PHASE 2 REPORT ON A SITE INVESTIGATION

Site

LAND OFF WHITE STORK ROAD, BOORLEY GARDENS, BOORLEY GREEN, HEDGE END, HAMPSHIRE SO32 2BX

Client

HEDGE END CARE HOME LTD

Report Ref

25/12718/A/GO REV 1

Issued

MARCH 2025

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The following foreword should be read in conjunction with this report. Any variations on the general procedures outlined below are indicated in the text.

FOREWORD

The recommendations made and opinions expressed in this Report are based on the strata conditions revealed by the fieldworks as indicated on the exploratory records, together with an assessment of the data from in situ and laboratory tests. No liability can be accepted for conditions which have not been revealed by the fieldworks, for example, between exploratory positions. While this Report may offer opinions on the possible configuration of strata, both between the excavations and below the maximum depth achieved by the investigation, these comments are for guidance only and no liability can be accepted for their accuracy. The data obtained relate to the conditions which are relevant at the time of the investigation.

The groundwater observations entered on exploratory records are those noted at the time of the investigation. The normal rate of progress does not usually permit the recording of any equilibrium water level for any one water strike. It should be noted that groundwater levels are prone to seasonal variation and to changes in local drainage conditions. The word 'none' indicates that groundwater was sealed off by the borehole casing or that no water was observed in the exploratory hole upon completion.

It should be appreciated that this report does not constitute a Geotechnical Design Report (GDR) as defined in Eurocode 7 and no aspect of this report constitutes a design. Specific sections of this report are generally in line with the guidance set out in Eurocode 7 for a Ground Investigation Report (GIR), as defined within BS EN 1997:-2 (2024). This provides guidance on the number and spacing of investigation positions, methods of investigation and sample quality class to be achieved which may not have been met by this investigation.

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REPORT REF: 25/12718/A/GO REV 1
CONTRACT: WHITE STORK ROAD, BOORLEY GREEN

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EXECUTIVE SUMMARY

This investigation has demonstrated that made ground overlies cohesive soils becoming variable with depth, indicative of the Wittering Formation of the Eocene epoch. In view of the anticipated structural loadings and relatively soft near surface condition of the cohesive soils associated with the Wittering Formation, it is suggested that a piled foundation solution be adopted for the proposed structure. The results of the geochemical analysis have not recorded any elevated levels of contamination and specific remedial measures are not necessary. Moreover, no specialist precautions are necessary with respect to sulphate and buried concrete.

1 INTRODUCTION

1.1 Scope

The client proposes to construct a new care home facility at the land off White Stork Road, Boorley Green ("the site"). Initially a Phase 1 Desk Study was completed by Albury S.I. Ltd in October 2023 and should be read in conjunction with this report. Accordingly, a Phase 2 site investigation has been undertaken in order to ascertain the nature and engineering properties of the soils underlying the proposed development site and to obtain data which will assist in the formulation of a safe and economical foundation solution. In addition, a geo-environmental appraisal of the site has also been carried out.

The programme of this investigation comprised the construction of two deep cable percussive boreholes supplemented by nine machine excavated trial pits. During this work samples were recovered for further examination and laboratory testing. In addition, a number of in situ tests were also performed.

This report describes the work undertaken, presents the information obtained and discusses the ground conditions with respect to foundation design, construction and potential contamination.

1.2 The Site

The site remains undeveloped from the time of the Phase 1 walkover survey, however, the wheel wash and stockpiled soils are no longer present. Photographs which give a general impression of the site at the time of the fieldworks are included below. At the time of our investigation the ground surface was heavily waterlogged with much standing water present.





2 FIELDWORKS

The boreholes and trial pits were constructed on 11th, 12th and 13th February 2025 at locations as shown on the site plan, drawing no. 25/12718/A/1, which is presented as Figure 1. The exploratory positions were located in order to provide adequate site coverage, taking into account site constraints such as the safety mesh fencing protecting the northern boundary and incoming overhead electric services in the north east corner of the site, as well as the heavily waterlogged ground conditions.

The depths and descriptions of the strata encountered in the boreholes and trial pits are given on the records which comprise Appendix 1 to this report. These records note the depths at which samples were taken, the results of in situ tests and the groundwater observations noted at the time of the fieldworks.

3 GROUND CONDITIONS

3.1 Geology

Reference to the earlier desk study indicates the site to be underlain by the Wittering Formation of the lower Eocene epoch and is part of the Bracklesham Group, typically comprising laminated clay interbedded with sand.

3.2 Stratigraphy

Consideration of the exploratory records indicates that made ground in the form of brown slightly gravelly silty clay with rootlets and roots was present at surface and generally proved to 0.40m depth. The exceptions were at trial pits E and CBR4 where made ground was noted to extend to depths of 1.30m and 0.70m respectively. Some possible disturbed or made ground was also noted at 0.50m within borehole 1. The gravel consists of brick fragments, flint and occasional clinker.

Orangish brown and grey to brownish grey mottled yellowish brown silty to very silty clay was exposed beneath the made ground. These cohesive soils are indicative of the Wittering Formation and trial pits A to E and CBR1 to CBR4 were concluded within this deposit at 1.10m and 3.10m. An exception was a limited horizon of dark brown laminated, slightly gravelly, very silty clay with some layers of very weak lignite and is probably slightly organic, being encountered between 2.40m and 2.60m within trial pit A.

Dark grey to brown/grey fissured clay with veins of light grey sand at depth was encountered below depths of 3.00m and 5.50m within the boreholes, which were proved to depths of 10.00m and 11.00m. Below these depths the soils vary to grey very silty sand with laminations of grey clay or very sandy silt, which was proved to 12.00m depth. A further cohesive horizon was also present between 12.00m and 13.00m within borehole 2.

Dark grey silty fine sand was encountered below 12.00m and 13.00m, becoming slightly silty with depth, and these granular soils were noted to extend to 19.50m and 20.00m. Below these levels soils varying from light grey silty sand with laminations of grey silty clay or dark grey laminated silty clay with laminations of sand were exposed and the boreholes were concluded within this laminated sand/clay at 25.00m.

3.3 Groundwater

During the construction of the trial pits a number of groundwater strikes were recorded, generally in the form of seepage inflows, at between 0.50m and 3.05m depths. Short-term standing water levels of between 2.35m and 3.10m were observed upon completion of trial pits A, C, D and CBR2. The remaining trial pits B, E and CBR1, CBR3 and CBR4 were observed to be dry upon completion. The boreholes struck water at 12.50m and the water levels recorded during boring are shown on the borehole records.

3.4 In Situ Testing

During the construction of the boreholes a series of in situ Standard Penetration Tests [SPT] were performed. The test results are presented in terms of the number of blows to achieve a seating drive for 150mm of penetration, recorded as two 75mm increments and the test drive over 300mm recorded as four 75mm increments. The test drive is used to derive the penetration resistance for that soil layer and is recorded as the uncorrected SPT *N* value. Penetration resistances or *N* values typically increasing with depth from 5 blows/300mm to 29 blows/300mm were recorded between 1.20m and 10m which, using established correlations, infers a soft to stiff condition in situ for a cohesive soil. Below 11.00m increasing penetration resistances ranging between 34 and 84 blows/100mm were recorded reflecting a dense to very dense in situ condition for a granular soil. In three instances the test was terminated at 50 blows for less than 300mm of penetration and extrapolated *N* values of 62+,

64+ and 78+ have been derived, which reflect the very dense nature of the strata below 21.00m. The calibration certificate for the SPT tool is included with the logs in Appendix 1.

During the construction the trial pits hand shear vane tests were performed using the Geonor Shear Vane test equipment. Shear strengths ranging between 85kPa and 115kPa have been recorded which reflect a stiff in situ condition for a cohesive soil.

4 LABORATORY TESTING

A programme of laboratory testing has been undertaken and the results are presented as Appendix 2 to this report. The geotechnical soil testing was undertaken by Albury S.I. Ltd, whilst representative samples were submitted for geochemical testing at the UKAS accredited laboratories operated by i2 Analytical Ltd. Each type of test is summarised below and the results obtained have been used to assist in the formulation of the discussion.

4.1 Water Content

The water contents of samples of the soils encountered at this site have been determined. Water contents within the range 21.5% to 57.7% have been recorded.

4.2 Index Properties

The liquid and plastic limits of samples of the clay soils have been determined. The results of this work indicate that the samples tested can generally be described as inorganic clays or silts of high to very high plasticity and of medium to high volume change potential.

4.3 Particle Size Distribution

Samples of the granular soils encountered at depth beneath this site have been subjected to sieve analysis in order to determine the soils' particle size distribution. In two instances this work was extended by sedimentation analysis to ascertain the soils clay and silt fraction. The results of this work are presented in the form of grading curves.

4.4 Triaxial Compression

The undrained shear strength characteristics of samples of the clay associated with the Wittering Formation encountered at this site have been determined by testing specimens of 100mm diameter in the triaxial compression apparatus. Under the conditions of this work cohesions ranging between 30kPa and 100kPa were obtained, which is indicative of a low to high strength condition for a cohesive soil.

4.5 California Bearing Ratio

Samples of the soil taken from likely road formation level have been tested in order to determine their CBR value. Each test was made on specimens that had been recompacted in the standard laboratory mould, at their approximate natural water contents. Under the conditions of this work CBR values of between 0.7% and 4.1% were obtained.

4.6 Geochemical Testing – Soluble Sulphates & pH

Samples of the soils and groundwater encountered at this site have been subjected to chemical analyses in order to determine their soluble sulphate contents and pH values. Under the conditions of this work low concentrations of soluble sulphate have been recorded in association with acidic and near neutral pH values. The results are summarised below.

Table 1 - Summary of Chemical Tests

BH/TP No.	Sample		Concentration of Sulphates expressed as SO_4		Total Sulphate as SO_4 mg/kg	pH
	Depth m	Type	2:1 Water : Soil Extract mg/l	Groundwater mg/l		
TP A	0.50	CLAY	74		330	6.6
TP A	1.50	CLAY	121		560	4.5
TP B	1.50	CLAY	87		3200	4.2
TP C	1.00	CLAY	68		380	4.4
TP C	(2.35)	Water		298		4.1
TP D	0.50	CLAY	26		230	4.9
TP E	0.50	MADE GROUND	198		570	4.7
TP E	1.50	CLAY	123		830	4.2
CBR 2	0.50	CLAY	29		410	5.4
BH 1	3.00-3.45	CLAY	137		570	4.8
BH 1	6.00-6.45	CLAY	90		460	6.4
BH 1	9.00-9.45	CLAY	154		550	7.1
BH 1	15.00-15.45	SAND	103		420	7.9
BH 2	4.50-4.95	CLAY	171		580	7.3
BH 2	7.50-7.95	CLAY	149		580	6.8
BH 2	10.50-10.95	CLAY	203		820	7.8
BH 2	13.50-13.95	SAND	56		380	7.5
BH 2	18.00-18.45	SAND	49		430	6.9

4.7 Geochemical Testing

Six samples of the made ground have been submitted to the UKAS accredited laboratories operated by i2 Analytical Ltd. The samples are screened for the presence of asbestos (ACM) and subjected to a broad suite of tests of common inorganic and organic priority contaminants including metals, PAH and petroleum hydrocarbons. A sample from trial pit CBR4 at 0.50m depth was also subjected to a full suite of WAC tests with 10:1 leachate analysis.

5 GEOTECHNICAL DISCUSSION

5.1 Foundations

The client proposes to construct a new care home and the proposed layout is shown in Figure 2. At the time of the preparation of this report the anticipated structural loads were not known.

It cannot be recommended that major structural foundations be located within the made ground revealed by this investigation. Soils of this origin are frequently present in a weak and variable condition such that unacceptable settlement could occur even under the action of light loading intensities. Therefore, it will be necessary to continue foundation excavations through these undesirable materials where they are of less than 1.00m in thickness to this minimum depth in order to avoid that zone of soil which is subject to normal seasonal moisture variation or frost action.

It is known that a number of trees including mature Oaks are present in the vicinity to the north of the proposed structure. A discussion of the causes, effects and classification of desiccation in clay soils is included in Appendix 3 to this report. Consideration of the results of the laboratory testing indicates that some moisture deficiency may have developed within the near surface soils at trial pit B at 1.00m and 1.50m and at trial pits C and D at 1.00m, as the water contents of less than 40% are slightly lower than the general water content profiles which have been recorded at other locations.

In view of the anticipated structural loadings and soft near surface condition of the cohesive soils, it is suggested that a piled foundation solution be adopted for the proposed structure. The design of piles lies outside the scope of this report as it is dependent upon the type of pile employed, its size and bearing capacity. Therefore, when the loadings are known it will be sensible to seek the advice of suitably experienced specialist piling contractors in order to provide a satisfactory solution to the problem. The information given in Appendices 1 and 2 of this report may be used in pile design.

5.2 Stability of Excavations

Excavations left open to shallow depths of less than 1.00m should remain stable in the short term and temporary support to their sides should not be required. Where foundation excavations are to be extended below this level, then adequate temporary support or shoring should be provided to comply with current statutory safety regulations and to maintain the stability of the excavation sides.

5.3 Groundwater

The groundwater observations made at the time of the fieldworks suggest that significant engineering problems with respect to shallow depth excavations are unlikely. Should slight seepages be encountered or surface water run-off drain into excavations then these minor amounts should be removed by forming sumps from which the water can be pumped.

The cohesive soils revealed in this investigation are susceptible to rapid softening in the unconfined state. Where excavations are to be left open for extended periods then the bases should be blinded using leanmix concrete following final trimming to prevent deterioration of the founding medium.

5.4 Drainage

The near surface drainage characteristics of the underlying cohesive soils have not been considered as part of this investigation. It is evident that these would be a poor and unsuitable drainage medium and alternative means of surface water disposal will need to be sought.

5.5 Pavement Design

The results of the CBR testing can be used to establish the construction thickness for roads and paved areas. The Wittering Formation would be a relatively poor subgrade and some improvement should be anticipated. Prior to placement of any granular material any soft spots or artificial material should be removed. It would be prudent to place a geogrid or geotextile separator layer to prevent stone from punching into the underlying clay subsoil due to compaction or trafficking.

5.6 Ground Floor Slabs

A system of fully suspended floor slabs should be incorporated within the proposed structure given the presence of highly shrinkable clay soil, moisture deficiency and trees.

5.7 Buried Concrete

The information obtained from this investigation has been compared with the criteria proposed in BRE Special Digest 1, 2005 Edition, Concrete in Aggressive Ground. Using the information in Table C1 (natural ground) of this publication the Aggressive Chemical Environment for Concrete Classification (ACEC) is AC-1, which coincides with a Design Sulphate Class DS-1. The ACEC Class above can be used to determine the Design Chemical Class for concrete for general cast-in-situ use as required in Part D of the Digest.

6 GROUND CONTAMINATION

A Conceptual Site Model (CSM) was formulated for this site as part of the Phase 1 Desk Study, which informed the current Phase 2 intrusive investigation. The CSM produced as part of the desk study has been reviewed and updated accordingly, which is presented in tabular form below.

Table 2 - Conceptual Site Model

Source(s)	Potential Pathway(s)	Receptor(s)	Risk Level
Made Ground associated with demolished structure in north east of site and localised reworked natural soils (BH 1 and TP E)	Dermal Contact, Ingestion and Inhalation of dust	Site Workers End Users Vegetation	Low
	Leaching, Surface run-off	Groundwater	Very low

6.1 Human Health

A Conceptual Site Model (CSM) was formulated for this site as part of the Phase 1 Desk Study. No specific sources of contamination were identified other than a small cottage in the north east corner of the site present sometime prior to 1896.

A generic assessment of the chronic or long-term risk to human health from soil contamination has been made using the available generic screening criteria. The screening values include the Category 4 Screening Levels [C4SLs] (DEFRA, 2014) and Suitable for Use Levels [S4ULs] (LQM/CIEH, 2014) derived using the CLEA software. It should be appreciated that these do not consider the short-term or acute risks, such as to construction workers or SI personnel. A summary table of the results is included with the test result sheets in Appendix 2, together with the relevant GAC.

The results have been compared against the GAC for the proposed land-use Public Open Space near Residential Housing (POS^{RESI}) and 2.5%. A comparison of the results against the GAC reveal that the levels lie below the assessment criteria. It should be appreciated that the results also lie below the more stringent Residential (with homegrown produce) GAC land-use category with no exceedances and no asbestos was identified within any of the six samples screened. The majority of TPH concentrations are below the limit of detection. This confirms that the soils encountered are unlikely to pose an unacceptable to risk to site end users following development.

6.2 Vegetation

The metals boron, copper, nickel and zinc are phytotoxic at certain levels, with their availability being dependent upon soil pH. These levels may not pose a significant long-term health risk to humans, but could be detrimental to plant growth or function. The results obtained suggest that problems in this respect are not anticipated, however some soil amendments may be prudent to provide a suitable growing medium dependent upon the landscaping scheme.

6.3 Preliminary Waste Assessment

Given that no exceedances of human health soil guidance values were recorded, it is likely that material can be retained and re-used on site. Where excavated soils cannot be re-used or retained on site, then these surplus materials will require off-site disposal. It may be possible to divert the unwanted material to a soil treatment hub where it can be recycled. Where material cannot be re-used or recycled then disposal at a licensed landfill site can be considered. It will then be necessary to classify the spoil as inert, non-hazardous or hazardous. A discussion of the current regime for the classification and treatment of waste soils is included in Appendix 4.

An initial assessment of the geochemical results obtained from this investigation has been carried out to provide a preliminary classification of the surplus materials. The HazWaste Online tool determines whether waste soil should be classified as being non-hazardous or hazardous. The output from the HazWaste assessment is located in Appendix 4. Asbestos was not detected in any of the samples screened. Based on the output waste soil arisings from this site have been tentatively identified as being non-hazardous waste. The underlying natural soils are considered to be inert for disposal purposes.

This assessment is preliminary and based upon the information obtained from the investigation. Where made ground is excavated then these materials should be stockpiled and segregated. Further sampling, testing and characterisation to accurately classify waste soil arisings may be required. It should be appreciated that it is the responsibility of the waste

producer to sufficiently characterise their waste. Moreover, the agreement of the waste acceptor should be sought.

6.4 Ground Gases

There are no active or inactive registered landfill sites identified by the Phase 1 Desk Study within 1km of the site. There is no infilled land or potential sources of ground gases in the area and specific monitoring is not necessary.

The site has been shown to be underlain by cohesive soils, which would act to restrict the lateral migration of any ground gases from off-site sources. The site also not within a Radon affected area.

6.5 Groundwater

The site is underlain by a bedrock Secondary (A) or Minor aquifer of medium vulnerability associated with the Wittering Formation. No source protection zone (SPZ) or potable groundwater abstractions were identified within the desk study as being present in the locality.

The underlying Wittering Formation will exhibit low permeability and controlled waters receptors are not at significant risk from the proposed development. Hence, detailed investigation and assessment of the underlying groundwater is not considered warranted based upon the findings of this investigation.

7 CONCLUSIONS

In view of the anticipated structural loadings and soft near surface condition of the cohesive soils, it is suggested that a piled foundation solution be adopted for the proposed structure

No exceedances of relevant GAC have been recorded and no asbestos has been detected, which confirms that the soils encountered are unlikely to pose an unacceptable to risk to site end users following development. Whilst a localised increased thickness of made ground was recorded in the areas of borehole 1 and trial pit E, the description infers that the material is primarily reworked natural soils, consisting of orangish brown mottled greyish brown silty CLAY, with scattered coarse red brick fragments at depth. This is also visually apparent within the photograph given on the trial pit record. Therefore, testing of this material is not warranted given the absence of historical sources and the limited deleterious material observed within this soil profile.

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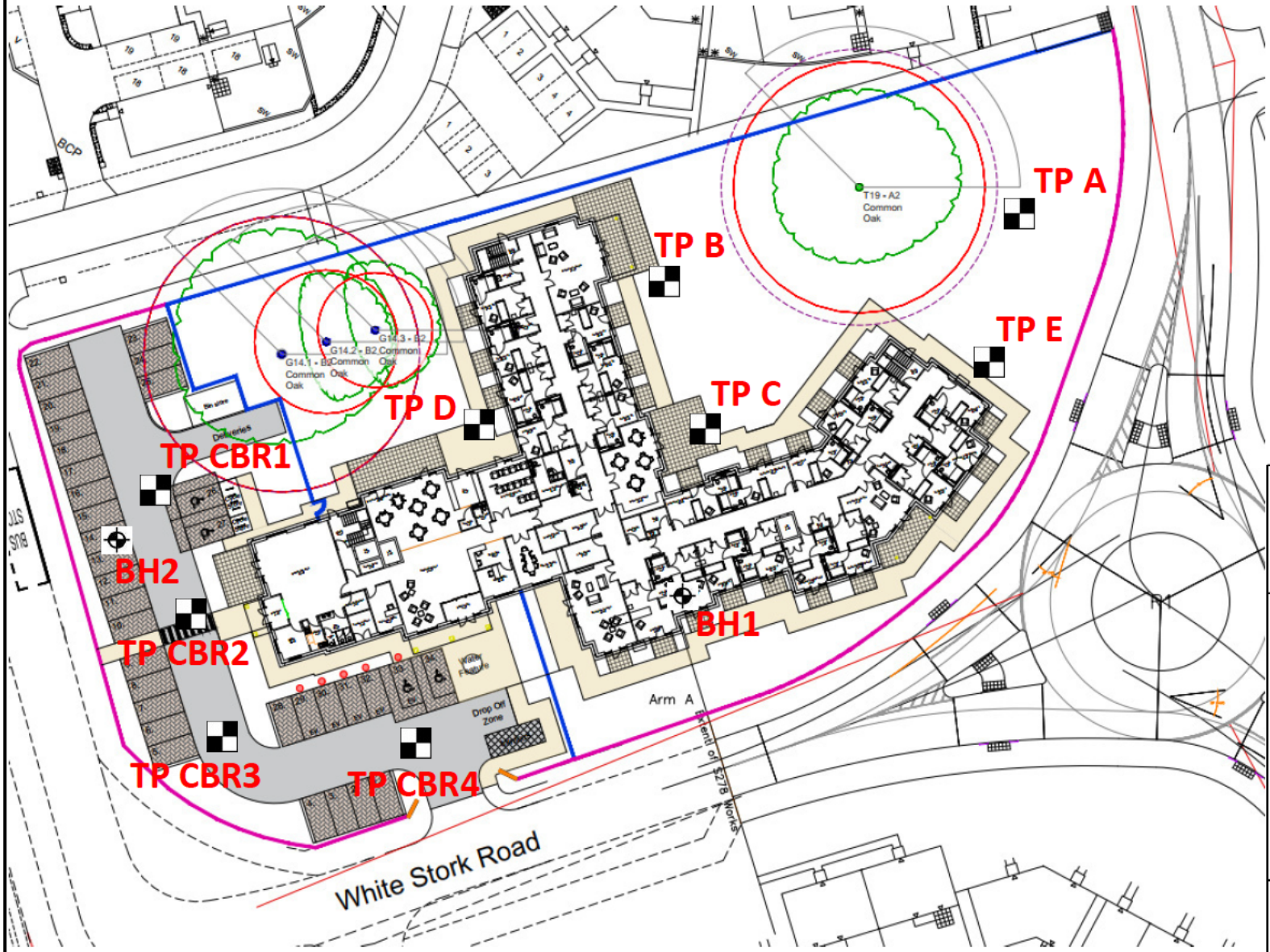
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LIST OF ABBREVIATIONS

AOD	-	Above Ordnance Datum
ACM	-	Asbestos-containing Material
AST	-	Above-ground Storage Tank
BGS	-	British Geological Survey
BH	-	Borehole
BRE	-	Building Research Establishment
BSI	-	British Standards Institution
BS	-	British Standard
C4SL	-	Category Four Screening Level
CIRIA	-	Construction Industry Research and Information Association
CP	-	Cable Percussive
DPH	-	Dynamic Probing Heavy
DPSH	-	Dynamic Probing Super Heavy
EA	-	Environment Agency
GAC	-	Generic Assessment Criteria
LL	-	Liquid Limit
mAOD	-	Metres Above Ordnance Datum
mBGL	-	Metres Below Ground Level
mOD	-	Metres Ordnance Datum
OS	-	Ordnance Survey
PAH	-	Polycyclic Aromatic Hydrocarbons
PCB	-	Polychlorinated Biphenyl
PID	-	Photo Ionisation Detector
PL	-	Plastic Limit
PSD	-	Particle Size Distribution
SGV	-	Soil Guideline Value
SOM	-	Soil Organic Matter
SPT	-	Standard Penetration Test
SPZ	-	Source Protection Zone
SVOC	-	Semi-volatile Organic Compounds
TPH	-	Total Petroleum Hydrocarbon
UST	-	Underground Storage Tank
UXB	-	Unexploded Bombs
UXO	-	Unexploded Ordnance
VOC	-	Volatile Organic Compound

FIGURE 1

SITE LAYOUT PLAN



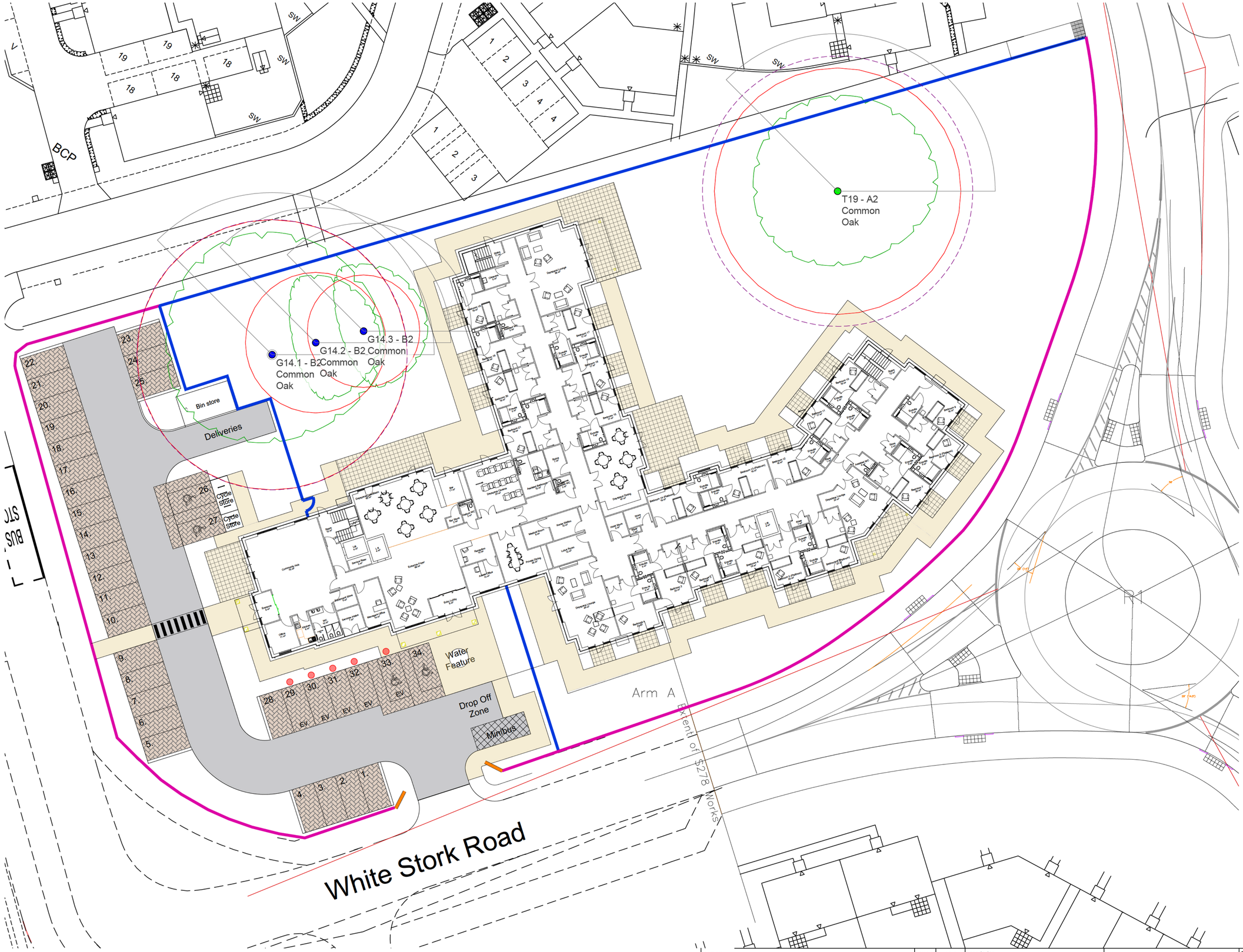
Title:	Site Layout Plan
Dwg No:	25/12718/A/1
Drawn by:	GO
Client:	Hedge End Care Home Ltd
Contract:	White Stork Road, Boorley Green
Job Ref:	25/12718/A/GO
Scale:	NTS
Revision:	0
Issue Date:	13/03/2025

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FIGURE 2

PROPOSED LAYOUT



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AREA CALCULATIONS
The areas shown are approximate only and have been measured off preliminary drawings as the likely areas at the current state of design using the stated option from the Code of Measuring Practice, 6th edition. These may be affected by future design development and construction tolerances, or the result of surveys for existing buildings. Take account of these factors before planning any financial or property development purpose or strategy and seek confirmation of latest areas before decision making.

Rev No.	Date	Description
AA	11/10/24	Maintenance store omitted and fenceline updated
Z	07/10/24	Equipment store moved into community hub
Y	20/09/24	Key updated
X	19/09/24	Boundary treatments updated
W	12/07/24	Boundary treatments updated
V	27/06/24	EV charging points added
U	25/06/24	Entrance area updated
–	02/01/18	Original Drawing

ADG
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Drawing Title
Proposed S te P an

Description
Proposed Care Home Deve opment,
Boor ey Gardens, Bot ey, Hampsh re, SO32 2BX

Client
Ha ebourne Group

Checked By	Drawn By	File Name	Drawing No.
JB	CFF	H2161 ADG ZZ XX DR A	9002
Scale 1:200	Sheet Size A1	Status PLANN NG	Revision AA

APPENDIX 1

EXPLORATORY RECORDS

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		BOREHOLE	1
Contract	White Stork Road, Boorley Green	Report Ref	25/12718/A/GO
Client	Hedge End Care Home Ltd	Ground Level	
Site Address	Land off White Stork Road, Boorley Gardens, Boorley Green, Hedge End, Hampshire SO32 2BX	Date Commenced Date Completed	10/02/2025 11/02/2025
Type & Diameter of Boring	Cable Percussion: 200mm diameter GL-12.5m to 150mm diameter to 25m	Sheet No	1 of 3

Water Strikes, m		Water levels recorded during boring, m						
1	12.50	Date	10/02/2025	10/02/2025	11/02/2025	11/02/2025	11/02/2025	
2		Hole Depth	12.50	15.00	15.00	25.00	25.00	
3		Casing Depth	10.00	15.00	15.00	25.00	GL	
4		Water Level	9.50	11.00	9.00	15.00	9.00	

Remarks SPT Hammer Energy Ratio (Er): 67%

Excavation of starter pit to clear services

1.5 hours standing time gaining access to site

Samples or Tests		Standard Penetration Tests			Depth m	Legend	Strata Description
Type	Depth, m	Seat	Test Drive	*N*			
D	0.30				0.30		MADE GROUND (brown CLAY)
B	0.50						Soft light brown and grey slightly gravelly silty CLAY with some dark mottling in the upper 0.50m - possible disturbed or MADE GROUND? Gravel is of flint
U	1.20-1.65				1.20		Soft yellowish brown and dark grey very silty CLAY
D	1.75						
D	2.00-2.45	1, 0	1, 1, 2, 2	6	2.00		Firm to stiff light brownish grey very silty CLAY with occasional orangish brown mottling
D	2.75						
U	3.00-3.45				3.00		Firm to stiff friable dark brownish grey mottled yellowish brown silty CLAY
D	4.00						
D	4.50-4.95	2, 2	3, 3, 4, 6	16			
D	5.50				5.50		Stiff brown/grey fissured CLAY with veins of light grey sand from 7.50m
U	6.00-6.45						
D	7.00						
D	7.50-7.95	2, 3	4, 5, 4, 7	20			
D	8.50				8.50		Stiff bluish grey silty CLAY with laminations of light grey sand

(Continued on next sheet)

BOREHOLE	1
Report Ref	25/12718/A/GO

Contract	White Stork Road, Boorley Green

Samples or Tests		Standard Penetration Tests			Depth m	Legend	Strata Description
Type	Depth, m	Seat	Test Drive	*N*			
U	9.00-9.45						Stiff bluish grey silty CLAY with laminations of light grey sand *(continued...)*
D	10.00				10.00		Stiff brown/grey very silty SAND with laminations of grey clay
D	10.50-10.95	4, 6	9, 8, 8, 9	34			
D	11.50						
D	12.00-12.45	5, 7	8, 9, 11, 11	39	12.00		Dense dark grey silty fine SAND, becoming very dense slightly silty fine SAND with depth
D	13.00						
D	13.50-13.95	6, 8	10, 11, 11, 14	46			
D	14.50						
D	15.00-15.45	3, 9	7, 8, 8, 12	35			
D	16.00						
D	16.50-16.95	3, 6	9, 15, 25, 35	84			
D	17.50						
D	18.00-18.50	4, 8	12, 18, 22, 30	82			
D	19.00						
D	19.50-19.95	3, 6	10, 15, 20, 25	70			

(Continued on next sheet)

Sample Code: U - Intact 100mm Ø B - Large Disturbed D - Small Disturbed W - Water Sample (U) - Non-recovery of Intact 100mm Ø sample [+] - extrapolated SPT N value*

ALBURY S.I. LTD
Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

BOREHOLE	1
Report Ref	25/12718/A/GO

Contract: White Stork Road, Boorley Green

Samples or Tests		Standard Penetration Tests			Depth	Legend	Strata Description
Type	Depth, m	Seat	Test Drive	*N*	m		
					20.00		Very stiff dark grey laminated silty CLAY with laminations of sand
D	20.50						
D	21.00-21.45	4, 7	12, 15, 14, 16	57			
D	22.00				22.00		Very dense dark grey silty SAND with laminations of grey silty clay
D	22.50-22.95	5, 7	9, 11, 24, 30	65			
D	23.50						
D	25.00-25.45	5, 8	10, 12, 25, 30	77	25.00		END OF BOREHOLE

Sample Code: U - Intact 100mm Ø B - Large Disturbed D - Small Disturbed W - Water Sample (U) - Non-recovery of Intact 100mm Ø sample [+] - extrapolated SPT N value*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		BOREHOLE	2
Contract	White Stork Road, Boorley Green	Report Ref	25/12718/A/GO
Client	Hedge End Care Home Ltd	Ground Level	
Site Address	Land off White Stork Road, Boorley Gardens, Boorley Green, Hedge End, Hampshire SO32 2BX	Date Commenced Date Completed	12/02/2025 13/02/2025
Type & Diameter of Boring	Cable Percussion: 200mm diameter GL-12.5m to 150mm diameter to 25m	Sheet No	1 of 3

Water Strikes, m		Water levels recorded during boring, m						
1	12.50	Date	12/02/2025	12/02/2025	12/02/2025	13/02/2025	13/02/2025	
2		Hole Depth	11.00	12.50	20.00	20.00	25.00	
3		Casing Depth	10.00	12.50	20.00	20.00	25.00	
4		Water Level	none	6.00	10.00	7.10	10.00	

Remarks

SPT Hammer Energy Ratio (Er): 67%

Excavation of starter pit to clear services

Samples or Tests		Standard Penetration Tests			Depth m	Legend	Strata Description
Type	Depth, m	Seat	Test Drive	*N*			
D	0.30						MADE GROUND (brown sandy CLAY over dark brownish grey slightly gravelly silty CLAY. Gravel is of brick and flint)
B	0.50				0.40		Soft brown and grey slightly gravelly slightly sandy silty CLAY. Gravel is of flint
B	1.20-1.65	1, 0	1, 1, 1, 2	5	1.20		Soft to firm orangish brown and light grey very silty CLAY
D	1.75						
U	2.00-2.45						
D	2.75						
D	3.00-3.45	2, 2	2, 3, 3, 4	12	3.00		Firm dark grey fissured silty CLAY
D	4.00						
U	4.50-4.95						
D	5.50				5.50		Stiff brown/grey fissured CLAY, becoming dark brownish grey at depth
D	6.00-6.45	2, 4	4, 5, 5, 6	20			
D	7.00						
U	7.50-7.95						
D	8.50						

(Continued on next sheet)

Sample Code: U - Intact 100mm Ø B - Large Disturbed D - Small Disturbed W - Water Sample (U) - Non-recovery of Intact 100mm Ø sample [+] - extrapolated SPT N value*

BOREHOLE	2
Report Ref	25/12718/A/GO

Contract	White Stork Road, Boorley Green

Samples or Tests		Standard Penetration Tests			Depth m	Legend	Strata Description
Type	Depth, m	Seat	Test Drive	*N*			
D	9.00-9.45	3, 5	6, 7, 8, 8	29			Stiff dark brownish grey fissured CLAY
D	10.00						
U	10.50-10.95						
					11.00		
D	11.50						Dense grey very sandy SILT with rare gravel
D	12.00-12.45	4, 6	8, 10, 10, 12	40	12.00		
D	13.00				13.00		Very stiff brown/grey silty CLAY with occasional partings of grey sand
D	13.50-13.95	5, 8	10, 12, 14, 13	49			Dense to very dense dark grey silty fine SAND
D	14.50						
D	15.00-15.45	3, 8	10, 12, 15, 16	53			
D	16.00						
D	16.50-16.95	3, 9	13, 17, 16, 17	63			
D	17.50						
D	18.00-18.50	5, 10	12, 15, 18, 20	65			
D	19.00						
D	19.50-19.95	6, 12	15, 17, 20, 22	74	19.50		Very dense light grey silty SAND with laminations of grey silty clay

(Continued on next sheet)

ALBURY S.I. LTD
Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

Sheet 3 of 3

BOREHOLE	2
Report Ref	25/12718/A/GO

Contract: White Stork Road, Boorley Green

Samples or Tests		Standard Penetration Tests			Depth m	Legend	Strata Description
Type	Depth, m	Seat	Test Drive	N			
D	20.50						Very dense light grey silty SAND with laminations of grey silty clay, becoming dark grey laminated SAND/CLAY below 20.5m
D	21.00-21.45	5, 10	14, 20, 30	64+			
D	22.00						
D	22.50-22.95	10, 18	25, 37	62+			
D	23.50						
D	24.00						
D	25.00-25.45	18, 25	31, 47	78+	25.00		END OF BOREHOLE

Sample Code: U - Intact 100mm Ø B - Large Disturbed D - Small Disturbed W - Water Sample (U) - Non-recovery of Intact 100mm Ø sample [+] - extrapolated SPT N value*

SPT Hammer Energy Test Report

In accordance with BSEN ISO 22476-3:2005

SPT Hammer Ref:	AR4202
Test Date:	14/03/2024
Report Date:	14/03/2024
File Name:	AR4202.spt
Test Operator:	BOB

Instrumented Rod Data

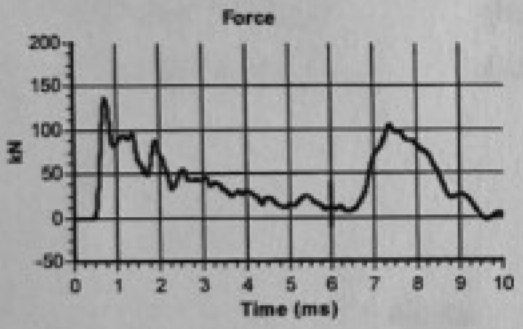
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.6
Assumed Modulus E_a (GPa):	208
Accelerometer No.1:	64786
Accelerometer No.2:	64789

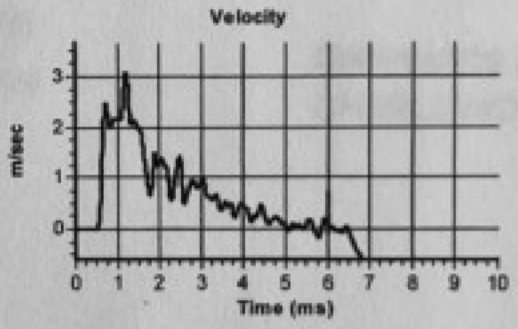
SPT Hammer Information

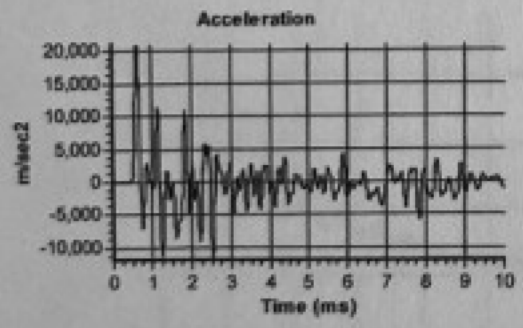
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	14.7

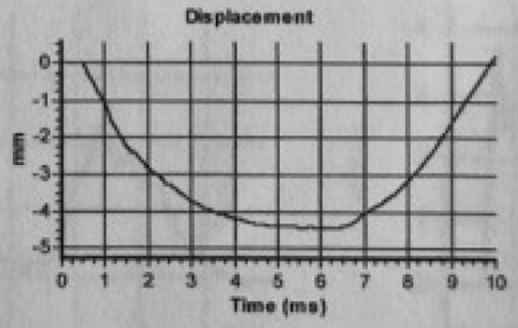
Comments / Location

CHARLSWOOD









Calculations

Area of Rod A (mm2):	983
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	318

Energy Ratio E_r (%): 67

[redacted]

Signed: Bob Stewart

Title: Technician

The recommended calibration interval is 12 months

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		TRIAL PIT	A
Contract	White Stork Road, Boorley Green	Report Ref	25/12718/A/GO
Client	Hedge End Care Home Ltd	Date	11/02/2025
Site Address	Land off White Stork Road, Boorley Gardens, Boorley Green, Hedge End, Hampshire SO32 2BX	Ground Level	

Type of excavator	JCB 3CX	Water level after completion, m	3.10

Water strikes, m		Pit Dimensions, m		Ease of excavation, m			
1	2.10	Length	1.00	Very easy		Difficult	2.40-2.60
2		Breadth	0.30	Moderate	GL - 2.40, 2.60-3.10	Very hard	

Remarks

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10				Grass over MADE GROUND (dark brown slightly gravelly very sandy CLAY/LOAM with roots. Gravel is of flint and brick fragments)
D	0.30		0.40		
D	0.50				Stiff orangish brown and grey silty CLAY with rare flint gravel
D	1.00	105			
			1.40		
D	1.50	115			Stiff orangish brown and grey very silty CLAY with occasional root hairs
D	2.00	115			
D	2.40		2.40		
D	2.50				Dark brown laminated slightly gravelly very silty CLAY with some layers of very weak lignite - slightly organic?
			2.60		Dark brownish grey mottled yellowish brown laminated very silty CLAY
D	3.00				
			3.10		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		TRIAL PIT	B
Contract	White Stork Road, Boorley Green	Report Ref	25/12718/A/GO
Client	Hedge End Care Home Ltd	Date	11/02/2025
Site Address	Land off White Stork Road, Boorley Gardens, Boorley Green, Hedge End, Hampshire SO32 2BX	Ground Level	

Type of excavator	JCB 3CX	Water level after completion, m	none

Water strikes, m		Pit Dimensions, m		Ease of excavation, m			
1	2.10 (seep)	Length	1.00	Very easy		Difficult	2.20-2.60
2		Breadth	0.30	Moderate	GL - 2.20	Very hard	

Remarks

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10				Grass over MADE GROUND (dark brownish grey very silty CLAY with rootlets and rare flint gravel)
D	0.30		0.40		
D	0.50				Stiff orangish brown and grey silty CLAY with occasional rootlets in the upper margins, becoming very silty with depth
D	1.00	95			
D	1.50	100			
D	2.00	100			
			2.20		Brownish grey very silty CLAY
D	2.50				
D	3.00		3.10		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		TRIAL PIT	C
Contract	White Stork Road, Boorley Green	Report Ref	25/12718/A/GO
Client	Hedge End Care Home Ltd	Date	11/02/2025
Site Address	Land off White Stork Road, Boorley Gardens, Boorley Green, Hedge End, Hampshire SO32 2BX	Ground Level	
Type of excavator	JCB 3CX	Water level after completion, m	2.35

Water strikes, m		Pit Dimensions, m		Ease of excavation, m			
1	3.05	Length	1.00	Very easy		Difficult	2.30-3.10
2		Breadth	0.30	Moderate	GL - 2.30	Very hard	

Remarks

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10				MADE GROUND (brown CLAY over dark brown slightly gravelly silty CLAY with grass and roots. Gravel is of brick)
D	0.30		0.40		
D	0.50				Stiff orangish brown and grey silty CLAY
D	1.00	105			
D	1.50	105			
D	2.00	115			
			2.30		Brownish grey mottled yellowish brown friable very silty CLAY
D	2.50				
D	3.00				
			3.10		END OF TRIAL PIT
W	(2.35)				



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH				TRIAL PIT	D
Contract	White Stork Road, Boorley Green			Report Ref	25/12718/A/GO
Client	Hedge End Care Home Ltd			Date	11/02/2025
Site Address	Land off White Stork Road, Boorley Gardens, Boorley Green, Hedge End, Hampshire SO32 2BX			Ground Level	
Type of excavator	JCB 3CX		Water level after completion, m	3.00	
Water strikes, m	Pit Dimensions, m		Ease of excavation, m		
1 3.00 (seep)	Length	1.00	Very easy	Difficult	1.80 - 3.10
2	Breadth	0.30	Moderate GL - 1.80	Very hard	

Remarks

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10				MADE GROUND (brown slightly gravelly silty CLAY over dark brown and bluish grey slightly gravelly silty CLAY with grass and roots. Gravel is of brick fragments and flint)
D	0.30				
			0.40		
D	0.50				Stiff orangish brown and grey slightly gravelly silty CLAY. Gravel is of flint
			0.80		
D	1.00	95			Stiff reddish brown mottled grey CLAY with orange veining
			1.30		
D	1.50	90			Stiff yellowish brown to orangish brown and brownish grey very silty CLAY
D	2.00	115			
			2.30		
D	2.50				Brownish grey mottled yellowish brown silty CLAY
D	3.00				
			3.10		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH		TRIAL PIT	E
Contract	White Stork Road, Boorley Green	Report Ref	25/12718/A/GO
Client	Hedge End Care Home Ltd	Date	11/02/2025
Site Address	Land off White Stork Road, Boorley Gardens, Boorley Green, Hedge End, Hampshire SO32 2BX	Ground Level	

Type of excavator	JCB 3CX	Water level after completion, m	none

Water strikes, m		Pit Dimensions, m		Ease of excavation, m			
1	0.50 (seep)	Length	1.00	Very easy		Difficult	1.30 - 3.10
2		Breadth	0.30	Moderate	GL - 1.30	Very hard	

Remarks
Waterlogged at ground surface

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10				Grass over MADE GROUND (dark brown silty CLAY/LOAM with rootlets)
D	0.30		0.40		
D	0.50				MADE GROUND (orangish brown mottled greyish brown silty CLAY with scattered coarse red brick fragments at depth)
D	1.00	100			
			1.30		Stiff greyish brown mottled orangish brown silty CLAY
D	1.50	105			
D	2.00	105			
			2.30		Brownish grey mottled yellowish brown very silty CLAY with some laminations of very weak claystone
D	2.50				
D	3.00		3.10		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH				TRIAL PIT	CBR1
Contract	White Stork Road, Boorley Green			Report Ref	25/12718/A/GO
Client	Hedge End Care Home Ltd			Date	11/02/2025
Site Address	Land off White Stork Road, Boorley Gardens, Boorley Green, Hedge End, Hampshire SO32 2BX			Ground Level	
Type of excavator	JCB 3CX		Water level after completion, m	none	
Water strikes, m	Pit Dimensions, m		Ease of excavation, m		
1 none	Length	1.00	Very easy	Difficult	
2	Breadth	0.30	Moderate GL - 1.10	Very hard	

Remarks

Samples or tests		Shear Strength kPa	Depth		Legend	Strata Description
Type	Depth, m					
D	0.10					Grass over MADE GROUND (grey/brown slightly gravelly silty CLAY over dark brownish grey and black slightly gravelly silty CLAY. Gravel is of brick fragments and flint)
D	0.30		0.40			
B	0.50					Stiff orangish brown and grey silty CLAY with roots, root remains and rare flint gravel, slightly sandy in the upper margins
D	1.00	85	1.10			END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH				TRIAL PIT	CBR2
Contract	White Stork Road, Boorley Green			Report Ref	25/12718/A/GO
Client	Hedge End Care Home Ltd			Date	11/02/2025
Site Address	Land off White Stork Road, Boorley Gardens, Boorley Green, Hedge End, Hampshire SO32 2BX			Ground Level	
Type of excavator	JCB 3CX		Water level after completion, m	1.10	

Water strikes, m		Pit Dimensions, m		Ease of excavation, m		
1	1.10 (seep)	Length	1.00	Very easy		Difficult
2		Breadth	0.30	Moderate	GL - 1.10	Very hard

Remarks
Geotextile membrane encountered at 0.50m

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10				Grass over MADE GROUND (brown/grey gravelly CLAY over dark brown and bluish grey slightly gravelly silty CLAY with roots. Gravel is of brick fragments, flint and occasional clinker)
D	0.30		0.40		
B	0.50	85			Stiff brownish and bluish grey slightly gravelly silty CLAY. Gravel is of flint
			0.90		
D	1.00	100			Stiff orangish brown and grey silty CLAY
			1.10		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH				TRIAL PIT	CBR3
Contract	White Stork Road, Boorley Green			Report Ref	25/12718/A/GO
Client	Hedge End Care Home Ltd			Date	11/02/2025
Site Address	Land off White Stork Road, Boorley Gardens, Boorley Green, Hedge End, Hampshire SO32 2BX			Ground Level	
Type of excavator	JCB 3CX		Water level after completion, m	none	
Water strikes, m	Pit Dimensions, m		Ease of excavation, m		
1 none	Length	1.00	Very easy	Difficult	
2	Breadth	0.30	Moderate GL - 1.10	Very hard	

Remarks
Geotextile membrane encountered at 0.50m

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10				MADE GROUND (brown/grey slightly gravelly silty CLAY over dark brown and bluish grey slightly gravelly silty CLAY with roots. Gravel is of flint and brick fragments)
D	0.30		0.40		
B	0.50	100			Stiff orangish brown and grey slightly sandy silty CLAY
			0.80		
D	1.00	110			Orangish brown and grey silty CLAY with rare fine flint gravel
			1.10		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH				TRIAL PIT	CBR4
Contract	White Stork Road, Boorley Green			Report Ref	25/12718/A/GO
Client	Hedge End Care Home Ltd			Date	11/02/2025
Site Address	Land off White Stork Road, Boorley Gardens, Boorley Green, Hedge End, Hampshire SO32 2BX			Ground Level	
Type of excavator	JCB 3CX		Water level after completion, m	none	
Water strikes, m	Pit Dimensions, m		Ease of excavation, m		
1 none	Length	1.00	Very easy	Difficult	0.50-0.70
2	Breadth	0.30	Moderate GL - 0.50, 0.70-1.10	Very hard	

Remarks
Geotextile membrane encountered at 0.60m

Samples or tests		Shear Strength kPa	Depth	Legend	Strata Description
Type	Depth, m				
D	0.10				MADE GROUND (brown/grey silty CLAY over dark brownish grey slightly gravelly silty CLAY with grass and roots, occasional tape. Gravel is of brick fragments and flint)
D	0.30				
B	0.50		0.50		MADE GROUND (dark brown gravelly very sandy CLAY. Gravel is of flint, brick and occasional clinker)
B	0.70		0.70		Stiff orangish brown and grey silty CLAY
D	1.00	100	1.10		END OF TRIAL PIT



Sample Code: *B - Large Disturbed* *D - Small Disturbed* *W - Water Sample* *R - Root Sample*

APPENDIX 2

LABORATORY TEST RESULTS

INDEX PROPERTIES AND WATER CONTENTS

BS 1377 : Part 2 and BS EN ISO 17892: Part 1 and Part 12: 5.3 and 6.1

Report Ref	25/12718/A/GO	**Contract**	White Stork Road, Boorley Green	***Sheet 1 of 2***

TP No.	Sample		Water Content W %	Liquid Limit W_L %	Plastic Limit W_P %	Plasticity Index IP %	Passing 425 µm Sieve %	Modified Plasticity Index IPc %	Atterberg Classification	NHBC Classification VCP	Sample Preparation	Remarks
	Depth m	Description										
B	1.00	Orangish brown and grey silty CLAY	33.6	67	32	35	100	35	CH	Medium	A	
	1.50	Orangish brown and grey very silty CLAY	39.6									
	2.00	Orangish brown and grey very silty CLAY	49.7	76	43	33	100	33	MV	Medium	A	
	2.50	Brownish grey very silty CLAY	38.3									
	3.00	Brownish grey very silty CLAY	36.0									
C	1.00	Orangish brown and grey silty CLAY	38.4									
	1.50	Orangish brown and grey silty CLAY	48.0	73	41	32	100	32	MV	Medium	A	
	2.00	Orangish brown and grey silty CLAY	43.8									
	2.50	Brownish grey mottled yellowish brown friable very silty CLAY	40.6									
	3.00	Brownish grey mottled yellowish brown friable very silty CLAY	37.6									
		(continued on next sheet)										

Liquid Limit determined by one-point fall cone method using 80g 30° cone and correction factors after Clayton and Jukes (1978) unless otherwise stated above

KEY: *Soil Type:* **C** - Clay **M** - Silt **O** - Organic **NP** - Non Plastic

Plasticity: **L** - Low **I** - Intermediate **H** - High **V** - Very High **E** - Extremely High

Sample Preparation: **A** - As Received **H** - Particles >425µm removed by hand picking **S** - Particles >425µm removed by washing and wet sieving with oven drying

INDEX PROPERTIES AND WATER CONTENTS

BS 1377 : Part 2 and BS EN ISO 17892: Part 1 and Part 12: 5.3 and 6.1

Report Ref	25/12718/A/GO	**Contract**	White Stork Road, Boorley Green	***Sheet 2 of 2***

TP No.	Sample		Water Content W %	Liquid Limit W_L %	Plastic Limit W_P %	Plasticity Index IP %	Passing 425 µm Sieve %	Modified Plasticity Index IPc %	Atterberg Classification	NHBC Classification VCP	Sample Preparation	Remarks
	Depth m	Description										
D	0.50	Orangish brown and grey slightly gravelly silty CLAY. Gravel is of flint	33.6									
	1.00	Reddish brown mottled grey CLAY with orange veining	39.1	101	38	63	100	63	CE	High	A	
	1.50	Yellowish brown and brownish grey very silty CLAY	44.1									
	2.00	Orangish brown and brownish grey very silty CLAY	39.5	60	31	29	100	29	CH/MH	Medium	A	
	2.50	Brownish grey mottled yellowish brown silty CLAY	37.2									
	3.00	Brownish grey mottled yellowish brown silty CLAY	37.1									
E	1.50	Greyish brown mottled orangish brown silty CLAY	51.6									
	2.00	Greyish brown mottled orangish brown silty CLAY	38.2	65	35	30	100	30	MH	Medium	A	
	2.50	Brownish grey mottled yellowish brown very silty CLAY with some laminations of very weak claystone	57.7									
	3.00	Brownish grey mottled yellowish brown very silty CLAY with some laminations of very weak claystone	56.2									

Liquid Limit determined by one-point fall cone method using 80g 30° cone and correction factors after Clayton and Jukes (1978) unless otherwise stated above

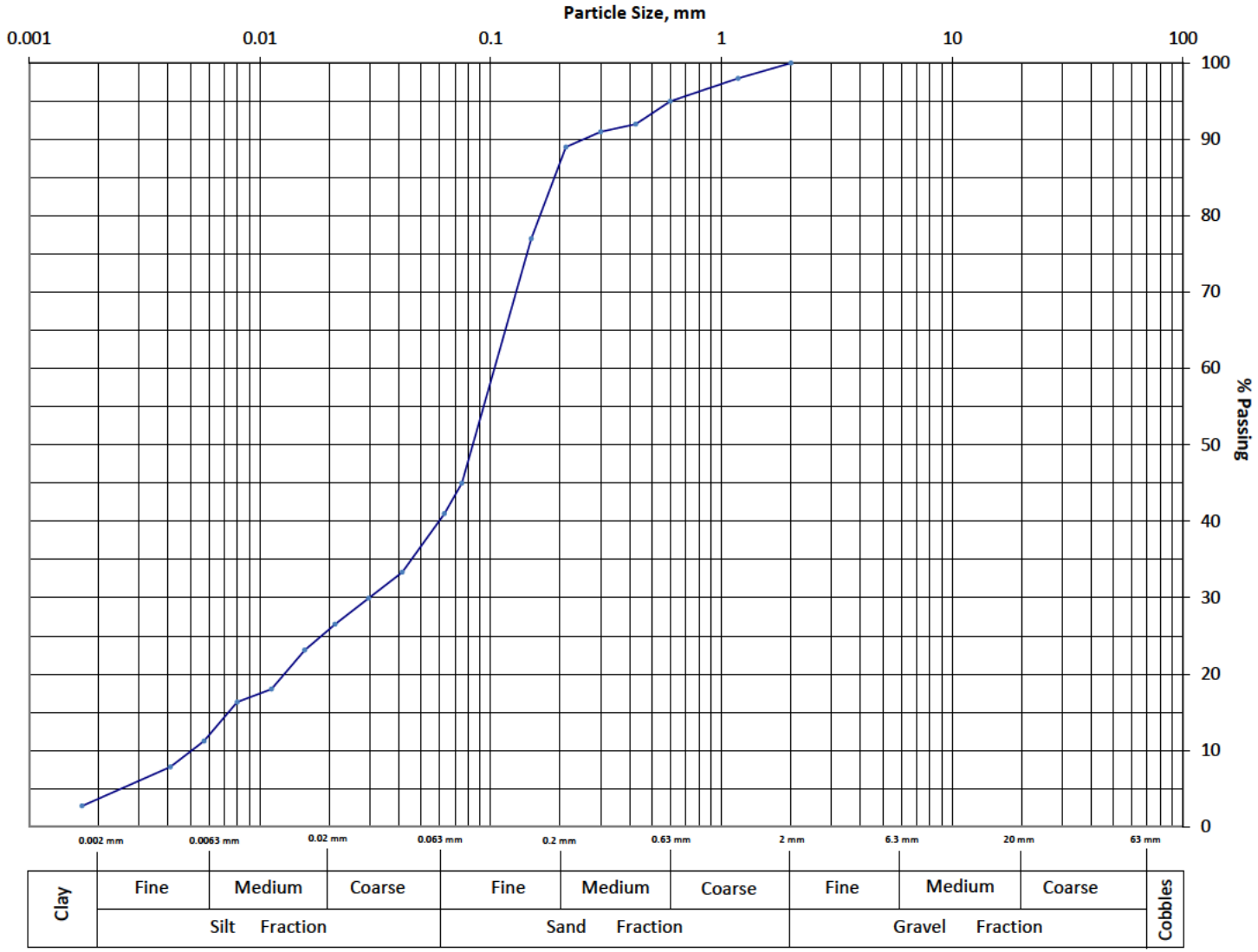
KEY: *Soil Type:* **C** - Clay **M** - Silt **O** - Organic **NP** - Non Plastic

Plasticity: **L** - Low **I** - Intermediate **H** - High **V** - Very High **E** - Extremely High

Sample Preparation: **A** - As Received **H** - Particles >425µm removed by hand picking **S** - Particles >425µm removed by washing and wet sieving with oven drying

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892 : Part 4 : Clause 5.2 Wet Sieving & Clause 5.3 Sedimentation by Hydrometer



Sieve Aperture/ Particle Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	
9.5	
6.3	
4.75	
3.35	
2	100
1.18	98
0.6	95
0.425	92
0.3	91
0.212	89
0.15	77
0.075	45
0.063	41
0.041	33
0.030	30
0.021	27
0.016	23
0.011	18
0.0080	16
0.0057	11
0.0041	8
0.0017	3

Sample Proportions (%)	
Cobbles	0
Gravel	0
Sand	59
Silt & Clay	41

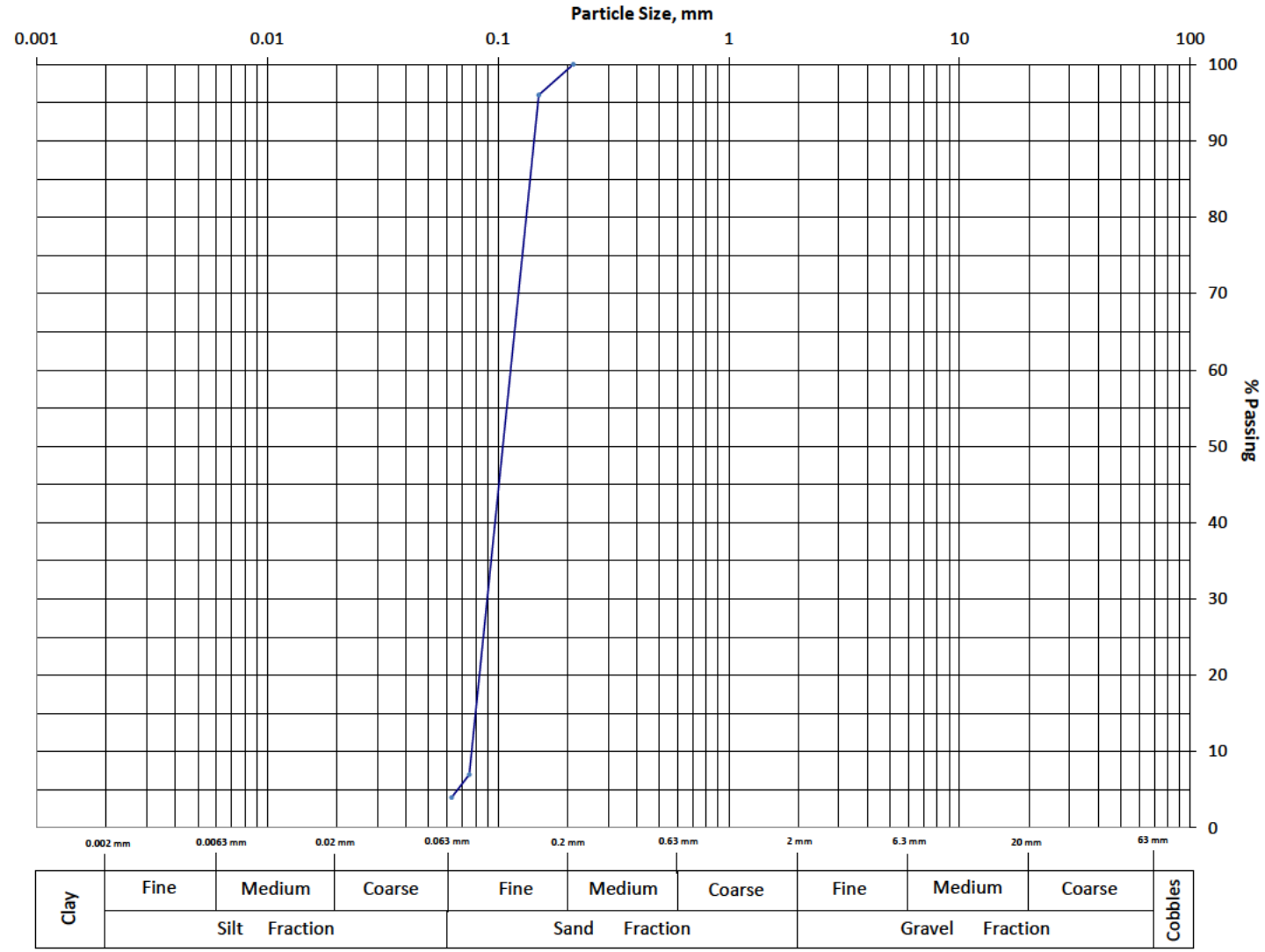
Notes
Particle Density 2.65 Mg/m3 assumed
Sample subjected to H_2O_2 pre-treatment

BH No.	1	**Description**	Brown/grey very silty SAND	**Contract**	White Stork Road, Boorley Green
Depth	10.50-10.95			**Report Ref**	25/12718/A/GO

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892 : Part 4 : Clause 5.2 Wet Sieving Method



BS Test Sieve Aperture Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	
9.5	
6.3	
4.75	
3.35	
2	
1.18	
0.6	
0.425	
0.3	
0.212	100
0.15	96
0.075	7
0.063	4

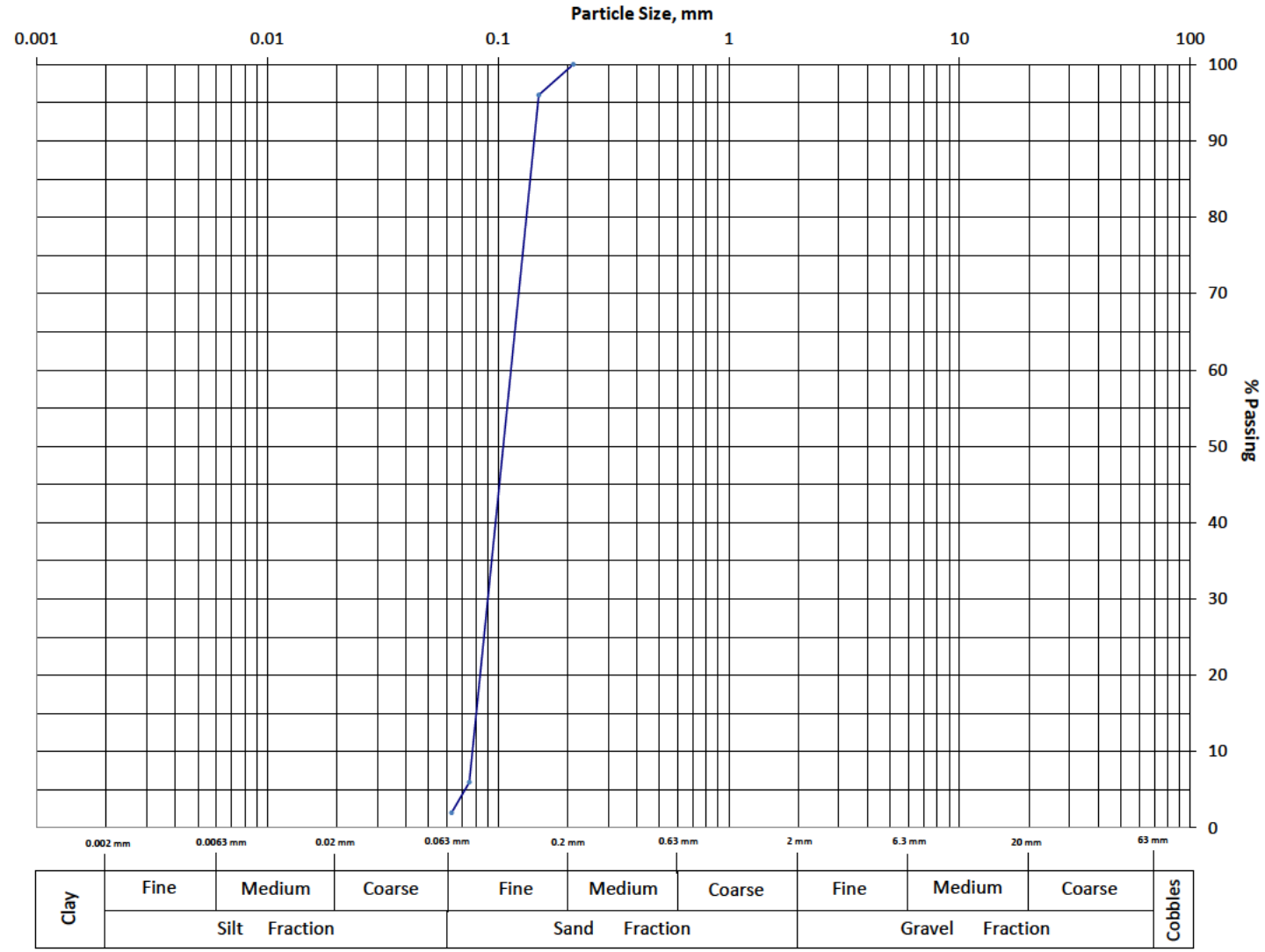
Particle Proportions (%)	
Cobbles	0
Gravel	0
Sand	96
Silt & Clay	4

BH No.	1	**Description**	Dark grey slightly silty fine SAND	**Contract**	White Stork Road, Boorley Green
Depth	13.50-13.95			**Report Ref**	25/12718/A/GO

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PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892 : Part 4 : Clause 5.2 Wet Sieving Method



BS Test Sieve Aperture Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	
9.5	
6.3	
4.75	
3.35	
2	
1.18	
0.6	
0.425	
0.3	
0.212	100
0.15	96
0.075	6
0.063	2

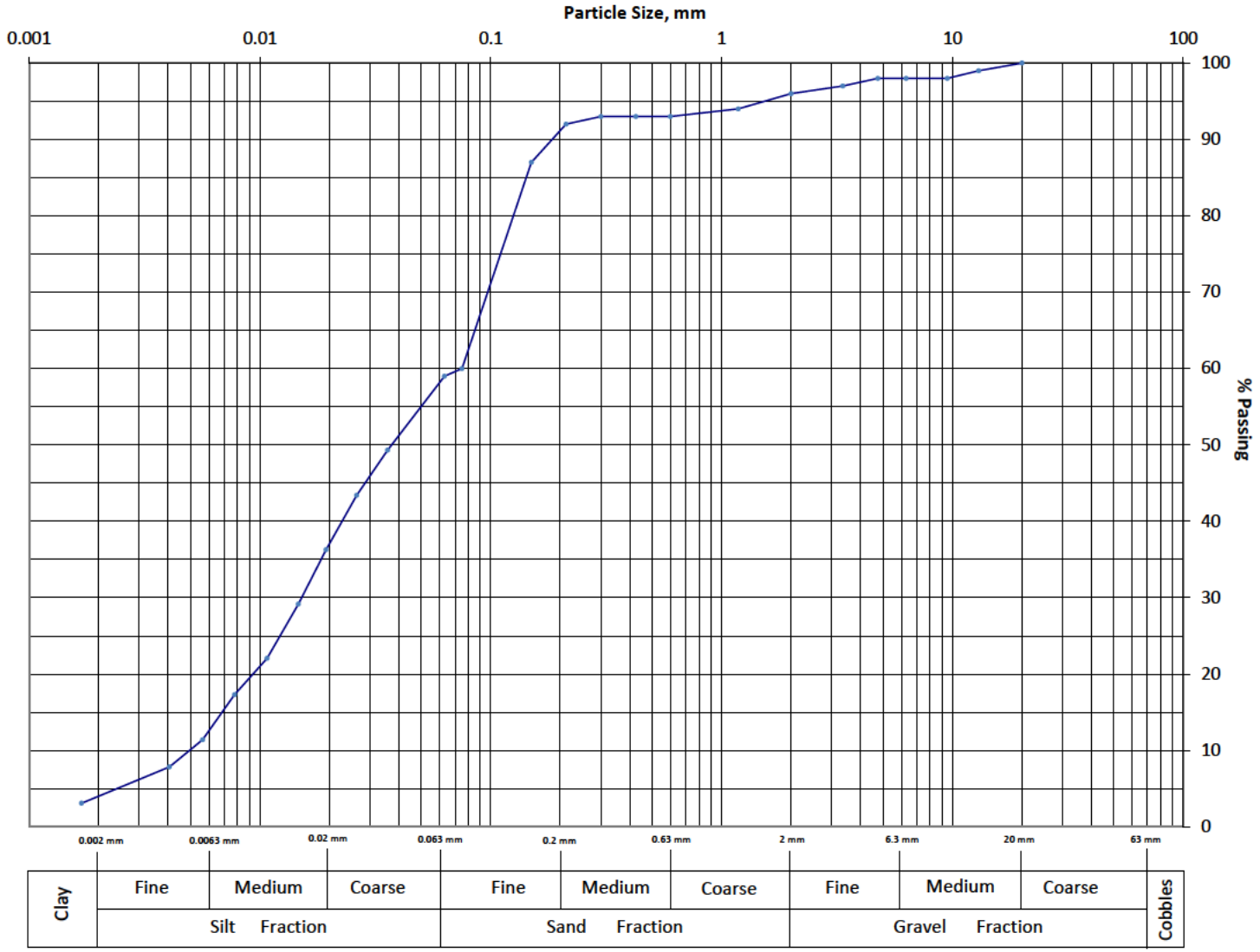
Particle Proportions (%)	
Cobbles	0
Gravel	0
Sand	98
Silt & Clay	2

BH No.	1	**Description**	Dark grey slightly silty fine SAND	**Contract**	White Stork Road, Boorley Green
Depth	19.50-19.95			**Report Ref**	25/12718/A/GO

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey GU8 5LH

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892 : Part 4 : Clause 5.2 Wet Sieving & Clause 5.3 Sedimentation by Hydrometer



Sieve Aperture/ Particle Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	100
13	99
9.5	98
6.3	98
4.75	98
3.35	97
2	96
1.18	94
0.6	93
0.425	93
0.3	93
0.212	92
0.15	87
0.075	60
0.063	59
0.036	49
0.026	43
0.019	36
0.015	29
0.011	22
0.0078	17
0.0056	11
0.0040	8
0.0017	3

Sample Proportions (%)	
Cobbles	0
Gravel	4
Sand	37
Silt & Clay	59

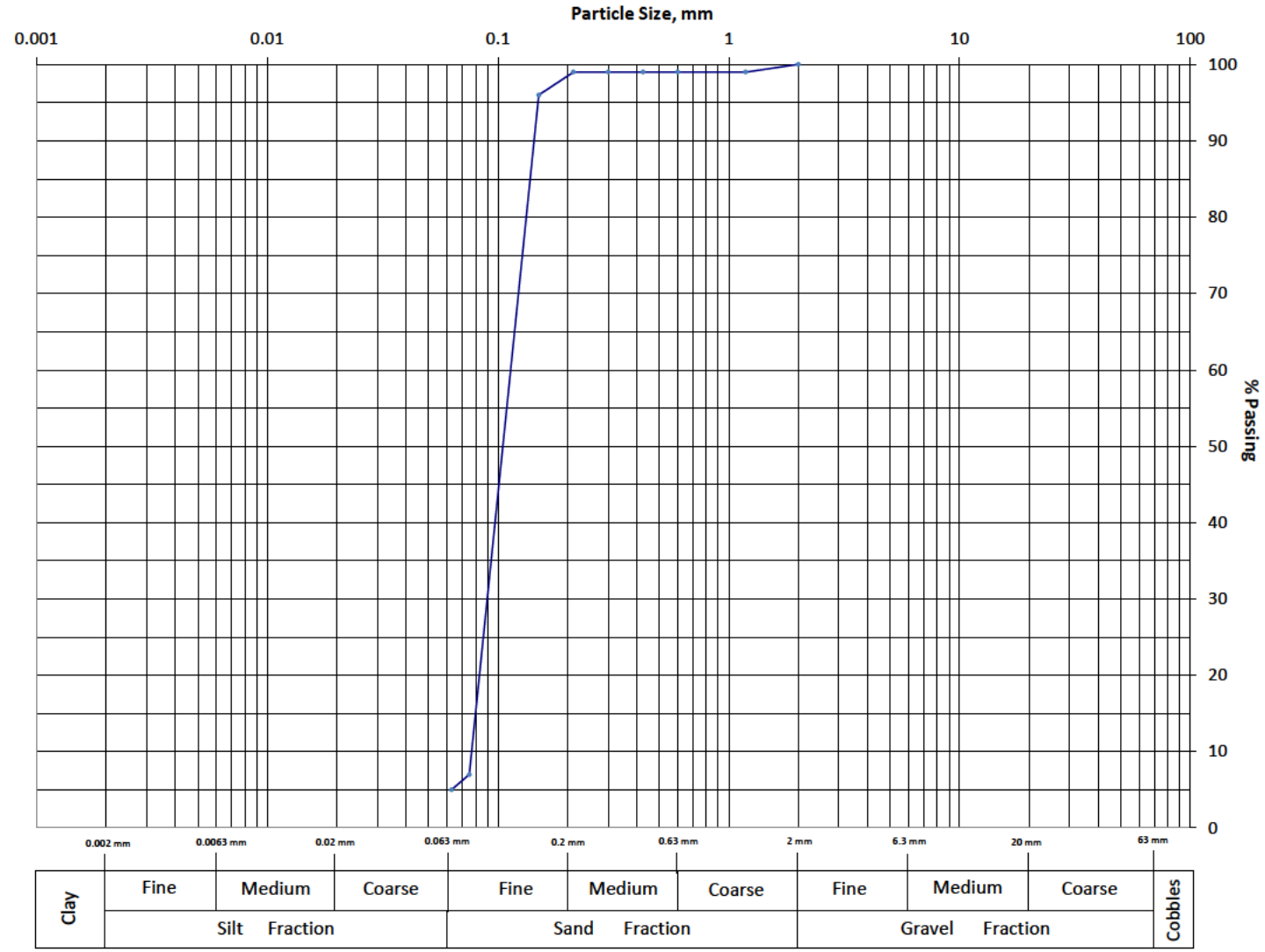
Notes
Particle Density 2.65 Mg/m3 assumed
Sample subjected to H_2O_2 pre-treatment

BH No.	2	**Description**	Grey very sandy SILT with rare gravel	**Contract**	White Stork Road, Boorley Green
Depth	11.50			**Report Ref**	25/12718/A/GO

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PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892 : Part 4 : Clause 5.2 Wet Sieving Method



BS Test Sieve Aperture Size (mm)	Percentage Passing
75	
63	
50	
37.5	
25	
20	
13	
9.5	
6.3	
4.75	
3.35	
2	100
1.18	99
0.6	99
0.425	99
0.3	99
0.212	99
0.15	96
0.075	7
0.063	5

Particle Proportions (%)	
Cobbles	0
Gravel	0
Sand	95
Silt & Clay	5

BH No.	2	**Description**	Dark grey silty fine SAND	**Contract**	White Stork Road, Boorley Green
Depth	16.00			**Report Ref**	25/12718/A/GO

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INDEX PROPERTIES & TRIAXIAL COMPRESSION TESTS

BS 1377 : Parts 2 & 7 : 1990

Report Ref	25/12718/A/GO	**Contract**	White Stork Road, Boorley Green

BH No.	Sample		INDEX PROPERTIES						TRIAXIAL COMPRESSION							Remarks
	Depth m	Description	Liquid Limit %	Plastic Limit %	Plasticity Index %	% Passing 425micron Sieve	Corrected Plasticity Index IP %	Soil Plasticity	Code	Lateral Pressure kPa	Compressive Strength kPa	Cohesion kPa	Angle of Friction °	Bulk Density kg/cu.m	Water Content % dry wt	
1	1.20-1.65	Yellowish brown and dark grey very silty CLAY	54	27	27	100	27	CH	U100	33	60	30	0	2030	33.1	
	3.00-3.45	Dark brownish grey mottled yellowish brown silty CLAY							U100	70	130	65	0	1965	40.1	
	6.00-6.45	Brown/grey fissured CLAY							U100	130	180	90	0	2090	37.8	
	9.00-9.45	Bluish grey silty CLAY with laminations of light grey sand							U100	190	200	100	0	2155	25.4	
2	2.00-2.45	Orangish brown and light grey very silty CLAY	55	27	28	100	28	CH	U100	50	120	60	0	1980	36.8	
	4.50-4.95	Dark grey fissured silty CLAY							U100	100	100	50	0	2045	28.6	
	7.50-7.95	Brown/grey fissured CLAY							U100	160	140	70	0	2090	27.6	
	10.50-10.95	Dark brownish grey fissured CLAY							U100	220	200	100	0	2170	25.2	
	20.50	Grey silty CLAY	80	31	49	100	49	CV							43.9	
		(continued on next sheet)														

KEY:

Code:	**38** - 38mm nominal diameter specimen	**100** - 100mm nominal diameter specimen	**R** - Remoulded	**F** - Functional	**LV** - Laboratory Vane
	U - Undrained	**CD** - Consolidated Drained	**CU** - Consolidated Undrained	**M** - Multi Stage	**S** - Single Stage
Soil Type:	**C** - Clay	**M** - Silt	**O** - Organic	**NP** - Non Plastic	
Plasticity:	**L** - Low	**I** - Intermediate	**H** - High	**V** - Very High	**E** - Extremely High

INDEX PROPERTIES & TRIAXIAL COMPRESSION TESTS

BS 1377 : Parts 2 & 7 : 1990

Report Ref	25/12718/A/GO	Contract	White Stork Road, Boorley Green	*Continuation Sheet*	*1*

BH/TP No.	Sample		INDEX PROPERTIES						TRIAXIAL COMPRESSION							Remarks
	Depth m	Description	Liquid Limit %	Plastic Limit %	Plasticity Index %	% Passing 425micron Sieve	Corrected Plasticity Index IP %	Soil Plasticity	Code	Lateral Pressure kPa	Compression Strength kPa	Cohesion kPa	Angle of Friction °	Bulk Density kg/cu.m	Water Content % dry wt	
CBR1	0.50	Orangish brown and grey silty CLAY	79	31	48	100	48	CV							35.1	
CBR3	0.50	Orangish brown and grey slightly sandy silty CLAY	55	20	35	100	35	CH							25.7	

KEY:

Code: **38** - 38mm nominal diameter specimen; **100** - 100mm nominal diameter specimen; **R** - Remoulded; **F** - Functional; **LV** - Laboratory Vane

U - Undrained; **CD** - Consolidated Drained; **CU** - Consolidated Undrained; **M** - Multi Stage; **S** - Single Stage

Soil Type: **C** - Clay; **M** - Silt; **O** - Organic; **NP** - Non Plastic

Plasticity: **L** - Low; **I** - Intermediate; **H** - High; **V** - Very High; **E** - Extremely High

ALBURY S.I. LTD Miltons Yard, Petworth Road, Witley, Surrey, GU8 5LH

LABORATORY CALIFORNIA BEARING RATIO TEST

BS 1377 : Part 4 : 1990

Report Ref	25/12718/A	Contract	White Stork Road, Boorley Green

CBR No.	Sample			Natural Condition		Laboratory		CBR		Remarks
	Depth m	Description	% retained on 20mm sieve	Bulk Density kg/cu.m	Water Content %	Dry Density kg/cu.m	Water Content %	Top %	Base %	
1	0.50	Orangish brown and grey silty CLAY with roots	0	1815	35.7	1345	34.8	4.1	4.0	
2	0.50	Brownish and bluish grey slightly gravelly silty CLAY. Gravel is of flint	7.3	1975	22.5	1620	22.1	3.0	2.4	
3	0.50	Orangish brown and grey slightly sandy silty CLAY	0	1930	27.7	1545	25.0	3.6	3.2	
4	0.50	Made ground (dark brown gravelly very sandy CLAY. Gravel is of flint, brick and occasional clinker)	21.3	2030	18.3	1670	21.5	0.7	0.9	

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Analytical Report Number : 25-006310

Project / Site name:	White Stork Road, Boorley Green	**Samples received on:**	11/02/2025
Your job number:	25 12718 A GO	**Samples instructed on/ Analysis started on:**	11/02/2025
Your order number:	15508	**Analysis completed by:**	19/02/2025
Report Issue Number:	1	**Report issued on:**	19/02/2025
Samples Analysed:	6 soil samples		

Signed: [redacted]

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

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

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

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

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

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

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

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

Analytical Report Number: 25-006310
Project / Site name: White Stork Road, Boorley Green
Your Order No: 15508

Lab Sample Number				449187	449188	449189	449190	449191
Sample Reference				TP A	TP B	TP C	TP D	TP E
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.10	0.10	0.10	0.10	0.10
Date Sampled				10/02/2025	10/02/2025	10/02/2025	10/02/2025	10/02/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	31	33	20	19	22
Total mass of sample received	kg	0.1	NONE	0.3	0.3	0.3	0.3	0.3
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MBI	MBI	MBI	MBI	MBI
General Inorganics								
pH (L099)	pH Units	N/A	MCERTS	7.8	6.6	8.3	8	7.5
Total Sulphate as SO_4	mg/kg	50	MCERTS	710	400	650	580	620
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	110	45	320	160	230
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	54.4	22.3	162	80.4	115
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.9	3.8	1.3	1.7	2.4
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.13	0.09	0.15	0.16	0.08
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.44	0.24	0.29	0.52	0.34
Pyrene	mg/kg	0.05	MCERTS	0.42	0.21	0.28	0.49	0.32
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.28	0.1	0.16	0.33	0.18
Chrysene	mg/kg	0.05	MCERTS	0.32	0.11	0.17	0.32	0.24
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.51	0.17	0.22	0.51	0.37
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.22	0.06	0.11	0.18	0.17
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.42	0.13	0.2	0.38	0.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.25	0.07	0.11	0.2	0.17
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.27	0.08	0.12	0.25	0.2
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.31	1.27	1.81	3.38	2.36

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

Analytical Report Number: 25-006310
Project / Site name: White Stork Road, Boorley Green
Your Order No: 15508

Lab Sample Number				449187	449188	449189	449190	449191
Sample Reference				TP A	TP B	TP C	TP D	TP E
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.10	0.10	0.10	0.10	0.10
Date Sampled				10/02/2025	10/02/2025	10/02/2025	10/02/2025	10/02/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7	7.3	8.8	11	7.9
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.44	0.39	0.45	0.46	0.44
Boron (water soluble)	mg/kg	0.2	MCERTS	1	1.4	1.2	0.9	1.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (III)	mg/kg	1	NONE	25	26	25	26	27
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	27	25	26	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24	15	15	21	13
Lead (aqua regia extractable)	mg/kg	1	MCERTS	46	31	19	22	27
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	6.6	5.5	7.1	6.2	4.7
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	33	37	33	30	38
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	68	47	48	63	48
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	4.2	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	16	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	39	15	< 8.0
TPHCWG - Aliphatic >EC21 - EC40 $_{EH\_CU\_1D\_AL}$	mg/kg	10	NONE	< 10	< 10	49	22	< 10
TPHCWG - Aliphatic >EC35 - EC44 $_{EH\_CU\_1D\_AL}$	mg/kg	8.4	NONE	< 8.4	< 8.4	10	14	< 8.4
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10	< 10	60	15	< 10
TPHCWG - Aliphatic >EC5 - EC44 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10	< 10	70	29	< 10
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	0.065	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	14	12	< 10	27	< 10
TPHCWG - Aromatic >EC21 - EC40 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	19	13	< 10	43	< 10
TPHCWG - Aromatic >EC35 - EC44 $_{EH\_CU\_1D\_AR}$	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	27	< 8.4
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	14	12	< 10	27	< 10
TPHCWG - Aromatic >EC5 - EC44 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	14	12	< 10	54	< 10
VOCs								
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	65	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

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

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

Analytical Report Number: 25-006310
Project / Site name: White Stork Road, Boorley Green
Your Order No: 15508

Lab Sample Number	449192
Sample Reference	BH 1
Sample Number	None Supplied
Water Matrix	N/A
Depth (m)	0.30
Date Sampled	10/02/2025
Time Taken	None Supplied

Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	25
Total mass of sample received	kg	0.1	NONE	0.3
Asbestos				
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MBI
General Inorganics				
pH (L099)	pH Units	N/A	MCERTS	7
Total Sulphate as SO_4	mg/kg	50	MCERTS	400
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	130
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	63
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.2
Speciated PAHs				
Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05
Total PAH				
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80

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Analytical Report Number: 25-006310
Project / Site name: White Stork Road, Boorley Green
Your Order No: 15508

Lab Sample Number				449192
Sample Reference				BH 1
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				0.30
Date Sampled				10/02/2025
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	6.3
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.41
Boron (water soluble)	mg/kg	0.2	MCERTS	1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	< 1.2
Chromium (III)	mg/kg	1	NONE	25
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12
Lead (aqua regia extractable)	mg/kg	1	MCERTS	18
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	5.1
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	35
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	26
Petroleum Hydrocarbons				
TPHCWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0
TPHCWG - Aliphatic >EC21 - EC40 $_{EH\_CU\_1D\_AL}$	mg/kg	10	NONE	< 10
TPHCWG - Aliphatic >EC35 - EC44 $_{EH\_CU\_1D\_AL}$	mg/kg	8.4	NONE	< 8.4
TPHCWG - Aliphatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10
TPHCWG - Aliphatic >EC5 - EC44 $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10
TPHCWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.02	MCERTS	< 0.020
TPHCWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10
TPHCWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10
TPHCWG - Aromatic >EC21 - EC40 $_{EH\_CU\_1D\_AR}$	mg/kg	10	NONE	< 10
TPHCWG - Aromatic >EC35 - EC44 $_{EH\_CU\_1D\_AR}$	mg/kg	8.4	NONE	< 8.4
TPHCWG - Aromatic >EC5 - EC35 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	< 10
TPHCWG - Aromatic >EC5 - EC44 $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	< 10
VOCs				
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0

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

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Analytical Report Number : 25-006310
Project / Site name: White Stork Road, Boorley Green

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
449187	TP A	None Supplied	0.1	Brown loam and clay with gravel and vegetation
449188	TP B	None Supplied	0.1	Brown loam and clay with gravel and vegetation
449189	TP C	None Supplied	0.1	Brown clay and sand with gravel and vegetation
449190	TP D	None Supplied	0.1	Brown loam and clay with gravel and vegetation
449191	TP E	None Supplied	0.1	Brown loam and clay with gravel and vegetation
449192	BH 1	None Supplied	0.3	Brown clay with vegetation

Analytical Report Number : 25-006310
Project / Site name: White Stork Road, Boorley Green

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
TPH Chromatogram in soil	TPH Chromatogram in soil	In-house method	L064B	D	NONE
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088-PL	D/W	MCERTS
Chromium III in soil	In-house method by calculation from total Cr and Cr VI	In-house method by calculation	L080-PL/L130B	W	NONE
Hexavalent chromium in soil (low level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099-PL	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

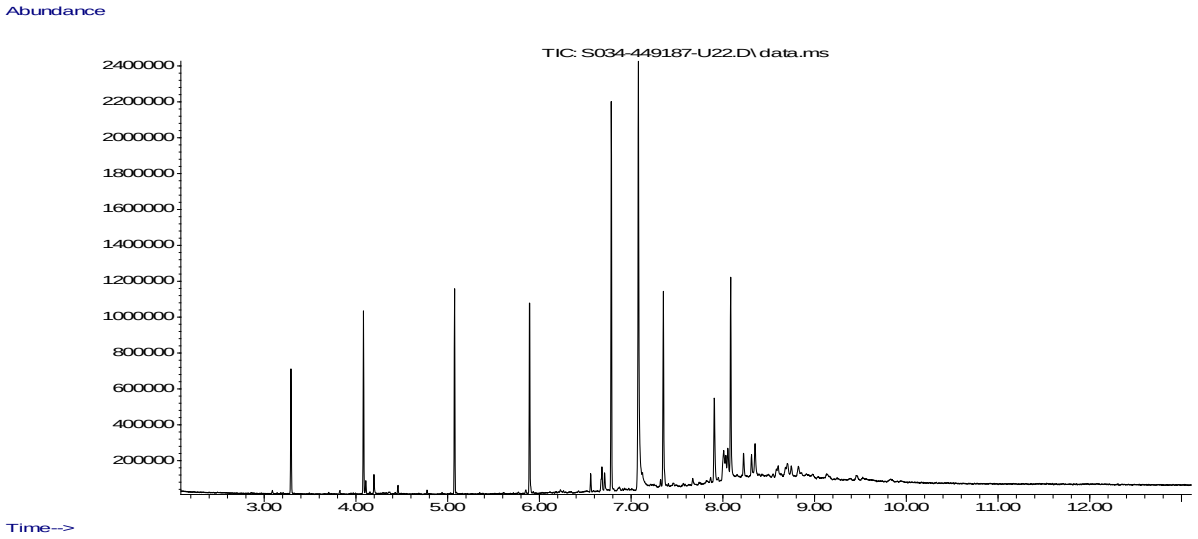
Analytical Report Number : 25-006310
Project / Site name: White Stork Road, Boorley Green

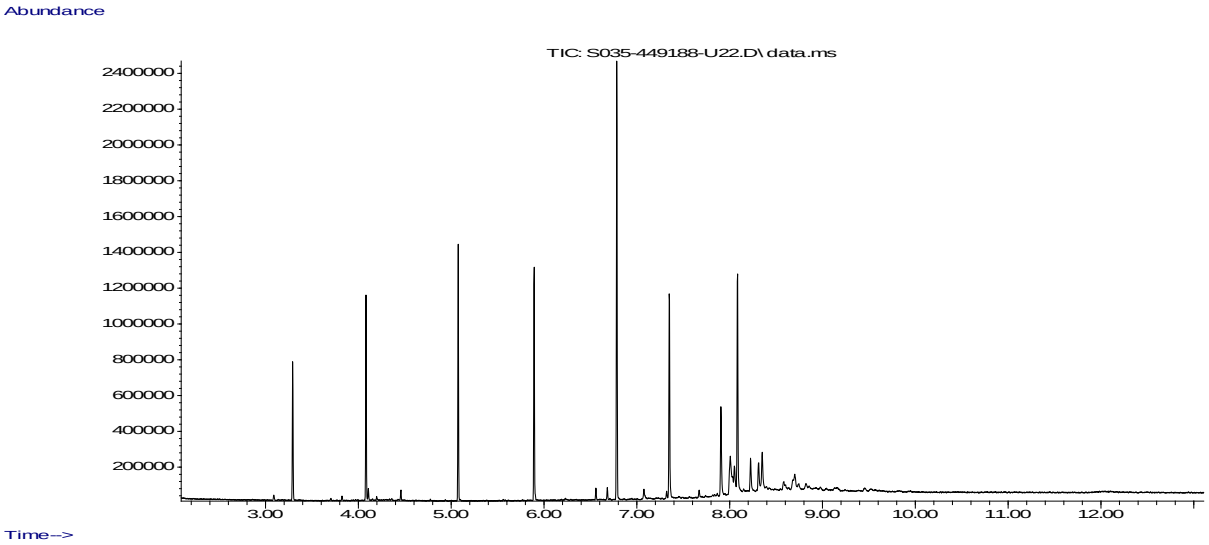
Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

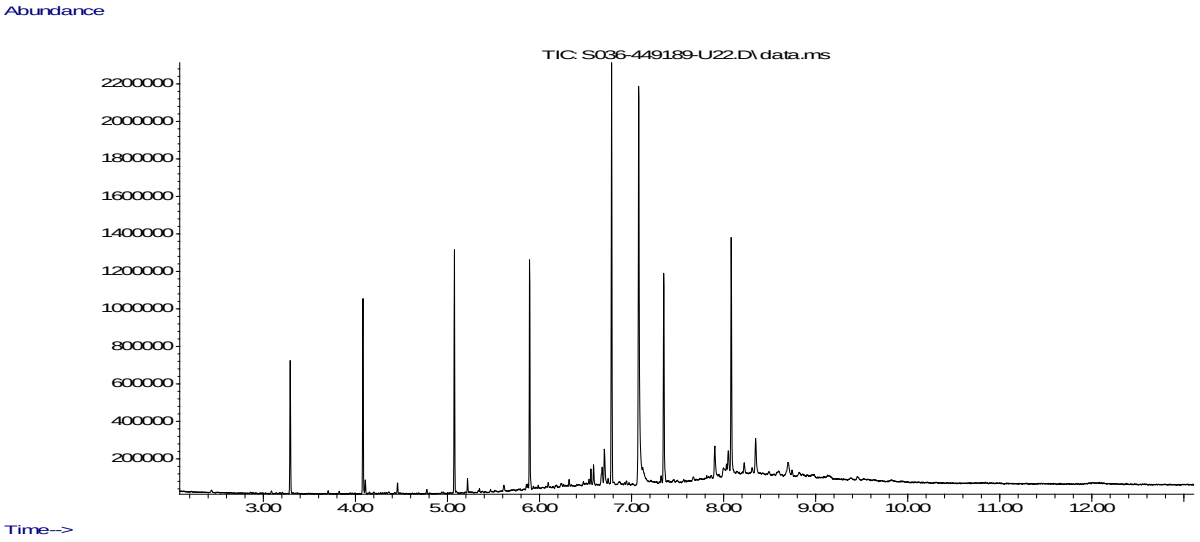
Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

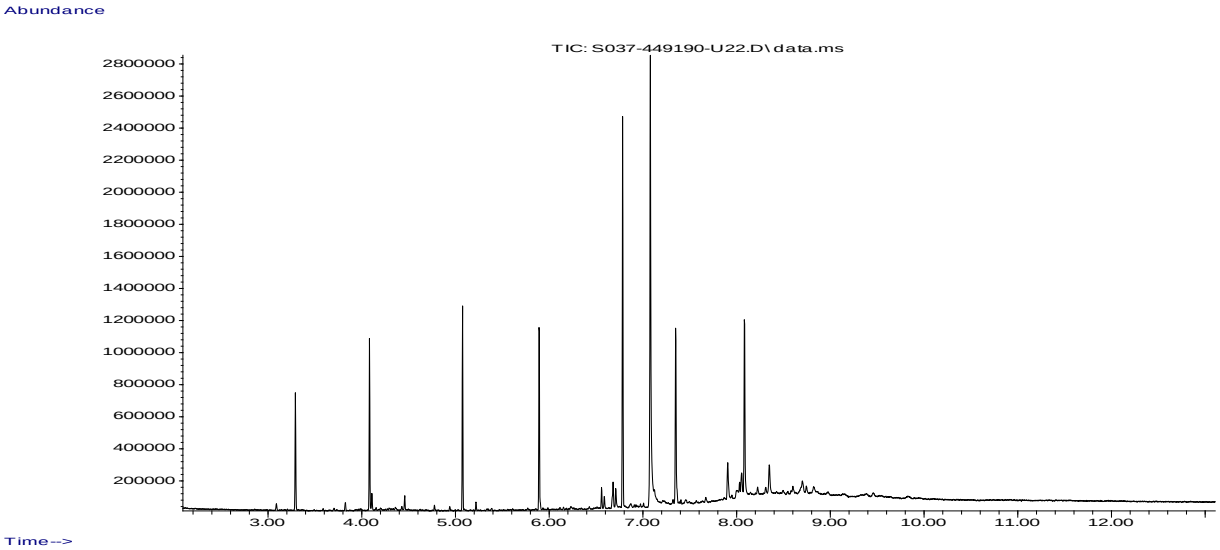
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

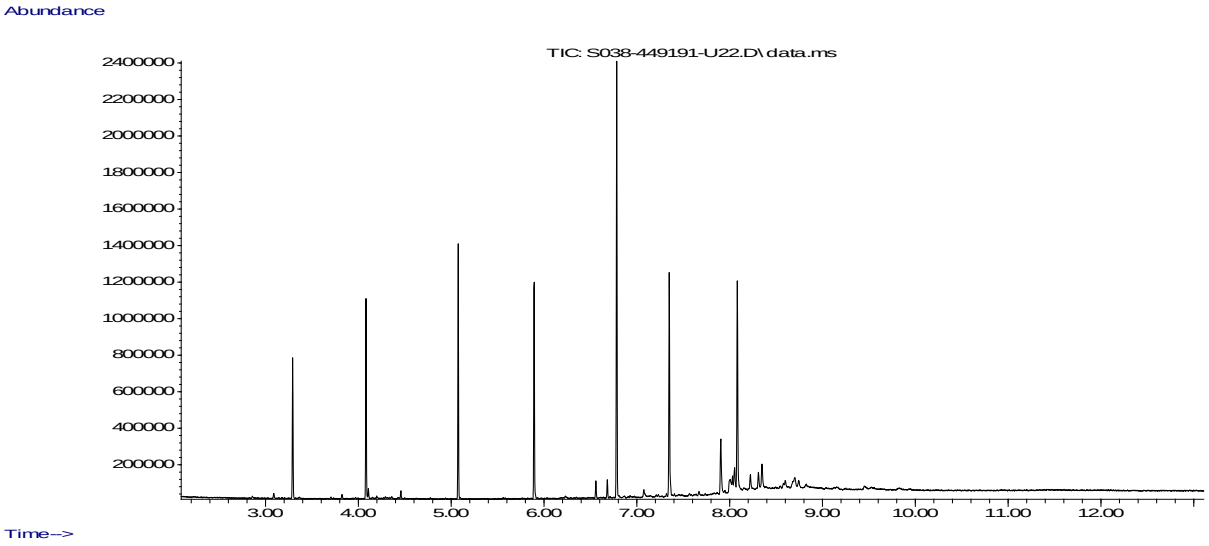
Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

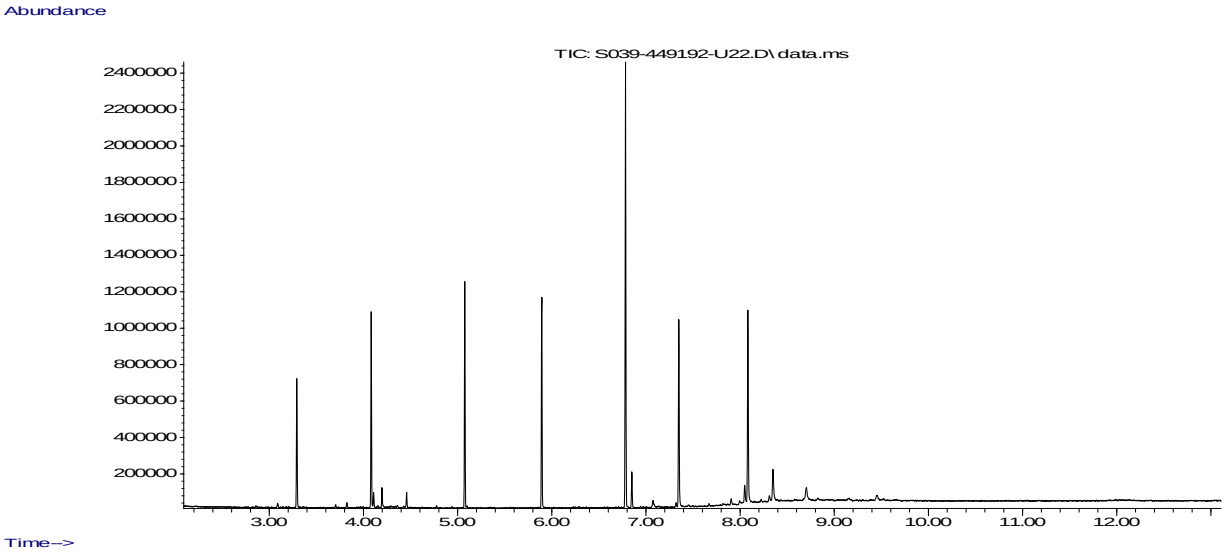

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9.00
10.00
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Time-->

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e: reception@i2analytical.com

Analytical Report Number : 25-006316

Project / Site name:	White Stork Road Boorley G288N	**Samples received on:**	11/02/2025
Your job number:	25 12718 A GO	**Samples instructed on/ Analysis started on:**	11/02/2025
Your order number:	15508	**Analysis completed by:**	19/02/2025
Report Issue Number:	1	**Report issued on:**	19/02/2025
Samples Analysed:	10:1 WAC sample		

Signed: [redacted]

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

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

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

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

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

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

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

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

Analytical Report Number: 25-006316
Project / Site name: White Stork Road Boorley G288N
Your Order No: 15508

Lab Sample Number				449226
Sample Reference				TP CBR4
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				0.50
Date Sampled				10/02/2025
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**	
Stone Content	%	0.1	NONE	22
Moisture Content	%	0.01	NONE	15
Total mass of sample received	kg	0.1	NONE	1
General Inorganics				
pH (L005B)	pH Units	N/A	MCERTS	8.5
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.9
Loss on Ignition @ 450°C	%	0.2	MCERTS	3.5
Acid Neutralisation Capacity	+/- mmol/kg	-9999	NONE	13
Speciated PAHs				
Naphthalene	mg/kg	0.05	MCERTS	0.09
Acenaphthylene	mg/kg	0.05	MCERTS	0.13
Acenaphthene	mg/kg	0.05	MCERTS	1.3
Fluorene	mg/kg	0.05	MCERTS	1
Phenanthrene	mg/kg	0.05	MCERTS	6.8
Anthracene	mg/kg	0.05	MCERTS	1.8
Fluoranthene	mg/kg	0.05	MCERTS	13
Pyrene	mg/kg	0.05	MCERTS	10
Benzo(a)anthracene	mg/kg	0.05	MCERTS	7.1
Chrysene	mg/kg	0.05	MCERTS	6.8
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	8.9
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	3.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.4
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.5
Coronene	mg/kg	0.05	NONE	1.4
Total PAH				
Total WAC-17 PAHs	mg/kg	0.85	NONE	77.2
Petroleum Hydrocarbons				
Mineral Oil (EC10 - EC40) EH_CU_1D_AL	mg/kg	10	NONE	160
VOCs				
Benzene	µg/kg	5	MCERTS	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0
Total BTEX	µg/kg	10	MCERTS	< 10

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Analytical Report Number: 25-006316
Project / Site name: White Stork Road Boorley G288N
Your Order No: 15508

Lab Sample Number				449226
Sample Reference				TP CBR4
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				0.50
Date Sampled				10/02/2025
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**	
PCBs by GC-MS				
PCB Congener 28	mg/kg	0.001	MCERTS	0.006
PCB Congener 52	mg/kg	0.001	MCERTS	0.003
PCB Congener 101	mg/kg	0.001	MCERTS	0.002
PCB Congener 118	mg/kg	0.001	MCERTS	< 0.001
PCB Congener 138	mg/kg	0.001	MCERTS	0.004
PCB Congener 153	mg/kg	0.001	MCERTS	0.002
PCB Congener 180	mg/kg	0.001	MCERTS	< 0.001
Total PCBs	mg/kg	0.007	MCERTS	0.017

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

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

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Waste Acceptance Criteria Analytical Results

Report No:	**25-006316**						
					Client:	**ALBURYSIL**	
Location	**White Stork Road Boorley G288N**						
Lab Reference (Sample Number)	449226				**Landfill Waste Acceptance Criteria**		
					Limits		
Sampling Date	10/02/2025				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	TP CBR4						
Depth (m)	0.50						
Solid Waste Analysis							
TOC (%)**	1.9				3%	5%	6%
Loss on Ignition (%) **	3.5				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	0.017				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL	160				500	--	--
Total PAH (WAC-17) (mg/kg)	77.2				100	--	--
pH (units)**	8.5				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	13				--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.00357			0.0357	0.5	2	25
Barium *	0.0189			0.189	20	100	300
Cadmium *	< 0.000100			< 0.00100	0.04	1	5
Chromium *	0.0012			0.012	0.5	10	70
Copper *	0.0056			0.056	2	50	100
Mercury *	< 0.000500			< 0.00500	0.01	0.2	2
Molybdenum *	0.00174			0.0174	0.5	10	30
Nickel *	0.0015			0.015	0.4	10	40
Lead *	0.0088			0.088	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0081			0.081	4	50	200
Chloride *	2.1			21	800	15000	25000
Fluoride*	0.29			2.9	10	150	500
Sulphate *	8.6			86	1000	20000	50000
TDS*	73			730	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	15.6			156	500	800	1000
Leach Test Information							
Stone Content (%)	22.0						
Sample Mass (kg)	1.0						
Dry Matter (%)	85						
Moisture (%)	15						

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

*= UKAS accredited (liquid eluate analysis only)

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

** = MCERTS accredited

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

Where colour coding is used on this report, this is for guidance purposes only. This does not constitute a statement of conformity of pass or fail.

Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

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

Analytical Report Number : 25-006316
Project / Site name: White Stork Road Boorley G288N

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
449226	TP CBR4	None Supplied	0.5	Brown clay and sand with vegetation and stones

Analytical Report Number : 25-006316
Project / Site name: White Stork Road Boorley G288N

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
pH at 20°C in soil	Determination of pH in soil by addition of water followed by electrometric measurement	In-house method	L005B	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
PCB's By GC-MS in soil	Determination of PCB by extraction with hexane followed by GC-MS	In-house method based on USEPA 8082	L027B	D	MCERTS
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by electrometric measurement	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L031B	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR Analyser	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	NONE
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Sample Preparation		In-house method	L043B	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046B	W	NONE
Loss on ignition of soil @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	In-house method	L047-PL	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088-PL	D/W	NONE
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025

Analytical Report Number : 25-006316
Project / Site name: White Stork Road Boorley G288N

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025

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

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

Site name: White Stork Road, Boorley Green
Report Ref: 25/12718/A/GO

SUMMARY TABLE OF RESULTS

ALBURY S.I. LTD

			Location	TP A	TP B	TP C	TP D	TP E	BH 1	TP CBR 4 (WAC)	Standard Deviation	Arithmetic Mean	US95	S4UL/C4SUL GAC Residential with home-grown produce (1% SOM)	S4UL/C4SUL GAC Public Open Spaces near Residential Housing (1% SOM)
			Depth (m)	0.10	0.10	0.10	0.10	0.10	0.30	0.50					
			Date Sampled	10/02/2025	10/02/2025	10/02/2025	10/02/2025	10/02/2025	10/02/2025	10/02/2025					
Parameter	**Units**	**Test Limit of detection**													
Asbestos in Soil Detected/Not Detected	Type	N/A		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected					None detected	None detected
pH	pH	N/A		7.8	6.6	8.3	8	7.5	7	8.5	0.58	7.51			
Total Organic Carbon (TOC)	%	0.1		3.9	3.8	1.3	1.7	2.4	1.2	1.9	1.11	2.13			
Speciated PAHs															
Naphthalene	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.09				2.3	4900
Acenaphthylene	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.13				210	15000
Acenaphthene	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	1.3				170	15000
Fluorene	mg/kg	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	1				170	9900
Phenanthrene	mg/kg	0.05		0.13	0.09	0.15	0.16	0.08	< 0.05	6.8	2.49	1.24		95	3100
Anthracene	mg/kg	0.05		< 0.05	< 0.05	< 0.05	0.05	< 0.05	< 0.05	1.8	0.88	0.93		2400	74000
Fluoranthene	mg/kg	0.05		0.44	0.24	0.29	0.52	0.34	< 0.05	13	4.71	2.47		280	3100
Pyrene	mg/kg	0.05		0.42	0.21	0.28	0.49	0.32	< 0.05	10	3.60	1.95		620	7400
Benzo(a)anthracene	mg/kg	0.05		0.28	0.1	0.16	0.33	0.18	< 0.05	7.1	2.57	1.36		7.2	29
Chrysene	mg/kg	0.05		0.32	0.11	0.17	0.32	0.24	< 0.05	6.8	2.45	1.33		15	57
Benzo(b)fluoranthene	mg/kg	0.05		0.51	0.17	0.22	0.51	0.37	< 0.05	8.9	3.19	1.78	6.89	2.6	7.1
Benzo(k)fluoranthene	mg/kg	0.05		0.22	0.06	0.11	0.18	0.17	< 0.05	3.9	1.40	0.77		77	190
Benzo(a)pyrene	mg/kg	0.05		0.42	0.13	0.2	0.38	0.3	< 0.05	7	2.50	1.41	5.42	2.2	5.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05		0.25	0.07	0.11	0.2	0.17	< 0.05	3.4	1.21	0.70		27	82
Dibenz(a,h)anthracene	mg/kg	0.05		0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	1	0.48	0.53	0.77	0.24	0.57
Benzo(ghi)perylene	mg/kg	0.05		0.27	0.08	0.12	0.25	0.2	< 0.05	3.5	1.24	0.74		320	640
Speciated Total EPA-16 PAHs	mg/kg	0.8		3.31	1.27	1.81	3.38	2.36	< 0.80						
Heavy Metals / Metalloids															
Arsenic (aqua regia extractable)	mg/kg	1		7	7.3	8.8	11	7.9	6.3		1.53	8.05		37	
Beryllium (aqua regia extractable)	mg/kg	0.06		0.44	0.39	0.45	0.46	0.44	0.41		0.02	0.43		1.7	
Boron (water soluble)	mg/kg	0.2		1	1.4	1.2	0.9	1.2	1		0.17	1.12		290	
Cadmium (aqua regia extractable)	mg/kg	0.2		0.3	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2		0.00	0.30		11	
Chromium (hexavalent) Low Level	mg/kg	1.2		< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2					6	
Chromium (III)	mg/kg	1		25	26	25	26	27	25		0.75	25.67		910	
Copper (aqua regia extractable)	mg/kg	1		24	15	15	21	13	12		4.35	16.67		2400	
Lead (aqua regia extractable)	mg/kg	1		46	31	19	22	27	18		9.55	27.17		200	
Mercury (aqua regia extractable)	mg/kg	0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3					11	
Nickel (aqua regia extractable)	mg/kg	1		6.6	5.5	7.1	6.2	4.7	5.1		0.84	5.87		130	
Selenium (aqua regia extractable)	mg/kg	1		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0					250	
Vanadium (aqua regia extractable)	mg/kg	1		33	37	33	30	38	35		2.69	34.33		410	
Zinc (aqua regia extractable)	mg/kg	1		68	47	48	63	48	26		13.45	50.00		3700	
Petroleum Hydrocarbons															
TPHCWG - Aliphatic >EC5 - EC6$_{HS_1D_AL}$	mg/kg	0.01		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010					42	
TPHCWG - Aliphatic >EC6 - EC8$_{HS_1D_AL}$	mg/kg	0.01		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010					100	
TPHCWG - Aliphatic >EC8 - EC10$_{HS_1D_AL}$	mg/kg	0.01		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010					27	
TPHCWG - Aliphatic >EC10 - EC12$_{EH_CU_1D_AL}$	mg/kg	1		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0					130(48)	
TPHCWG - Aliphatic >EC12 - EC16$_{EH_CU_1D_AL}$	mg/kg	2		< 2.0	< 2.0	4.2	< 2.0	< 2.0	< 2.0					1100 (24)	
TPHCWG - Aliphatic >EC16 - EC21$_{EH_CU_1D_AL}$	mg/kg	8		< 8.0	< 8.0	16	< 8.0	< 8.0	< 8.0					65000	
TPHCWG - Aliphatic >EC21 - EC40$_{EH_CU_1D_AL}$	mg/kg	10		< 10	< 10	49	22	< 10	< 10					65000	
TPHCWG - Aliphatic >EC35 - EC44$_{EH_CU_1D_AL}$	mg/kg	8.4		< 8.4	< 8.4	10	14	< 8.4	< 8.4					65000	
TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010					70	
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01		< 0.010	< 0.010	0.065	< 0.010	< 0.010	< 0.010					130	
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.02		< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020					34	
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0					74	
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0					140	
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10		< 10	< 10	< 10	< 10	< 10	< 10					260	
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10		14	12	< 10	27	< 10	< 10					1100	
TPHCWG - Aromatic >EC21 - EC40 EH_CU_1D_AR	mg/kg	10		19	13	< 10	43	< 10	< 10					1100	
TPHCWG - Aromatic >EC35 - EC44 EH_CU_1D_AR	mg/kg	8.4		< 8.4	< 8.4	< 8.4	27	< 8.4	< 8.4					1100	
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0					49*	
Benzene	µg/kg	5		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0				87	
Toluene	µg/kg	5		< 5.0	< 5.0	65	< 5.0	< 5.0	< 5.0	< 5.0				130000	
Ethylbenzene	µg/kg	5		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0				47000	
p & m-Xylene	µg/kg	8		< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0				56000	
o-Xylene	µg/kg	5		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0				60000	

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* EIC/AGS/CL:AIRE GAC (2010)

Soil Generic Assessment Criteria (GAC) for Human Health - Importation of Soil

Determinand	GAC (mg/kg^{-1})	
	Residential with home-grown produce	Source
Asbestos (ACM)	None detected	
Arsenic	37	C4SL (2014)
Beryllium	1.7	S4UL (2014)
Boron	290	S4UL (2014)
Cadmium	11	S4UL (2014)
Chromium III	910	S4UL (2014)
Chromium VI	6	S4UL (2014)
Copper	See PTE Table below	DEFRA, 2005
Lead	200	Category 4 [C4SL] (2014)
Mercury	11	S4UL (2014)
Nickel	See PTE Table below	DEFRA, 2005
Selenium	250	S4UL (2014)
Vanadium	410	S4UL (2014)
Zinc	See PTE Table below	DEFRA, 2005
Total Petroleum Hydrocarbons (TPH)		S4UL (2014)
Benzene	(0.087, 0.17, 0.37)	S4UL (2014)
Toluene	(130, 290, 660)	S4UL (2014)
Ethylbenzene	(47, 110, 260)	S4UL (2014)
Xylenes - m, o or p	(56, 130, 310)	S4UL (2014)
PAH Compounds		
Acenaphthene	(210, 510, 1100)	S4UL (2014)
Acenaphthylene	(170, 420, 920)	S4UL (2014)
Anthracene	(2400, 5400, 11000)	S4UL (2014)
Benz[a]anthracene	(7.2, 11, 13)	S4UL (2014)
Benzo[a]pyrene (only)	(2.2, 2.7, 3.0)	S4UL (2014)
Benzo[b]fluoranthene	(2.6, 3.3, 3.7)	S4UL (2014)
Benzo[ghi]perylene	(320, 340, 350)	S4UL (2014)
Benzo[k]fluoranthene	(77, 93, 100)	S4UL (2014)
Chrysene	(15, 22, 27)	S4UL (2014)
Dibenz[ah]anthracene	(0.24, 0.28, 0.3)	S4UL (2014)
Fluoranthene	(280, 560, 890)	S4UL (2014)
Fluorene	(170, 400, 860)	S4UL (2014)
Indeno[123-cd]pyrene	(27, 36, 41)	S4UL (2014)
Naphthalene	(2.3, 5.6, 13)	S4UL (2014)
Phenanthrene	(95, 220, 440)	S4UL (2014)
Pyrene	(620, 1200, 2000)	S4UL (2014)

Values in brackets indicate GAC for SOM (1%, 2.5%, 6%)

Potentially Toxic Elements [PTE]	Maximum permissible levels of toxic elements in soil (mg/kg-1) (Grassland figures in brackets)			
	pH 5.0<5.5	pH 5.5<6.0	pH 6.0-7.0	pH >7.0
Zinc	200	200	200	300
Copper	80 (130)	100 (170)	135 (225)	200 (330)
Nickel	50 (80)	60 (100)	75 (125)	100 (180)

Based upon levels of PTE in soil following application of sewage sludge to agricultural soil (DEFRA, 2005) & BS 3882

The above GAC are presented above for reference only and should be considered with their respective technical notes.
The technical notes are commercial in confidence and are not reproduced here.

References:

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

LQM/CIEH, 2009. Generic Assessment Criteria for Human Health Risk Assessment (2nd Edition) including 2011 Cr (III) erratum

EIC/AGS/CL:AIRE, 2010. Soil Generic Assessment Criteria for Human Health Risk Assessment.

LQM/CIEH, 2014. S4UL for Human Health Risk Assessment

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(Jan 2025)

APPENDIX 3

DESICCATION

DESICCATION

Classification

The removal of moisture from a soil as a result of external influences with a constant stress regime, results in shrinkage or settlement of the soil. The magnitude of shrinkage is dependent upon the geological stress history of the soil, its clay content and the composition of the clay minerals. Under normal climatic conditions, there is a seasonal cyclic variation in soil moisture and, hence, volume change, which extends to depths of approximately 1m. When the soil moisture deficit attains a critical value, the shrinkage of the soil can become significant. In these circumstances, the soil can be regarded as being present in a desiccated state.

Causes

A common cause of desiccation consists of the reduction in soil moisture by tree root action. In the absence of a water table at shallow depth, root action of trees will reduce the soil moisture level in order to maintain growth. In general terms, the increase in rainfall which occurs during winter periods will allow for some replacement of the moisture content of the soil, particularly where isolated or immature trees are concerned.

However, when drought summer conditions or limited winter rainfall occurs, desiccated zones will develop within the zone of influence of tree roots. In woodland, desiccation develops as it is not possible for rainfall to overcome the soil moisture deficit. Other causes of desiccation, which have created problems to structures, include incorrectly installed and insulated heating pipes or ducts and industrial processes, ie furnaces or brick kilns.

Effects

The development of desiccation in clay soils will result in an increase in strength of the material. In addition, negative pore water pressure or soil suction will develop. Any foundation system located within soil which is subject to a reduction in soil moisture can experience structural distress, which results from the loss in volume or shrinkage of the ground. Also, if the source of the desiccation is removed, there will be heave of the soils as a result of an increase in equilibrium water content

It is evident, therefore, that foundation systems founded in soils which are actively experiencing an increase or decrease in soil moisture, will be subject to either heave or settlement, which can induce stresses within the structure. It should also be appreciated that a desiccated soil, which is experiencing an increase in equilibrium water content, will attempt to increase its volume in a horizontal as well as vertical plane. It is important, therefore, to ensure that horizontal movements do not apply differential stresses to structural elements, by incorporating collapsible membranes within remedial works.

Identification

A soil in a state of equilibrium is present in a semi-solid state. At the onset of desiccation, the condition of the soil moves towards the boundary between a solid and semi-solid state, this boundary being defined as the plastic limit of the soil. It follows, therefore, that when the natural water content of a soil lies close to, or falls below, the value of the plastic limit, the soil can be considered to be desiccated.

An alternative proposal was made by Driscoll (1983), who related the soil suction induced by desiccation to a function of the liquid limit of the soil. In general terms, desiccation is assumed to be present when the moisture content falls below a level of 40% liquid limit. The arbitrary factor of 0.4 relates to a soil suction value proposed by Croney (1977) and may vary with the composition and mineralogy of different soil types. This approach is only considered to be valid over a limited depth range as the overburden effect will result in a natural reduction in soil moisture and result in the development of negative pore pressures.

A further approach, which considers the shear strength of the clay, Pugh et al (1995), recognises the fact that a reduction in soil moisture will result in an increase in undrained shear strength as well as the development of negative pore pressures. Whilst this approach has a considerable amount of merit, care is required in establishing the value of the soil's in situ shear strength, particularly if it is not possible to obtain representative "undisturbed" samples from cable percussion boreholes. The proposal made in the Pugh paper that the simple pocket penetrometer will provide accurate consistent results should be treated with care, as the pocket penetrometer can take no account of the effects of disturbance and remoulding that are inevitable when completing a trial pit with a mechanical excavator. It is for this reason that this Company attempts to establish the shear strength of clay soils by using the Geonor Field Vane. With this test equipment the appropriate-sized vane is pushed into the side of the pit, through the thin disturbed zone which is caused by the teeth of the bucket during excavation. Furthermore, by use of the 'blank' probe, it is possible to take account of any skin friction which builds up on the shaft of the vane and thus provide a more accurate assessment of the shear strength of the soils.

Hence, a combination of the methods discussed above should be considered in order to confirm whether the development of soil moisture reduction to achieve a desiccated state has occurred within a particular site. The data for affected areas should, where possible, be compared with soils which lie outside the influence of tree root bulbs and may, therefore, be considered to be present in a stable and equilibrium state.

References

Croney D (1977)	The Design and Performance of Road Pavements London HMSO pp 674
Driscoll R (1983)	The Influence of Vegetation on the Swelling and Shrinking of Clay Soils in Britain Geotechnique 33.4 pp 93-105
Pugh RS, Parnell PG and Parks RD (1995)	A rapid and reliable on site method of assessing desiccation in clay soils Geotechnical Engineering 13 Jan 1995 pp 25—30

APPENDIX 4

WASTE

WASTE CLASSIFICATION

The European Waste Framework Directive is implemented in the UK by the 2002 Landfill Regulations, together with a number of other acts and regulations. A key part of this process is to establish the hazardous properties of potential waste. The classification and definition of hazardous waste is interpreted within the Environment Agency guidance WM3 and all wastes require classifying in accordance with the European Waste Catalogue [EWC]. The EWC is a detailed list of typical industry waste types and each has a 6 digit code. Typically the appropriate EWC codes for excavated soil being disposed off site are:

17 05 03* soil and stones containing dangerous substances, or
17 05 04 soil and stones other than those mentioned in 17 05 03

If excavated soils are to be discarded or exported from site then they would be considered controlled waste and require classification. However, if soils can be re-used on site then they are not considered to be controlled waste. A Desk Study, soil descriptions, laboratory chemical analysis and risk assessment can all contribute to basic waste characterisation. Depending upon the chemical composition or levels of contaminants in the waste (e.g. metals, TPH, asbestos), soil and stones can either be hazardous or non-hazardous. Waste Acceptance Criteria [WAC] test results are used to determine the suitability of the waste intended for disposal against the acceptance criteria for a particular class of landfill site. WAC tests are not used for the classification of waste soils and are only required for inert or hazardous excavated material which is destined for landfill.

Wastes containing asbestos with a concentration of >0.10% weight/weight (w/w) are generally considered to be hazardous. While waste with <0.10% w/w of asbestos are considered non-hazardous. Where free fibres or fibrous asbestos is present at concentrations of >0.001% then these are considered to pose a risk to human health and are deemed hazardous waste. These waste materials also require a suitably licensed company to handle them.

Waste Treatment

It is a requirement of the 2002 Landfill Regulations that all wastes must undergo some form of pre-treatment prior to disposal at an appropriately licensed landfill. Treatment is defined using a 'three-point test' and can include physical, chemical, biological or thermal processes, which must change the characteristics of the waste in order to:

- reduce its volume, or
- reduce its hazardous nature, or
- facilitate its handling, or
- enhance its recovery.

The exceptions to this are:

- inert waste for which treatment is not technically feasible.
- it is waste other than inert waste and treatment would not reduce its quantity or its hazards to human health or the environment.

The waste producer should either treat their own waste or ensure that the waste will be treated by a subsequent handler. The waste producer should record the type and amount of pre-treatment undertaken prior to disposal.

Examples of treatment include mechanical segregation or sorting, compositing, soil treatment hubs and incineration. This can include physical sorting of waste soil types into separate stockpiles at the producer site, e.g. topsoil, made ground and natural clay, sand or gravels.

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

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

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

ZHQTK-H0XSV-CCV7N

Report is invalid if pages are removed.

Job name

MAIN 25-006310_HWOL

Description/Comments

Project

25/12718/A/GO

Site

White Stork Road, Boorley Green

Classified by

Name:
George Owens
Date:
07 Mar 2025 11:46 GMT
Telephone:
01428 684 836

Company:
Albury SI Ltd
Miltons Yard, Petworth Rd, Witley
Godalming
GU8 5LH

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: -

Course	Date
Hazardous Waste Classification	-

Purpose of classification

2 - Material Characterisation

Address of the waste

Land off White Stork Road, Boorley Green, Hedge End **Post Code** SO32 2BX

SIC for the process giving rise to the waste

41202 Construction of domestic buildings

Description of industry/producer giving rise to the waste

Construction of care home

Description of the specific process, sub-process and/or activity that created the waste

Waste created during excavation of soils for foundations

Description of the waste

made ground, clay and sand

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	TP A--10022025-0.10		Non Hazardous		3
2	TP B--10022025-0.10		Non Hazardous		6
3	TP C--10022025-0.10		Non Hazardous		9
4	TP D--10022025-0.10		Non Hazardous		12
5	TP E--10022025-0.10		Non Hazardous		15
6	BH 1--10022025-0.30		Non Hazardous		17

Related documents

#	Name	Description
1	MAIN 25-006310_HWOL.hwol	i2 Analytical .hwol file used to populate the Job
2	Example waste stream template for contaminated soils	waste stream template used to create this Job

Report

Created by: George Owens

Created date: 07 Mar 2025 11:46 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	19
Appendix B: Rationale for selection of metal species	20
Appendix C: Version	21

Classification of sample: TP A--10022025-0.10

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

Sample details

Sample name:
TP A--10022025-0.10
Moisture content:
31%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 31% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7	mg/kg	1.32	6.377	mg/kg	0.000638 %	✓	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.44	mg/kg	2.775	0.843	mg/kg	0.0000843 %	✓	
3	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		1	mg/kg	3.22	2.222	mg/kg	0.000222 %	✓	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.3	mg/kg	1.142	0.236	mg/kg	0.0000236 %	✓	
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		25	mg/kg	1.462	36.539	mg/kg	0.00365 %		
6	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				<1.2	mg/kg	2.27	<2.724	mg/kg	<0.000272 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		24	mg/kg	1.126	18.645	mg/kg	0.00186 %	✓	
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	46	mg/kg	1.56	49.509	mg/kg	0.00317 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		6.6	mg/kg	2.976	13.554	mg/kg	0.00136 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		68	mg/kg	2.774	130.163	mg/kg	0.013 %	✓	
13	TPH (C6 to C40) petroleum group			TPH		14	mg/kg		9.66	mg/kg	0.000966 %	✓	
14	confirm TPH has NOT arisen from diesel or petrol					☑							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<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									
17		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<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		pH				7.8	pH		7.8	pH	7.8 pH		
				PH									
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
22		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
23		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
24		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7									
25		phenanthrene				0.13	mg/kg		0.0897	mg/kg	0.00000897 %	✓	
			201-581-5	85-01-8									
26		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-371-1	120-12-7									
27		fluoranthene				0.44	mg/kg		0.304	mg/kg	0.0000304 %	✓	
			205-912-4	206-44-0									
28		pyrene				0.42	mg/kg		0.29	mg/kg	0.000029 %	✓	
			204-927-3	129-00-0									
29		benzo[a]anthracene				0.28	mg/kg		0.193	mg/kg	0.0000193 %	✓	
		601-033-00-9	200-280-6	56-55-3									
30		chrysene				0.32	mg/kg		0.221	mg/kg	0.0000221 %	✓	
		601-048-00-0	205-923-4	218-01-9									
31		benzo[b]fluoranthene				0.51	mg/kg		0.352	mg/kg	0.0000352 %	✓	
		601-034-00-4	205-911-9	205-99-2									
32		benzo[k]fluoranthene				0.22	mg/kg		0.152	mg/kg	0.0000152 %	✓	
		601-036-00-5	205-916-6	207-08-9									
33		benzo[a]pyrene; benzo[def]chrysene				0.42	mg/kg		0.29	mg/kg	0.000029 %	✓	
		601-032-00-3	200-028-5	50-32-8									
34		indeno[123-cd]pyrene				0.25	mg/kg		0.173	mg/kg	0.0000173 %	✓	
			205-893-2	193-39-5									
35		dibenz[a,h]anthracene				0.05	mg/kg		0.0345	mg/kg	0.00000345 %	✓	
		601-041-00-2	200-181-8	53-70-3									
36		benzo[ghi]perylene				0.27	mg/kg		0.186	mg/kg	0.0000186 %	✓	
			205-883-8	191-24-2									
37		vanadium { divanadium pentaoxide; vanadium pentoxide }				33	mg/kg	1.785	40.649	mg/kg	0.00406 %	✓	
		023-001-00-8	215-239-8	1314-62-1									
										Total:	0.0299 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 12500 mg/kg (1.25%) because: example given in WM3

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.00096%)

Classification of sample: TP B--10022025-0.10

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

Sample details

Sample name:
TP B--10022025-0.10
Moisture content:
33%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 33% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.3	mg/kg	1.32	6.458	mg/kg	0.000646 %	✓	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.39	mg/kg	2.775	0.725	mg/kg	0.0000725 %	✓	
3	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		1.4	mg/kg	3.22	3.02	mg/kg	0.000302 %	✓	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		26	mg/kg	1.462	38	mg/kg	0.0038 %		
6	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				<1.2	mg/kg	2.27	<2.724	mg/kg	<0.000272 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		15	mg/kg	1.126	11.315	mg/kg	0.00113 %	✓	
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	31	mg/kg	1.56	32.397	mg/kg	0.00208 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		5.5	mg/kg	2.976	10.968	mg/kg	0.0011 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		47	mg/kg	2.774	87.358	mg/kg	0.00874 %	✓	
13	TPH (C6 to C40) petroleum group			TPH		12	mg/kg		8.04	mg/kg	0.000804 %	✓	
14	confirm TPH has NOT arisen from diesel or petrol					☑							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<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									
17		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<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		pH				6.6	pH		6.6	pH	6.6 pH		
				PH									
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
22		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
23		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
24		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7									
25		phenanthrene				0.09	mg/kg		0.0603	mg/kg	0.00000603 %	✓	
			201-581-5	85-01-8									
26		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-371-1	120-12-7									
27		fluoranthene				0.24	mg/kg		0.161	mg/kg	0.0000161 %	✓	
			205-912-4	206-44-0									
28		pyrene				0.21	mg/kg		0.141	mg/kg	0.0000141 %	✓	
			204-927-3	129-00-0									
29		benzo[a]anthracene				0.1	mg/kg		0.067	mg/kg	0.0000067 %	✓	
		601-033-00-9	200-280-6	56-55-3									
30		chrysene				0.11	mg/kg		0.0737	mg/kg	0.00000737 %	✓	
		601-048-00-0	205-923-4	218-01-9									
31		benzo[b]fluoranthene				0.17	mg/kg		0.114	mg/kg	0.0000114 %	✓	
		601-034-00-4	205-911-9	205-99-2									
32		benzo[k]fluoranthene				0.06	mg/kg		0.0402	mg/kg	0.00000402 %	✓	
		601-036-00-5	205-916-6	207-08-9									
33		benzo[a]pyrene; benzo[def]chrysene				0.13	mg/kg		0.0871	mg/kg	0.00000871 %	✓	
		601-032-00-3	200-028-5	50-32-8									
34		indeno[123-cd]pyrene				0.07	mg/kg		0.0469	mg/kg	0.00000469 %	✓	
			205-893-2	193-39-5									
35		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
36		benzo[ghi]perylene				0.08	mg/kg		0.0536	mg/kg	0.00000536 %	✓	
			205-883-8	191-24-2									
37		vanadium { divanadium pentaoxide; vanadium pentoxide }				37	mg/kg	1.785	44.255	mg/kg	0.00443 %	✓	
		023-001-00-8	215-239-8	1314-62-1									
										Total:	0.0238 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 12500 mg/kg (1.25%) because: example given in WM3

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.0008%)

Classification of sample: TP C--10022025-0.10

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

Sample details

Sample name:
TP C--10022025-0.10
Moisture content:
20%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

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

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.8	mg/kg	1.32	9.295	mg/kg	0.00093 %	✓	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.45	mg/kg	2.775	0.999	mg/kg	0.0000999 %	✓	
3	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		1.2	mg/kg	3.22	3.091	mg/kg	0.000309 %	✓	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		25	mg/kg	1.462	36.539	mg/kg	0.00365 %		
6	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				<1.2	mg/kg	2.27	<2.724	mg/kg	<0.000272 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		15	mg/kg	1.126	13.511	mg/kg	0.00135 %	✓	
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19	mg/kg	1.56	23.709	mg/kg	0.00152 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		7.1	mg/kg	2.976	16.905	mg/kg	0.00169 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		48	mg/kg	2.774	106.527	mg/kg	0.0107 %	✓	
13	TPH (C6 to C40) petroleum group			TPH		70	mg/kg		56	mg/kg	0.0056 %	✓	
14	confirm TPH has NOT arisen from diesel or petrol					☑							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<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									
17		toluene				0.065	mg/kg		0.052	mg/kg	0.0000052 %	✓	
		601-021-00-3	203-625-9	108-88-3									
18	●	ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<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	●	pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
22	●	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
23	●	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
24	●	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7									
25	●	phenanthrene				0.15	mg/kg		0.12	mg/kg	0.000012 %	✓	
			201-581-5	85-01-8									
26	●	anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-371-1	120-12-7									
27	●	fluoranthene				0.29	mg/kg		0.232	mg/kg	0.0000232 %	✓	
			205-912-4	206-44-0									
28	●	pyrene				0.28	mg/kg		0.224	mg/kg	0.0000224 %	✓	
			204-927-3	129-00-0									
29		benzo[a]anthracene				0.16	mg/kg		0.128	mg/kg	0.0000128 %	✓	
		601-033-00-9	200-280-6	56-55-3									
30		chrysene				0.17	mg/kg		0.136	mg/kg	0.0000136 %	✓	
		601-048-00-0	205-923-4	218-01-9									
31		benzo[b]fluoranthene				0.22	mg/kg		0.176	mg/kg	0.0000176 %	✓	
		601-034-00-4	205-911-9	205-99-2									
32		benzo[k]fluoranthene				0.11	mg/kg		0.088	mg/kg	0.0000088 %	✓	
		601-036-00-5	205-916-6	207-08-9									
33		benzo[a]pyrene; benzo[def]chrysene				0.2	mg/kg		0.16	mg/kg	0.000016 %	✓	
		601-032-00-3	200-028-5	50-32-8									
34	●	indeno[123-cd]pyrene				0.11	mg/kg		0.088	mg/kg	0.0000088 %	✓	
			205-893-2	193-39-5									
35		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
36	●	benzo[ghi]perylene				0.12	mg/kg		0.096	mg/kg	0.0000096 %	✓	
			205-883-8	191-24-2									
37		vanadium { divanadium pentaoxide; vanadium pentoxide }				33	mg/kg	1.785	47.129	mg/kg	0.00471 %	✓	
		023-001-00-8	215-239-8	1314-62-1									
										Total:	0.0313 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 12500 mg/kg (1.25%) because: example given in WM3

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

toluene (conc.: 5.2e-06%)

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.0056%)

Classification of sample: TP D--10022025-0.10

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

Sample details

Sample name:
TP D--10022025-0.10
Moisture content:
19%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

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

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11 mg/kg	1.32	11.764 mg/kg	0.00118 %	✓	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.46 mg/kg	2.775	1.034 mg/kg	0.000103 %	✓	
3	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		0.9 mg/kg	3.22	2.347 mg/kg	0.000235 %	✓	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		26 mg/kg	1.462	38 mg/kg	0.0038 %		
6	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				<1.2 mg/kg	2.27	<2.724 mg/kg	<0.000272 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		21 mg/kg	1.126	19.151 mg/kg	0.00192 %	✓	
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	22 mg/kg	1.56	27.796 mg/kg	0.00178 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		6.2 mg/kg	2.976	14.947 mg/kg	0.00149 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		63 mg/kg	2.774	141.565 mg/kg	0.0142 %	✓	
13	TPH (C6 to C40) petroleum group			TPH		83 mg/kg		67.23 mg/kg	0.00672 %	✓	
14	confirm TPH has NOT arisen from diesel or petrol					☑					
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<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									
17		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18	●	ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<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	●	pH				8	pH		8	pH	8pH		
				PH									
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
22	●	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
23	●	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
24	●	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7									
25	●	phenanthrene				0.16	mg/kg		0.13	mg/kg	0.000013 %	✓	
			201-581-5	85-01-8									
26	●	anthracene				0.05	mg/kg		0.0405	mg/kg	0.00000405 %	✓	
			204-371-1	120-12-7									
27	●	fluoranthene				0.52	mg/kg		0.421	mg/kg	0.0000421 %	✓	
			205-912-4	206-44-0									
28	●	pyrene				0.49	mg/kg		0.397	mg/kg	0.0000397 %	✓	
			204-927-3	129-00-0									
29		benzo[a]anthracene				0.33	mg/kg		0.267	mg/kg	0.0000267 %	✓	
		601-033-00-9	200-280-6	56-55-3									
30		chrysene				0.32	mg/kg		0.259	mg/kg	0.0000259 %	✓	
		601-048-00-0	205-923-4	218-01-9									
31		benzo[b]fluoranthene				0.51	mg/kg		0.413	mg/kg	0.0000413 %	✓	
		601-034-00-4	205-911-9	205-99-2									
32		benzo[k]fluoranthene				0.18	mg/kg		0.146	mg/kg	0.0000146 %	✓	
		601-036-00-5	205-916-6	207-08-9									
33		benzo[a]pyrene; benzo[def]chrysene				0.38	mg/kg		0.308	mg/kg	0.0000308 %	✓	
		601-032-00-3	200-028-5	50-32-8									
34	●	indeno[123-cd]pyrene				0.2	mg/kg		0.162	mg/kg	0.0000162 %	✓	
			205-893-2	193-39-5									
35		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
36	●	benzo[ghi]perylene				0.25	mg/kg		0.203	mg/kg	0.0000203 %	✓	
			205-883-8	191-24-2									
37		vanadium { divanadium pentaoxide; vanadium pentoxide }				30	mg/kg	1.785	43.38	mg/kg	0.00434 %	✓	
		023-001-00-8	215-239-8	1314-62-1									
										Total:	0.0366 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 12500 mg/kg (1.25%) because: example given in WM3

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.00672%)

Classification of sample: TP E--10022025-0.10

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

Sample details

Sample name:
TP E--10022025-0.10
Moisture content:
22%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 22% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.9	mg/kg	1.32	8.136	mg/kg	0.000814 %	✓	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.44	mg/kg	2.775	0.952	mg/kg	0.0000952 %	✓	
3	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		1.2	mg/kg	3.22	3.014	mg/kg	0.000301 %	✓	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		27	mg/kg	1.462	39.462	mg/kg	0.00395 %		
6	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				<1.2	mg/kg	2.27	<2.724	mg/kg	<0.000272 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		13	mg/kg	1.126	11.417	mg/kg	0.00114 %	✓	
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	27	mg/kg	1.56	32.85	mg/kg	0.00211 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		4.7	mg/kg	2.976	10.911	mg/kg	0.00109 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		48	mg/kg	2.774	103.864	mg/kg	0.0104 %	✓	
13	TPH (C6 to C40) petroleum group			TPH		<20	mg/kg		<20	mg/kg	<0.002 %		<LOD
14	confirm TPH has NOT arisen from diesel or petrol					☑							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<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									
17		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<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		pH				7.5	pH		7.5	pH	7.5 pH		
				PH									
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
22		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
23		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
24		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7									
25		phenanthrene				0.08	mg/kg		0.0624	mg/kg	0.00000624 %	✓	
			201-581-5	85-01-8									
26		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-371-1	120-12-7									
27		fluoranthene				0.34	mg/kg		0.265	mg/kg	0.0000265 %	✓	
			205-912-4	206-44-0									
28		pyrene				0.32	mg/kg		0.25	mg/kg	0.000025 %	✓	
			204-927-3	129-00-0									
29		benzo[a]anthracene				0.18	mg/kg		0.14	mg/kg	0.000014 %	✓	
		601-033-00-9	200-280-6	56-55-3									
30		chrysene				0.24	mg/kg		0.187	mg/kg	0.0000187 %	✓	
		601-048-00-0	205-923-4	218-01-9									
31		benzo[b]fluoranthene				0.37	mg/kg		0.289	mg/kg	0.0000289 %	✓	
		601-034-00-4	205-911-9	205-99-2									
32		benzo[k]fluoranthene				0.17	mg/kg		0.133	mg/kg	0.0000133 %	✓	
		601-036-00-5	205-916-6	207-08-9									
33		benzo[a]pyrene; benzo[def]chrysene				0.3	mg/kg		0.234	mg/kg	0.0000234 %	✓	
		601-032-00-3	200-028-5	50-32-8									
34		indeno[123-cd]pyrene				0.17	mg/kg		0.133	mg/kg	0.0000133 %	✓	
			205-893-2	193-39-5									
35		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
36		benzo[ghi]perylene				0.2	mg/kg		0.156	mg/kg	0.0000156 %	✓	
			205-883-8	191-24-2									
37		vanadium { divanadium pentaoxide; vanadium pentoxide }				38	mg/kg	1.785	52.913	mg/kg	0.00529 %	✓	
		023-001-00-8	215-239-8	1314-62-1									
										Total:	0.028 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH 1--10022025-0.30

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

Sample details

Sample name:
BH 1--10022025-0.30
Moisture content:
25%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 25% Wet Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.3	mg/kg	1.32	6.239	mg/kg	0.000624 %	✓	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.41	mg/kg	2.775	0.853	mg/kg	0.0000853 %	✓	
3	boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		1	mg/kg	3.22	2.415	mg/kg	0.000241 %	✓	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		25	mg/kg	1.462	36.539	mg/kg	0.00365 %		
6	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				<1.2	mg/kg	2.27	<2.724	mg/kg	<0.000272 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		12	mg/kg	1.126	10.133	mg/kg	0.00101 %	✓	
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18	mg/kg	1.56	21.058	mg/kg	0.00135 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		5.1	mg/kg	2.976	11.384	mg/kg	0.00114 %	✓	
11	selenium { nickel selenate }	028-031-00-5	239-125-2	15060-62-5		<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
12	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		26	mg/kg	2.774	54.096	mg/kg	0.00541 %	✓	
13	TPH (C6 to C40) petroleum group			TPH		<20	mg/kg		<20	mg/kg	<0.002 %		<LOD
14	confirm TPH has NOT arisen from diesel or petrol					☑							
15	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
16	benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<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									
17		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
18	•	ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		xylene				<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<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	•	pH				7	pH		7	pH	7pH		
				PH									
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
22	•	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
23	•	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
24	•	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7									
25	•	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-581-5	85-01-8									
26	•	anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-371-1	120-12-7									
27	•	fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-912-4	206-44-0									
28	•	pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-927-3	129-00-0									
29		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
30		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
31		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
32		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
33		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
34	•	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-893-2	193-39-5									
35		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
36	•	benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-883-8	191-24-2									
37		vanadium { divanadium pentaoxide; vanadium pentoxide }				35	mg/kg	1.785	46.861	mg/kg	0.00469 %	✓	
		023-001-00-8	215-239-8	1314-62-1									
										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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non GB MCL determinands

- **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

- **confirm TPH has NOT arisen from diesel or petrol**

Description/Comments: Chapter 3, section 4b requires a positive confirmation for benzo[a]pyrene to be used as a marker in evaluating Carc. 1B; H350 (HP 7) and Muta. 1B; H340 (HP 11)
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

- **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

- **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

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 (edit as required)

beryllium {beryllium oxide}

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

boron {diboron trioxide}

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 (edit as required)

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. (edit as required) 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 (edit as required)

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 (edit as required)

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 (edit as required)

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. (edit as required) Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected. (edit as required)

lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

selenium {nickel selenate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

zinc {zinc chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

vanadium {divanadium pentaoxide; vanadium pentoxide}

worst case

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2025.65.6483.11817 (06 Mar 2025)
HazWasteOnline Database: 2025.65.6483.11817 (06 Mar 2025)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
GB MCL List - version 1.1 of 09 June 2021
GB MCL List v2.0 - version 2.0 of 20th October 2023
GB MCL List v3.0 - version 3.0 of 11th January 2024
GB MCL List v4.0 - version 4.0 of 2nd March 2024
GB MCL List v5.0 - version 5.0 of 26th June 2024