 pH		8.7 pH	8.7 pH			
22	naphthalene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
23	acenaphthylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-917-1	208-96-8								
24	acenaphthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		201-469-6	83-32-9								
25	fluorene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		201-695-5	86-73-7								
26	phenanthrene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		201-581-5	85-01-8								
27	anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		204-371-1	120-12-7								
28	fluoranthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-912-4	206-44-0								
29	pyrene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		204-927-3	129-00-0								
30	benzo[a]anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
31	chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
32	benzo[b]fluoranthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
33	benzo[k]fluoranthene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
34	benzo[a]pyrene; benzo[def]chrysene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
35	indeno[123-cd]pyrene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-893-2	193-39-5								
36	dibenz[a,h]anthracene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
37	benzo[ghi]perylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
		205-883-8	191-24-2								
38	sulfur { sulfur }				13 mg/kg		10.27 mg/kg	0.00103 %	✓		
	016-094-00-1	231-722-6	7704-34-9								
39	monohydric phenols		P1186		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
Total:									0.00937 %		

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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non GB MCL determinands

■ **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database

Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H332 , Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Resp. Sens. 1; H334 , Skin Sens. 1; H317 , Repr. 1B; H360FD , 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

■ **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

■ **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.

■ **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

■ **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

■ **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

■ **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

■ **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

■ **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

■ **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

■ **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

■ **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

■ **1,1-dichloroethane and 1,2-dichloroethane (combined)** (EC Number: 203-458-1, 200-863-5, CAS Number: 107-06-2, 75-34-3)

Description/Comments: Combines the hazard statements and risk phrases for 1,1-dichloroethane and 1,2-dichloroethane
 Data source: N/A
 Data source date: 14 Oct 2016
 Hazard Statements: Flam. Liq. 2; H225 , Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 1B; H350 , Aquatic Chronic 3; H412

■ **dichlorodifluoromethane** (EC Number: 200-893-9, CAS Number: 75-71-8)

Description/Comments: VOC; Data from C&L Inventory Database
 Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
 Data source date: 02 Mar 2017
 Hazard Statements: Aquatic Chronic 3; H412 , Ozone 1; H420 , Press. Gas; H280

■ **trichlorofluoromethane** (EC Number: 200-892-3, CAS Number: 75-69-4)

Description/Comments: VOC; Data from C&L Inventory Database
 Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
 Data source date: 02 Mar 2017
 Hazard Statements: Acute Tox. 4; H312 , Ozone 1; H420

■ **bromochloromethane** (EC Number: 200-826-3, CAS Number: 74-97-5)

Description/Comments: VOC; Data from C&L Inventory Database
 Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
 Data source date: 02 Mar 2017
 Hazard Statements: Acute Tox. 4; H312 , Skin Corr. 1B; H314 , Eye Dam. 1; H318 , Acute Tox. 4; H332 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Ozone 1; H420

■ **bromodichloromethane** (EC Number: 200-856-7, CAS Number: 75-27-4)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;
 Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
 Data source date: 02 Mar 2017
 Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 1A; H360

▪ **trans-1,3-dichloropropene** (EC Number: 431-460-4, CAS Number: 10061-02-6)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Flam. Liq. 3; H226 , Acute Tox. 3; H301 , Asp. Tox. 1; H304 , Acute Tox. 3; H311 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Irrit. 2; H319 , Acute Tox. 4; H332 , STOT SE 3; H335 , Aquatic Chronic 1; H410

▪ **1,3-dichloropropane** (EC Number: 205-531-3, CAS Number: 142-28-9)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H332 , Flam. Liq. 2; H225 , Flam. Liq. 3; H226 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335

▪ **dibromochloromethane** (EC Number: 204-704-0, CAS Number: 124-48-1)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 4; H332 , STOT SE 3; H335 , STOT SE 3; H336 , Muta. 2; H341 , Aquatic Chronic 2; H411

▪ **1,1,1,2-tetrachloroethane** (EC Number: 211-135-1, CAS Number: 630-20-6)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , Eye Dam. 1; H318 , Acute Tox. 4; H332 , Carc. 2; H351 , Acute Tox. 4; H312 , Aquatic Chronic 3; H412 , Skin Irrit. 2; H315

▪ **tert-butylbenzene** (EC Number: 202-632-4, CAS Number: 98-06-6)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Flam. Liq. 3; H226 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , Acute Tox. 4; H332 , STOT SE 3; H335 , Asp. Tox. 1; H304 , Aquatic Chronic 2; H411

▪ **sec-butylbenzene** (EC Number: 205-227-0, CAS Number: 135-98-8)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Aquatic Chronic 2; H411

▪ **4-isopropyltoluene** (EC Number: 202-796-7, CAS Number: 99-87-6)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Chronic 2; H411

▪ **n-butylbenzene** (EC Number: 203-209-7, CAS Number: 104-51-8)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Flam. Liq. 3; H226 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

▪ **hexachlorobutadiene** (EC Number: 201-765-5, CAS Number: 87-68-3)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 3; H301 , Acute Tox. 2; H310 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Irrit. 2; H319 , Acute Tox. 2; H330 , Carc. 2; H351 , Repr. 2; H361 , STOT SE 2; H371 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

▪ **1,2,3-trichlorobenzene** (EC Number: 201-757-1, CAS Number: 87-61-6)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , STOT SE 3; H336 , Aquatic Acute 1; H400 , Aquatic Chronic 3; H410

• **hexachloroethane** (EC Number: 200-666-4, CAS Number: 67-72-1)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , STOT RE 2; H373

• **2-nitrophenol** (EC Number: 201-857-5, CAS Number: 88-75-5)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 4; H332 , STOT SE 3; H335 , STOT RE 2; H373 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **bis(2-chloroethoxy)methane** (EC Number: 203-920-2, CAS Number: 111-91-1)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 3; H301 , Acute Tox. 4; H312 , Acute Tox. 1; H330 , Acute Tox. 2; H330 , STOT SE 1; H370 , STOT RE 2; H373

• **2-methyl naphthalene** (EC Number: 202-078-3, CAS Number: 91-57-6)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , STOT SE 3; H336 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **2-chloronaphthalene** (EC Number: 202-079-9, CAS Number: 91-58-7)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

• **dimethyl phthalate** (EC Number: 205-011-6, CAS Number: 131-11-3)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 3; H331 , STOT SE 3; H335 , STOT SE 3; H336 , Repr. 2; H361 , Aquatic Chronic 3; H412

• **dibenzofuran** (EC Number: 205-071-3, CAS Number: 132-64-9)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Acute Tox. 4; H332 , Aquatic Chronic 2; H411

• **4-chlorophenylphenylether** (EC Number: 230-281-7, CAS Number: 7005-72-3)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **diethyl phthalate** (EC Number: 201-550-6, CAS Number: 84-66-2)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Skin Irrit. 2; H315 , Acute Tox. 3; H331 , Acute Tox. 3; H311 , STOT SE 3; H335 , STOT RE 2; H373 , Repr. 2; H361 , Acute Tox. 4; H302 , STOT SE 3; H336 , Skin Sens. 1; H317 , Aquatic Chronic 1; H410

• **4-bromophenylphenylether** (EC Number: 202-952-4, CAS Number: 101-55-3)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Eye Dam. 1; H318 , Eye Irrit. 2; H319 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

▪ **carbazole** (EC Number: 201-696-0, CAS Number: 86-74-8)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 2B;

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Acute Tox. 4; H302, Skin Irrit. 2; H315, Eye Irrit. 2; H319, STOT SE 3; H335, Muta. 2; H341, Carc. 2; H351, Aquatic Acute 1; H400, Aquatic Chronic 1; H410, Acute Tox. 3; H331, Acute Tox. 3; H311, Acute Tox. 3; H301

▪ **di-n-octyl phthalate** (EC Number: 204-214-7, CAS Number: 117-84-0)

Description/Comments: VOC; Data from C&L Inventory Database

Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 02 Mar 2017

Hazard Statements: Repr. 2; H361, Skin Sens. 1; H317, Resp. Sens. 1; H334, Eye Irrit. 2; H319, Aquatic Chronic 4; H413

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds

beryllium {beryllium oxide}

Reasonable case CLP species based on hazard statements/molecular weight. Industrial sources include: most common (non alloy) form, used in ceramics

boron {diboron trioxide; boric oxide}

Reasonable case CLP species based on hazard statements/ molecular weight, physical form and low solubility. Industrial sources include: fluxing agent for glass/enamels; additive for fibre optics, borosilicate glass

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass

chromium in chromium(VI) compounds {chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex}

Worst case species based on hazard statements/molecular weight

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. Worst case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected.

lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight

selenium {nickel selenate}

Worst case CLP species based on hazard statements/molecular weight

vanadium {divanadium pentaoxide; vanadium pentoxide}

Worst case species selected

zinc {zinc chromate}

Worst case CLP species based on hazard statements/molecular weight

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}

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide]

sulfur {sulfur}

metal

Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition v1.2.GB - Oct 2021**

HazWasteOnline Classification Engine Version: 2022.168.5189.9766 (18 Jun 2022)

HazWasteOnline Database: 2022.168.5189.9766 (18 Jun 2022)

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